For more than 35 years, this Guide has been the standard reference work for recognizing learning acquired in military life. All the courses offered by the Coast Guard, Marine Corps, and Navy are listed and briefly described. Each course description includes the course title and number; the length of the course, and where and when it was offered; the course objectives; the type of instruction; and recommendations about the type and amount of college credit that should be granted to those who have taken the course. Keyword and course number indexes to the course descriptions are provided. In addition, the Defense Activity for Non-Traditional Education Support (DANTES) Subject Standardized Tests are listed, along with recommendations for the amount of college credit that should be granted to those who passed the tests. (BW)
The 1980 GUIDE to the EVALUATION of EDUCATIONAL EXPERIENCES in the ARMED SERVICES
Awarding Credit For Extrainsitutional Learning

Guidelines

1. Reliable and valid evaluation of student achievement is the sine qua non in awarding credit. Experience, whether acquired at work, in social settings, in the library, at home, or in the formal classroom, is in itself an inadequate basis for awarding credit. Increased attention in choosing evaluation procedures and techniques and more thorough evaluation, are necessary when learning has been attained without participation in a program of study prescribed by an educational institution and offered by its faculty.

2. In determining whether it is appropriate to accept a student’s extrainsitutional learning for credit, the governing considerations should be its applicability to the student’s program of study, including graduation requirements, and the relationship of the learning to the institution’s mission, curricula, and standards for student achievement. Learning should be articulated, documented, and measured in these terms.

3. Institutions should evaluate extrainsitutional learning only in subject-matter fields in which they have or can arrange for faculty expertise or where they can rely on nationally validated examinations or other procedures for establishing credit equivalencies. Institutions should award credit in these areas only if the quality of learning meets their standards for student achievement. Normally, institutions should evaluate learning and award credit only in subject fields in which they offer courses or curricula. However, if the acquisition of college level learning outcomes has been demonstrated in an area not taught by the institution, but related to the student’s program of study, an exception may and ought to be made.

4. Institutions awarding credit for extrainsitutional learning should develop clearly stated policies regarding administrative responsibility, student eligibility, means of assessment, recording of results on transcripts, storage of documentation, student fees, and maximum number of credits allowable. Information on these and related institutional policies and procedures should be disseminated to students and faculty for maximum awareness and utilization.

5. Institutional policy should include provision that the institution’s policies and procedures for awarding credit for extrainsitutional learning should be subject to periodic revaluation.

The following statement by the ACE Commission on Educational Credit and Credentials has been approved by the ACE Board of Directors and endorsed by the Council on Postsecondary Accreditation.

The American Council on Education recommends that postsecondary education institutions develop policies and procedures for measuring and awarding credit for learning attained outside their sponsorship.

American society abounds in resources for learning at the postsecondary level. Public, private, and proprietary education institutions exercise the central but not exclusive responsibility, for instruction and learning. Associations, business, government, industry, the military, and unions sponsor formal instruction in addition to independent study and reading, work experiences, the mass media, and social interaction contribute to learning and competency.

Full and effective use of all educational resources is a worthy educational and social goal. Achieving this goal will depend in a large extent, on providing equitable recognition for extrainsitutional learning.

- Educational credentials have a significant bearing on the economic, professional, and social status of the individual. Thus, social equity requires that equivalent learning, regardless of where and how it is achieved, be incorporated into the system of records for learning and competency.

- Recognition encourages learning and contributes to pedagogical effectiveness. Teaching students what they already know is both stultifying to them and wasteful of educational and personal resources.

Postsecondary education institutions legally authorized and accredited to award degrees and other educational credentials have a special responsibility to assess extrainsitutional learning as part of their credentialing function.

In the development of institutional policies and procedures, the American Council on Education recommends the following guidelines.

"Extrainsitutional learning" is defined as learning that is attained outside the sponsorship of legally authorized and accredited postsecondary educational institutions. The term applies to learning acquired from work and life experiences, independent reading and study, the mass media, and participation in formal courses sponsored by associations, business, government, industry, the military, and unions.
The 1980 GUIDE to the EVALUATION of EDUCATIONAL EXPERIENCES in the ARMED SERVICES
PRODUCTION STAFF FOR THE 1980 GUIDE

Formal Course Evaluation Program
Eugene J. Sullivan, Associate Director, OECC
Joan Schwartz, Senior Program Associate
Penelope West Suritz, Senior Program Associate
Gwendolyn L. Dozier, Senior Secretary
Valerie L. Holland, Senior Secretary

Occupational Assessment Programs
Judith Cangialosi, Senior Program Associate
Mollye K. Cullins, Senior Secretary

The material in the 1980 edition of the Guide to the Evaluation of Educational Experiences in the Armed Services is not copyrighted.

Additional copies of the Guide are available from the Publications Division, American Council on Education, One Dupont Circle, Washington, DC 20036.

The work reported or presented herein was performed pursuant to contracts from the U.S. Department of Defense and the U.S. Department of the Navy. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Department of Defense or the U.S. Department of the Navy, and no official endorsement by the U.S. Department of Defense or the U.S. Department of the Navy should be inferred.

Library of Congress Cataloging in Publication Data:
American Council on Education. Guide to the evaluation of educational experiences in the armed services.

Includes indexes
U408.3.A653 1980 355'.007'15 80-13957

International Standard Book Number: 0-8268-1444-1
# Contents

Foreword, by J. W. Peltason ................................................................. v
How to Find and Use Course Exhibits .................................................. vii
Sample Course Exhibit ........................................................................ ix
How to Find and Use Navy General Rate and Rating Exhibits ............... x
Sample Navy Rating Exhibit ................................................................. xii
Questions and Answers ...................................................................... xiii
Transfer and Award of Credit ............................................................... xxi
Course Exhibits .................................................................................. 1-1
Navy Enlisted Ratings Exhibits .............................................................. 2-1
DANTES Subject Standardized Tests ................................................... 3-1
Appendix A: The Evaluation Systems .................................................. A-1
Appendix B: Navy Enlisted Occupational Fields and Ratings ................. B-1
Appendix C: Naval Occupational Standards ......................................... C-1
Appendix D: Naval Standards ............................................................... D-1
Navy Occupational Title Index .............................................................. I-1
Keyword Index ................................................................................... K-1
Course Number Index .......................................................................... N-1
COMMISSION ON EDUCATIONAL CREDIT AND CREDENTIALS
of the American Council on Education

MEMBERS

Terms ending December 31, 1980: John F. Grede, Vice-Chancellor, Career and Manpower Programs, City Colleges of Chicago; John W. Porter, President, Eastern Michigan University; Herman B. Smith, Jr., Chancellor, University of Arkansas, Pine Bluff; Scott D. Thomson, Executive Director, National Association of Secondary School Principals; Thurman J. White, Vice-President for Continuing Education and Public Service, University of Oklahoma, Chair

Terms ending December 31, 1981: Gary L. Filerman, President, Association of University Programs in Health Administration, Beverly J. Gibbs, Professor, Department of Foreign Languages, University of Texas, San Antonio; James W. Half, President, Empire State College, State University of New York; Cyril O. Houle, Professor of Education, University of Chicago, Senior Program Consultant, W. K. Kellogg Foundation; Elbert W. Ockerman, Dean of Admissions and Registrar, University of Kentucky, Lexington

Terms ending December 31, 1982: Arthur E. Adams, Vice Provost for Continuing Education, Ohio State University; Neal R. Berte, President, Birmingham-Southern College; P. J. Boglioli, Manager, Equal Employment and Affirmative Action, Mobil Oil Corporation; Norma M. Loeser, Dean of the School of Government and Business Administration, George Washington University; Kenneth E. Young, President, Council on Postsecondary Accreditation

Terms ending December 31, 1983: Shirley S. Chater, Vice-Chancellor for Academic Affairs, University of California, San Francisco; Kenneth R. Edwards, Director of Skill Improvement Training, International Brotherhood of Electrical Workers; Larraine R. Matusak, President, Thomas Edison College; Michael J. Pelczar, Jr., President, Council of Graduate Schools in the United States; William L. Ramsey, President, Milwaukee Area Technical College

Ex-officio: J. W. Peltason, President, American Council on Education; Prezell R. Robinson, President, Saint Augustine’s College

STAFF

J. W. Peltason, President, ACE
Jerry W. Miller, Director, Institutional Relations
Henry A. Spille, Director, OECC
Eugene J. Sullivan, Associate Director, OECC
John J. Sullivan, Associate Director, OECC
Douglas R. Whitney, Associate Director, OECC
Foreword

For more than thirty-five years, the Guide to the Evaluation of Educational Experiences in the Armed Services has been the standard reference work for recognizing learning acquired in military life. ACE has worked cooperatively with the Department of Defense and the armed services in assisting hundreds of thousands of servicemen and women to achieve recognition for their learning. The long-term success of the Guide evaluation system for military training has resulted in it serving as a model for the evaluation of programs offered by other noncollegiate organizations, including business, industry, government agencies, voluntary and professional associations, and labor unions. Collectively, these efforts are resulting in students combining extra-institutional learning opportunities with study at postsecondary institutions to achieve degree-related educational objectives. Not only is this sound educational practice, it is also an efficient use of educational resources and an incentive for the persons affected to undertake further study.

Special recognition must be paid to hundreds of individuals who have served as evaluators and the many educational institutions, professional and disciplinary associations, and the apprenticeship training community for their wholehearted cooperation in this endeavor. Without their support and assistance, the Guide would not have been possible. We are greatly indebted to them.

Once again, we are pleased to commend this work to you in your continuing work with servicemen and women and veterans.

J. W. PELTASON
President
American Council on Education
How to Find and Use Course Exhibits

This volume contains recommendations for formal courses offered by the Coast Guard, the Marine Corps, the Navy, and the Department of Defense.

The instructions that follow provide a step-by-step procedure for finding and using the exhibits and recommendations. Readers unfamiliar with the ACE evaluation procedures should read Appendix A. Additional information in using the Guide and awarding credit is provided in the Questions and Answers section.

Step 1

Have the applicant complete a "Request for Course Recommendation" form.

A "Request for Course Recommendation" form appears at the back of this volume. It may be reproduced and should always be filled out by the applicant, using the information provided on official and personal records, as well as the applicant's own knowledge of the service course. Applicants should never refer to the Guide while completing the form. (See questions 4 through 8 in Questions and Answers.)

Step 2

Verify course completion from military records.

It is the responsibility of the school official to verify course completion. The following military records are normally used to verify successful completion of course requirements:

1. DD Form 295, "Application for the Evaluation of Educational Experience During Military Service"—available to active-duty service personnel from military education officers. (Form must be certified by an authorized commissioned officer or his designee in order to be official.)

2. DD Form 214, "Armed Forces of the United States Report of Transfer or Discharge"—available to veterans, together with other in-service training records, from the General Services Administration, National Personnel Records Center (Military Personnel Records), 9700 Page Boulevard, St. Louis, Missouri 63132.

3. Course Completion Certificates—may be used to complement other records or when service courses are not recorded on official records.

(See questions 1, 3, 10, and 27 in Questions and Answers.)

The following steps refer to a "course exhibit." See sample course exhibit, page ix.

Step 3

Find the course exhibit by identifying the OECC ID Number in the Course Number Index or the Keyword Index.

A. Course Number Index. All available military course numbers are listed in the Course Number Index in alphanumeric sequence. If the applicant's military course number cannot be located in the Course Number Index, search for the course title in the Keyword Index.

B. Keyword Index. Identify all possible keywords within a formal course title. For example, the keywords in the title, "Ground Radio Communications Equipment Technician," are Radio, Communications, and Ground. Find one or all of those keywords in the Keyword Index and search the listing under the keyword for the course title. If the title cannot be found under one keyword, search all other possible keywords.

C. Identify OECC ID Number. When the title or military course number has been located, note the corresponding OECC ID Number. This number refers to the course exhibit's location in the Guide. The two-letter prefix refers to the section of the Course Exhibits chapter, i.e., CG=Coast Guard section; DD=Department of Defense section; MC=Marine Corps section; and NV=Navy section. Within each section, OECC ID Numbers are presented in numeric sequence.

(See question 2 in Questions and Answers.)
Step 4

Match the course identifying information with the corresponding data in the course exhibit.

Course identifying information includes the official military title, military course number, length, of course, dates of attendance, location, etc., and is provided by the applicant on the "Request for Course Recommendation" form. When the course exhibit consists of multiple versions, determine which version applies to the applicant's course by considering exhibit dates and course length. It is important to match all items.

(See questions 6, 7, 8, and 12 in Questions and Answers.)

Step 5

Read the course objectives and description.

Consideration should be given not only to the amount of credit and to the subject area, but also to the course objectives and description which are part of the course exhibit. These portions of the exhibit outline the course content and scope and also provide essential information about the nature of the course. This information is essential to you in determining the appropriate placement of credit for each individual student within the requirements and programs at your school.

(See question 9 in Questions and Answers.)

Step 6

Award credit, as appropriate.

Users are free to modify the credit recommendations in accordance with institutional policy and the educational goals of each individual applicant.

(See questions 11 and 19-25 in Questions and Answers.)

Step 7

When assistance is required, contact the Office on Educational Credit and Credentials.

Whenever problems arise in Steps 1 through 6, and assistance is desired, contact the OECC Information Service at:

Office on Educational Credit and Credentials
American Council on Education
One Dupont Circle
Washington, DC 20036
ATTN: Military Evaluations
(202) 833-4685
Sample Course Exhibit

JD Number. A number assigned by OECC to identify each course.

Military Course Number. The number assigned to the course by the military listed by version.

Length. The length of the course in weeks, with contact hours in parentheses by version.

Exhibit Dates. The start and end dates, by month and year, by version. When course was last evaluated and when, if applicable, it was eliminated. "Present" denotes publication cut-off for this edition of the Guide (3/80).

Instruction. Description of instruction, including teaching methods, facilities, equipment, major subject areas covered. Normally applies to all course versions, occasionally a note may be added regarding a specific version listed by version. In some instances will apply to all versions.

Course Version Numbers and Titles. Version 1 is the most recent if course has only one version, version number is omitted throughout exhibit.

Alternate Titles. In parentheses under the more recent title.

Location. By version. The service school, military installation, state.

Objectives. The purpose for which the course was designed. Applies to all versions.

Instruction. Lectures and practical exercises in basic sciences, preventive dentistry, casualty care, dental administration, radiography, and dental assisting.

Credit Recommendations. By version. Given in four categories: vocational certificate, lower-division baccalaureate/associate degree, upper-division baccalaureate, and graduate degree. Expressed in semester hours (See Appendix A for detailed explanation of credit categories).

Evaluation Date. Date when the credit recommendation was established, month and year, in parentheses following each recommendation.

Important. The appropriate course version can be found by using the course title and number, its length, exhibit dates, and location.
How to Find and Use
Navy General Rate and Rating Exhibits

This volume contains exhibits for Navy general rates and ratings evaluated through January 1, 1980. The following instructions provide a step-by-step procedure for finding and using general rates and rating exhibits and recommendations. If you are unfamiliar with Navy general rates and ratings—how they are structured and how occupational proficiency is demonstrated—you should read Appendix A. Additional information on general rates and ratings is provided in the Questions and Answers section.

Step 1.
Have the applicant submit official Navy documentation to you.

For enlisted personnel, occupational history is recorded at item 8 of NAVPERS 1070/604, "Navy, Occupation/Training and Awards History." (This form is sometimes referred to as Page 4 of the service record by Navy men and women.) Item 8 contains the following relevant information: the general rate or rating from which advanced or changed, the new general rate or rating, and the effective date of the advancement or change.

As an alternative, Navy enlisted persons may submit DD Form 295, "Application for the Evaluation of Educational Experiences During Military Service," when it includes the necessary occupational information. Although the present edition of the form was not designed to document general rate and rating proficiency, it is acceptable when the section, "Major Service Jobs and Billets," includes the following information: (1) the general rate or rating designation, (2) the general rate or rating title, and (3) the date of advancement. (A new edition of the form is being prepared which will provide space for military occupational information.) A person still in active or reserve service may request that DD Form 295 be completed by the education services officer and certified by the personnel officer at the unit to which assigned.

DD Form 214, "Armed Forces of the United States Report of Transfer or Discharge," is also acceptable for documentation. However, it does not contain the occupational history, which you may need.

Navy records must be requested by the individual. Records may be obtained as follows:

Active-duty Navy men and women. The Navy unit to which assigned.

Navy Reservist (Non-drilling) or retired personnel. The Naval Reserve Personnel Center (Code 41), 4400 Dauphine Street, New Orleans, Louisiana 70149.

Navy veteran. The original of the "Navy Occupation/Training and Awards History" form and the DD Form 214 is given to the veteran at time of discharge. If the veteran does not have them, duplicate copies may be obtained from General Services Administration, National Personnel Records Center (Military Personnel Records), 9700 Page Boulevard, St. Louis, Missouri 63132. The veteran may request service records by submitting U.S. Government Standard Form 180, which may be obtained from a state's veterans affairs office, the Veterans Administration, or the National Personnel Records Center.

Step 2.
Referring to military records, verify each general rate and rating the person has successfully held.

A. Eligibility for the recommendation is easily determined. Advancement can mean that the person is automatically eligible for the general rate or rating recommendation; that is, to be advanced, the person had to demonstrate occupational proficiency by meeting all the requirements for advancement, including—passing written and performance tests. (See questions 13-15 in Questions and Answers.)

B. Find the information necessary for locating the correct exhibit(s), the general rate and rating designations and the date of advancement, to each. (See question 16 in Questions and Answers.)

Step 3.
Find the appropriate general rate or rating exhibit in the Guide.

The exhibit for a given general rate or rating can easily be found when the designation is known. Each general rate and rating exhibit is assigned an OECI ID number that has three components. The first component, NER, identifies the exhibit as one that pertains to Navy enlisted general rates and ratings. The second component consists of the general rate or
HOW TO FIND AND USE NAVY GENERAL RATE AND RATING EXHIBITS

rating designation, e.g., SN, QM, or AME. The third-component, a three-digit, sequentially assigned number, e.g., 001, uniquely identifies the exhibit. Navy exhibit ID numbers have either eight or nine characters, depending on the rating designation, e.g., NER-QM-001 and NER-AME-001.

When the title of the general rate or rating is known, the exhibit ID number can be found by referring to the Navy Occupational Title Index.

There may be more than one exhibit for some ratings. Each time there is a new recommendation for a rating or another evaluation is pending, there is a new exhibit. For example, two exhibits appear for the rating AS. The OECC ID numbers for the two exhibits are NER-AS-001 and NER-AS-002. The oldest exhibit for a rating, the first to be evaluated, is assigned -001 as the last three characters. The last exhibit for a rating, the exhibit ending in the highest number, is the most recent. (See questions 17 and 18 in Questions and Answers.)

Step 4
Read the entire general rate or rating exhibit.

In order to apply a given recommendation to the student's program of study at your institution, you must first read the entire exhibit. Each item in the exhibit has been prepared to help you identify or interpret the recommendations. (See the sample exhibit.) Two items, career pattern and description, will be particularly helpful to you.

The descriptions, which are similar to learning outcome statements of postsecondary courses and programs of study, will provide you with essential information about the learning required for proficiency in the general rate and rating. Comparing the general rate or rating "Description" with a description of the course or program of study that the student will pursue will help you:

- determine how much of the recommended credit applies to the course or program of study at your institution,
- identify additional areas of possible credit,
- resolve duplication problems, when the applicant has applied for credit for more than one military learning experience,
- place the student at the appropriate point in the course sequence or program of study.

Step 5
Award credit, as appropriate.

The general rate and rating recommendations are advisory. They are intended to assist in formally recognizing the learning of Navy men and women and veterans and in placing them in postsecondary programs of study, apprenticeship programs, and jobs. The recommendations may be modified.

When an applicant has applied for credit for more than one military learning experience, you may find that you will have to reduce the total amount of credit recommended to avoid granting duplicate credit. (See questions 11, 19, and 20 in Questions and Answers.)

You may also wish to increase the recommended credit to account for the learning that the applicant may have acquired in other military or nonmilitary settings. (See questions 21 and 23-25 in Questions and Answers.)

Step 6
When assistance is required, contact the Office on Educational Credit and Credentials

OECC operates an information service to assist education officials, apprenticeship and training officials, and employers in evaluating the learning experiences of military personnel. Publication of the Guide is part of that service. However, there are instances when additional assistance is needed.

When requesting an exhibit for a general rate or rating, complete a copy of the "Request for Navy General Rate/Rating Exhibit" form that appears at the back of this volume. Use the form only to request recommendations for general rates and ratings that are listed as "Pending evaluation." (See question 18 in Questions and Answers.)

When assistance in interpretation is needed and it appears that official military records will help OECC staff members in responding to an inquiry, copies should be attached to the letter of inquiry. Do not send original records.

When a general rate or rating exhibit or assistance in interpretation is needed urgently, you may telephone the Office on Educational Credit and Credentials at (202) 833-4685. (Sorry, no collect calls.) Whether inquiring by letter or telephone, however, you should always obtain information concerning general rate and rating exhibits directly from the Office on Educational Credit and Credentials, not the applicant. (See question 8 in Questions and Answers.)

Inquiries concerning general rate and rating exhibits should be addressed to:

Office on Educational Credit and Credentials
American Council on Education
One Dupont Circle, N.W.
Washington, DC 20036
ATTN: NER Evaluation Program
### Sample Navy Rating Exhibit

**Title** The official Navy title of the general rate or rating during the period of the exhibit dates

**General Rate/Rating Designation** The official Navy system of identifying occupations and their levels, listed in ascending order according to rate. (See Question 13 in the Question and Answer section for definitions of the Navy identifiers.)

---

**ID Number** A code number assigned by OECC to identify each exhibit

**Exhibit Dates** Start and end dates by month and year. The earliest start date is 6/71, the effective date of the Navy manual regulating the general rates and ratings that have been evaluated (start dates may be later than 6/71). The term "Present" indicates that the exhibit is current as of 1/80. "Pending evaluation" means that the general rate or rating is scheduled to be evaluated.

**Career Pattern** Path of advancement. Shows prerequisite general rate and subsequent progression in a rating, the designation is provided for each rate, followed by the title and paygrade (in parentheses).

---

**Recommendation** By rate. Only the recommendation for the highest rate held should be used, the recommendations should not be added.

Educational credit is expressed in semester hours and recommended in four possible categories: vocational certificate; lower-division baccalaureate; associate degree; upper-division baccalaureate; and graduate degree.

Advanced standing in an apprenticeship training program, when recommended, is expressed in clock hours of experience and contact hours of related instruction. For example, the apprenticeship recommendation in the exhibit NER-CM-001 for CM3 is: "In an automotive, diesel, or truck mechanics apprenticeship training program, 1,500 clock hours of experience and 1,440 contact hours of related instruction (1/77)."

---

**Description** Summary. Orders, receives, disposes, inspects, stores, preserves, packages, ships, and issues materials and cargo. Prepares and maintains forms, records, correspondence, reports, and files. SK3: Knows the basic organization and functions of supply departments, is familiar with the purpose and use of major components of automated data processing (ADP) equipment and knows common terms used in ADP; operates office machines, typewriter (at 20 words per minute), routes, and files forms and messages; maintains files, the requisition log, and budget records; prepares supply-related documents; identifies, receives, stores, and issues materials and stock items; prepares items for shipment, prepares shipment documents, inventories stocked material and installed equipment, operates material-handling equipment. SK2: Able to perform the duties required for SK3; establishes and maintains files, knows types, uses, and purposes of appropriations and fundst; reconciles financial listings; prepares budget reports, requisitions repair parts, supplies, forms, and publications; supervises working parties handling stores; and instructions SKCM. Able...

**Recommendation, SK3**

In the vocational certificate category, 2 semester hours in office machines, 1 in material handling, and 1 in general clerical procedures, for a total of 4 semester hours. In the lower-division baccalaureate/associate degree category, 2 semester hours in office machines and 1 in general clerical procedures (12/76).

---

**Recommendation, SKCM**

In the vocational certificate category, the recommendation is the same as that for SK1. In the lower-division baccalaureate/associate degree category, the recommendation is the same as that for SKCS. In the upper-division baccalaureate category, 3 semester hours in supply management and 3 in management problems, and additional credit for a practicum in management and in human relations on the basis of institutional evaluation (12/76).

---

**Date of Evaluation** By month and year. Appears in parentheses following the recommendation for each rate.

**Important** Read entire exhibit before awarding educational credit or advanced standing in an apprenticeship training program.
Questions and Answers

This section is designed to answer questions that may arise about using the Guide and awarding credit.

1

An applicant at my institution has submitted a DD Form 214 that lists abbreviated course titles which I cannot decipher. The form does not contain enough information for me to find the courses in the Guide. What should I do? Military records often provide insufficient information for education officials to properly identify courses. For that reason, OECC has designed the "Request for Course Recommendation" form, which can be used to supplement records. The applicant for credit should be responsible for interpreting the information on his or her records and presenting the data in readable form. You may also use course completion certificates and other training records to verify entries on the DD Forms 214 and 295. It is recommended that you automatically require students to complete the Request for Course Recommendation Form. Then, if you need help from OECC, simply authorize the form and submit it to OECC.

2

When an applicant brings information on a number of courses completed, I can usually find exhibits for only a small percentage of the courses in the Guide. Am I doing something wrong? The course evaluations done by the Office on Educational Credit and Credentials probably represent about 30 percent of the total number of courses offered by the armed services. The remaining 70 percent cannot be evaluated for one reason or another. In general, courses evaluated and published in the Guide are offered on a full-time basis (a minimum of thirty contact hours of instruction a week) for not less than two weeks' duration; or, if less than two weeks in length, the courses must include a minimum total of sixty contact hours of academic instruction. (Prior to 1973 the minimum length requirement was three weeks or 90 contact hours.) Very few correspondence courses are listed in the Guide because such programs were not evaluated until the mid-1970s. However, recently we have begun to evaluate selected correspondence courses. These courses will be listed in the Keyword Index under "Correspondence" for easy identification. One criterion for reviewing correspondence courses is the establishment of an ongoing proctored end-of-course examination program. Another requirement for evaluation is that a course be formal as defined by the services, i.e., offered to meet servicewide training requirements and published in the formal schools catalog for the service. This requirement generally excludes locally organized and command-level training programs, as well as courses offered on a one-time basis. You will find no courses conducted prior to 1954 listed in this guide. You must always submit a Request for Course Recommendation form to this office for assistance with courses taken from 1940 through 1954. When in doubt about the availability of any evaluation for any service course, contact the OECC Information Service by telephone or by submitting a Request for Course Recommendation form.

3

I understand many military records were destroyed in a fire at the General Services Administration several years ago. What do I do if the applicant's military records were among those destroyed? Many records were reclaimed or reconstructed and are now available. In addition, the applicant's copies of certificates may be used in lieu of records destroyed in the GSA fire.

4

May I submit a Request for Course Recommendation form that the student has filled out with information from the Guide? A form filled out by a student who copies information from the Guide cannot be used by the OECC Information Service staff for identification purposes because that information only duplicates data already published. One of the purposes of the Request for Course Recommendation form is to secure information about a course from the student, ideally through official records, but also from his or her personal knowledge or memory of the course. With this first-hand information, you may find the correct course exhibit in the Guide. If you cannot find it, you may send the request form to the OECC Information Service.

The OECC staff can then use this additional information to search its extensive files for matching information. When a student attempts to identify a course taken years ago by extracting current titles and/or
Who should send in the Request for Course Recommendation form? The form should be completed by the applicant and authorized by you, the institution official. Credit recommendations will be forwarded to your institution only when you authorize us to do so. While we do provide credit recommendations to applicants upon receipt of their requests, we encourage them to apply through their schools. We do not normally send a credit recommendation to a college at the request of a student applicant.

Why is so much information needed on the Request for Course Recommendation form? You cannot be sure that you have identified the correct exhibit in the Guide unless all the information on the form matches the corresponding items in the course exhibit. The course title, course number, name and location of the service school, and length of the course shown on the form should be identical to the information in the exhibit. In addition, the dates of attendance should fall within the exhibit dates. OECC credit recommendations are for specific courses; therefore, all items must be identical if a positive identification is to be made. A complete and accurate form will also help the OECC Information Service research the course.

What do I do when the information on the Request for Course Recommendation form doesn't exactly match the information in the course exhibit? Send an authorized form to the OECC Information Service. Send the form in yourself, do not give it to the student to submit. Send copies of military records if you think they'll provide additional information. If OECC cannot identify the course and supply a credit recommendation, you may still grant credit to the applicant by conducting your own assessment of the applicant's learning. (See question 24 for information about assessment techniques.)

How long does it take to receive a response if I submit a properly completed request form? About three weeks for most requests, longer for those requiring extensive research. Every effort will be made to respond as quickly as possible. If you wish, you may call in requests, but if research is involved, OECC will ask you to send a written request. If you are calling in with a request, be sure to have all pertinent information (See Question 6) available to give to the OECC staff person.

How can I get additional information about the courses in the Guide? Sometimes the descriptive material in the exhibit is not detailed enough for me to make a decision about granting credit. What do I do then? With the exception of a few computer-taught or classified courses, OECC has on file the programs of instruction for all courses listed in the Guide. When necessary, OECC can provide the topic outline from the military syllabus, and in those instances where an entire program of instruction is needed, arrangements can be made to photocopy the entire syllabus.

What are USAFI and DANTES? Can I grant credit for the courses and tests listed on an applicant's USAFI or DANTES military test reports? USAFI was the United States Armed Forces Institute, which offered an extensive educational program to active-duty personnel. USAFI correspondence, seminar, and self-study courses, end-of-course tests, and Subject Standardized Tests (SSTs) were made available to service personnel worldwide until 1973, when USAFI was disestablished. Subsequently, the Defense Activity for Non-Traditional Education Support (DANTES) was established in 1974, and that agency continued the development and administration of Subject Standardized Tests and other educational services. OECC continues to recommend credit for USAFI offerings and DANTES SSTs.

In verifying completion of USAFI or DANTES courses or tests, the military test report should not be considered official. That report is given to all service personnel who have taken a course or test. To obtain official USAFI or DANTES transcripts, refer to the addresses provided in Appendix A under "Other Recommendations."

What is the significance of the date which appears after each credit recommendation? That date is called the "evaluation date" and represents the month and year the credit recommendation was established. Each time a course or general rate or rating is evaluated, a date is provided so that you know when the course or
general rate or rating was last considered in terms of a credit equivalency. The date tells you how recently a recommendation was established so that you can judge the currency of the credit recommended. This information is particularly useful in subject areas where “state of the art” is important in determining the applicability of credit. You can also use the evaluation date when your institution has established a “statute of limitations” for acceptance of transfer credit. The date is provided purely for your information; do not confuse the date with exhibit dates or effective dates.

12

An applicant completed a course in 1973, but the Guide exhibit dates are 5/74 to present. Should I grant credit based on the Guide? The exhibit dates shown in the Guide indicate the time period for which OECC has information on the course. The course may have been offered for several years prior to the exhibit “start” date, but since the service branch did not submit information on the course during that time period, OECC is not able to backdate the exhibit to cover it. If you can reasonably surmise, from other information provided by the applicant (length, course content description), that his or her course was the same or similar to the course listed in the Guide, then you may want to grant credit based on the Guide recommendation. If the applicant’s course was a number of weeks longer or shorter than the one covered in the Guide exhibit, you may be able to grant credit based on a comparison of the applicant’s information with the descriptive information in the Guide. The Office on Educational Credit and Credentials encourages you to conduct your own assessment of courses for which no credit recommendation is available. (See question 24 for information about assessment techniques; for information on Navy rating exhibit dates, see questions 17 and 18.) OECC staff can often provide you with military formal school catalog descriptions of a course outside the time period in the exhibit. This should help you determine whether you might apply the credit listed in the guide exhibit based on your own comparison.

13

How can I distinguish among the terms paygrade, general rate, rating, and rate? A paygrade is a position from 1 to 9 on the Navy’s pay scale for enlisted personnel; in referring to a paygrade, the letter E (enlisted) precedes the number (E-1, E-2, E-3, E-4, E-5, E-6, E-7, E-8, and E-9). A general rate is an apprenticeship that indicates eligibility for entrance into various ratings. A rating is an occupation composed of a number of related jobs. A rate is an identifying term or title associated with a given paygrade. For example, the petty officer third-class for paygrade E-4. A rate may also be associated with a specific rating; for example, a petty officer third-class (paygrade E-4) whose rating is Air Controlman will usually refer to his or her rate as “Air Controlman Third Class.” Navy men and women usually refer to themselves by their rate. Refer to Appendix A for a description of the Navy Enlisted Rating structure.

14

Do all ratings provide paths of advancement and career development for paygrades E-4 through E-9? Although most ratings begin at paygrade E-4 and terminate at paygrade E-9, there are some exceptions. For example, the Legalman rating consists of paygrades E-5 through E-9. In this case, a person progresses to paygrade E-5 from paygrade E-4 of the Yeoman rating. At the other end of the spectrum, some ratings are structured so that a person holding a rating which consists only of paygrade E-7 (e.g., Master Chief Constructionman), may have progressed from any one of several related ratings that terminate at paygrade E-8. This allows personnel who are assigned to ratings that are low in density and in which occupational content is similar to progress to higher levels and scopes of authority and responsibility. Paths of progression are provided in each exhibit in the “Career Pattern” section.

15

How do I determine whether an applicant is eligible to receive the credit you recommend in your general rate and rating exhibits? Item 8 of NAVPERS 1070/604, “Navy Occupation/Training and Awards History,” provides the list of general rate(s) and rating(s) to which a person has advanced. Advancements, are made and recorded in Item 8 only after all criteria for advancement, including passing performance and written tests, have been met and openings occur. Therefore, if the general rate or rating is listed in Item 8, the person has demonstrated his or her proficiency in it and is eligible to receive the credit that is recommended. DD Forms 214 and 295 also contain some information regarding general rates and ratings; however, they usually do not contain a person’s entire occupational history.

16

If the letters PNA (passed-but-not-advanced) appear in item 8 of NAVPERS 1070/604, Navy Occupation/Training and Awards History, or on DD, Form 295,
“Application for the Evaluation of Educational Experiences During Military Service,” should I grant the credit recommended for the rating the person holds or for the rating the person would have held if he or she had been advanced? The latter. Passed-but-not-advanced means that the person has passed the required written and performance examinations and is qualified for advancement. However, time in service, time in rate, and awards received also contribute to a person’s total advancement score, which is the basis used in determining who is selected to fill existing openings in a given rate. In other words, the PNA person has demonstrated his or her occupational proficiency but was not advanced because he or she had an insufficient number of points from sources other than examinations to compete successfully for the openings in a given rate.

17

If the date of a person’s advancement to a given general rate or rating is earlier than the start date of the exhibit, can I still use the recommendation? Probably not. You need to do some additional investigating to help you decide whether to accept or modify the recommendation. The start date established by OECC is based on how far back we can verify that the general rate or rating was the same as it was when our evaluation team evaluated it. The verification is based on official documentation given to us by the Navy. The documentation supports a start date of June 1971 for most general rates and ratings. However, several are later than June 1971. We do not have the means to confirm that a general rate or rating was the same before June 1971, but you might. There are two steps you will need to follow in making your decision:

1. Ask the person to provide a copy of the Navy Regulation pertaining to occupational qualifications or standards that were in effect when he or she held the general rate or rating. Use the qualifications or standards to identify the learning outcomes represented by the general rate or rating.

2. Determine how much credit may be granted to the person. (Remember that advancement notes occupational proficiency.) A careful comparison of the description in the general rate or rating exhibit and the qualifications or standards obtained in step one may reveal whether the general rate or rating was substantively different. If it was not, the credit recommendation in the exhibit may be used. If specific differences are identified, then the recommended credits may need to be modified accordingly. One approach to modifying the credit recommendation is to have faculty members in appropriate subject areas assess the person’s learning. In assessing the learning for educational credit, they should identify the discrete learning outcomes achieved by the person and relate them to the educational objectives of their courses and programs of study. Equivalent credit should be granted when the person has demonstrated the achievement of the same learning outcomes for which the faculty members grant credit to their students. (See question 24 for information about assessment techniques.)

18

When a general rate or rating exhibit includes the statement, “Pending evaluation,” how will I know when the ACE recommendations will be available? The “abbreviated” exhibit format was developed to inform you of the evaluation status of general rates and ratings. Such exhibits include only the OECC ID number, the title of the general rate or rating, the general rate or rating designation(s), and the exhibit dates with the statement, “Pending evaluation.” When you encounter this statement, two things are certain: (1) the general rate or rating is one that was in use as of the publication cut-off date of January 1980 and (2) that ACE plans to evaluate the general rate or rating. As recommendations for general rates and ratings become available, they will be announced in the OECC Newsletter. Inquiries about the evaluation status of a general rate or rating should be directed to the OECC Information Service (see p. xi).

19

Why is the number of credits recommended for the rating I just looked up greater than the number recommended for the course that leads to it? Discrepancies between the credit recommendations for related ratings and courses are not uncommon. Indeed, it is rare for the subject matter covered in a course to perfectly coincide with the learning represented by occupational proficiency. In most cases, there is quite a differ-
ence in scope, difference in the subject matter mastered by the learner and, when the subject matter is the same, a difference in the depth, breadth, and extent of the learning.

Usually the scope of a course is narrower than that of the job. Most Navy courses are designed to prepare Navy men and women to function on-the-job or to take on additional tasks. As such, the courses normally provide entry-level occupational skills and competencies. Occupational proficiency is predicated on the additional factor(s) of work experience and/or extensive self-instruction.

In awarding credit for related ratings and courses, you need to be aware of the likelihood of overlapping credit recommendations. The term "overlapping" means that at least part of the learning represented by demonstrated occupational proficiency in the rating is the same as that for the course; therefore, some of the credits recommended may duplicate each other. A suggested procedure for resolving duplication is given in the answer to question 20.

20

I have looked up the exhibits for several courses and ratings for one person. Several of the credit recommendations within a given credit category are in the same subject area. How can I avoid granting too much or duplicate credit to this person? In this instance, you have an example of overlapping credit recommendations. Awarding a simple total of the recommended credits could result in the award of more credit than the learning merits.

Credit recommendations may overlap between (1) related courses, (2) related ratings, and (3) related courses and ratings. Course recommendations will overlap when the individual has participated in several military courses in the same subject area and at the same level. Recommendations (both credit and apprenticeship) for ratings will overlap when the individual has advanced to two or more ratings that require related qualifications and the performance of related or similar duties. Course recommendations and rating recommendations will overlap when the individual has acquired his or her occupational proficiency, or a significant portion of it, through completion of one or more formal service school courses.

In all the instances cited, when the learning outcomes and courses or programs of study in which recommendations are made are the same or very similar, there is overlap, and you should modify the credit recommendations to avoid granting duplicate credit. To reconcile the overlap in the recommendations, compare the descriptions and recommendations and interview the applicant to obtain additional information. To determine how much credit may be awarded without duplication to an individual, use the following steps:

1. Identify the appropriate ratings held and/or formal courses completed by the individual from the official military records the individual provides.
2. Locate all pertinent and available rating exhibits and/or course exhibits in the Guide.
3. Locate the correct rate within each rating exhibit; for courses, locate the correct version within each course exhibit.
4. Read and compare all the descriptions.
5. Identify the appropriate recommendations in each exhibit, on the basis of the person's program of study.
6. Read and compare all the pertinent recommendations. It may be helpful to list the amount of credit and the subject areas or programs of study of each recommendation.
7. If necessary, obtain additional information from the individual through interview or further assessment.
8. When the nature and extent of the individual's learning has been identified, refer to all pertinent recommendations and make decisions on how much credit may be awarded without duplication. Credit should be awarded as appropriate to the educational goals of the individual and the policies of the institution.

If you cannot determine whether duplication exists, write the Office on Educational Credit and Credentials Information Service.

21

When credit is recommended in more than one category, what should I do? Credit has frequently been recommended in more than one category. One reason for multiple-category recommendations is that the scope of a given rating or course reflects learning in several subject fields at different levels of complexity. The learning outcomes acquired in a course or rating in one subject field may apply to courses normally included in lower-division baccalaureate/associate degree programs while those in another subject field may apply to courses normally included in upper-division baccalaureate programs. Another reason for multiple-category recommendations is that faculty members who serve as evaluators decide that learning in a given subject field can be applied to courses and programs of study encompassed by more than one of the categories; that is, learning in electronics, for example, may apply to the vocational certificate category...
QUESTIONS AND ANSWERS

ry and to the upper-division baccalaureate category. A thorough reading of the exhibit will help you to determine which category or categories is the best for you to apply. You will need to read the exhibit and compare learning outcomes achieved and course objectives and content with those of your own institution.

In the first instance—learning in several subject fields—the recommended credits may be added as long as all the subjects are applicable to the student’s programs of study at your institution.

Example A:

In the lower-division baccalaureate/associate degree category, 1 semester hour in communication skills and 1 in principles of management. In the upper-division baccalaureate category, 3 semester hours in personnel management (6/75)

In Example A, up to 5 semester hours may be awarded if they apply to the student’s program: 1 in communication skills, 1 in principles of management, and 3 in personnel management.

In the second instance—learning in a given subject field that is applied to two or more categories—the recommended credits probably should not be added. You will have to determine how they apply to the student’s program of study at your institution.

Example B:

If the vocational certificate category, 15 semester hours in electricity or electronics. In the lower-division baccalaureate/associate degree category, 10 semester hours in electricity or electronics. In the upper-division baccalaureate category, 5 semester hours in electricity or electronics.

In Example B, to determine how many credits to award, compare the information in the exhibit description with the desired outcomes of electricity or electronics or related courses and programs of study at your institution. Award credit based on comparison of these outcomes.

As a general rule, you should read the exhibit descriptions and then award credit as it best applies to the student’s program of study, as determined through academic counseling.

Credit may be applied to a student’s program in various ways: (1) applied to the major to replace a required course; (2) applied as an option within the major; (3) applied as a general elective; (4) applied to meet basic degree requirements; or (5) applied to waive a prerequisite. Credit granted by a postsecondary institution will depend on institutional policies and degree requirements.

I have a course recommendation in which credit in more than one category—but in the same subject area—is recommended. It looks like a combination of the previous examples. What do I do in that case? Credit categories could be combined. If, for example, the recommendation is:

In the lower-division baccalaureate/associate degree category, 3 semester hours in typing and 3 in office management. In the upper-division baccalaureate category, 3 semester hours in office management and 2 for field experience in management (11/75).

The 3 semester hours in office management recommended in the lower-division baccalaureate/associate degree category and the 3 in office management recommended in the upper-division baccalaureate category should not be combined for a total of 6. Eight semester hours might be granted if they apply to the student’s program: 3 in typing, 3 in office management, and 2 for field experience in management. The evaluators have described the course content, and using that description from the course exhibit, you must determine the appropriate application of the credit recommendation.

Do I have to grant credit exactly as it appears in the recommendation? No. You are under no obligation to grant credit, although most colleges do recognize learning that occurs in a military setting. The use of ACE recommendations is the prerogative of education officials and employers. The recommendations are provided to assist you in assessing the applicability of a person’s military learning experiences to his or her educational program or occupation. You may modify the recommendations in accordance with your institution’s policies and practices.

You should keep in mind, then, that the recommendations are advisory and are designed as a tool for use in giving due recognition to an individual for his or her learning experiences in the armed services. You should also keep in mind that the learning of some service personnel may exceed the skills, competencies, and knowledge evaluated for a specific course or rating. In these cases, you may wish to conduct further assessment. (See question 24 for information about assessment techniques.)

May I conduct my own assessment of an applicant’s learning? Yes. In a sense, you are always conducting your own assessment, even when you use the recom
mendations in this book. The Guide is one of many tools you can use to assess what an applicant has learned and how that learning can be applied to a specific program of study at your institution. When you cannot find a recommendation in the Guide or obtain one from OECC Information Service, we encourage you to use other means to assess what the person has learned.

There are a wide variety of assessment techniques that you can use, e.g., written examinations, oral examinations, faculty committee assessment, evaluation of materials supplied by the applicant, personal interviews, performance tests, and standardized examinations such as CLEP. A combination of several techniques will usually result in a reliable assessment of the person's learning.

You may learn more about assessment techniques through the publications of the Council for the Advancement of Experiential Learning (CAEL), formerly the Cooperative Assessment of Experiential Learning. Two CAEL reports give particularly helpful overviews of the topic. A Compendium of Assessment Techniques (CAEL-11; $4.50), and Principles of Good Practices in Assessing Experiential Learning by Warren W. Willingham (CAEL-27; $4.00 for a single copy, $3.00 each for ten or more). The publications may be purchased from CAEL, American City Building, Suite 212, Columbia, Maryland 21044.

You should also watch for new additions to the ACE Guide Series, which now comprises the Guide and a companion volume, The National Guide to Educational Credit for Training Programs, which lists recommendations for courses offered by business and industry, government agencies, professional and voluntary associations, and labor unions. The 1980 edition of The National Guide may be purchased from the ACE Publications Department ($22.00 a copy, prepaid). The office plans to add a guide to credit-by-examination programs to the series. Availability of the new guide will be announced in the OECC Newsletter.

25

I am an employer. How will the Guide be useful to me? You may find the exhibits helpful in identifying the skills and knowledge of veterans and placing them in jobs. The recommendations and descriptions enable you to compare a veteran's training and experience with the qualifications and requirements for jobs. The recommendations relate learning to postsecondary courses and curricula and, in some cases, to apprenticeship training programs.

26

I found the correct exhibit in my 1980-Guide but under Credit Recommendation it says "Pending Evaluation." My student can't wait for the 1982 Guide to find out what credit she might receive. What should I do in such a case? Staff members of the Office on Educational Credit and Credentials regularly schedule site evaluations. We publish the titles of courses, Army MOS's, and Navy ratings in the OECC Newsletter so that you may be aware of the availability of recommendations. When a course or occupation is listed as "Pending Evaluation," you may call the office to find out if a credit recommendation is available, or you may simply send in your authorized "Request for Course Recommendation" or "Request for Army Enlisted and Warrant Officer MOS Exhibits" form. The Guide system is constantly growing as courses and occupations are added to the database.

27

One of my students completed a formal military course but does not have a DD Form 295 or DD Form 214 because he was not on active-duty service. Can I grant credit for the course and how can I verify that the course was actually completed? We recommend that school officials use the DD 295 or DD 214 whenever available in verifying successful completion of a service course. This suggestion is not intended to exclude those individuals who do not have access to the forms because they were 1) on reserve status, 2) in the National Guard, or 3) civilians attending military courses. In such cases, we suggest that alternative forms of certification, such as course completion certificates or other acceptable records of training, be used to verify eligibility for credit. The following summary of records sources might be used in seeking alternative records: National Personnel Records Center, (Military Personnel Records), 9700 Page Boulevard, St. Louis, MO 63132—the primary source for in-service training records for discharged or retired personnel.

USAF, Military Personnel Records Division, Randolph AFB, TX 78148—for active AF members including National Guard on active duty in the Air Force and general officers retired with pay.

Air Reserve Personnel Center, 3800 York Street, Denver, CO 80205—for reserve personnel, retired reservists in non-pay status, and members of the National Guard released from active duty and transferred to reserve.

Commandant, U.S. Coast Guard, Washington, DC 20590—for Coast Guard active, reserve, and officers separated before 1-1-29.

Commandant of the Marine Corps, Headquarters, U.S. Marine Corps, Washington, DC 20380—for Marine Corps
QUESTIONS AND ANSWERS

Active members, Reserve officers, and Class II enlisted, Reserve

Marine Corps Reserve Forces, Class III, 1500 E Bannister Road, Kansas City, MO 64131—for Marine Corps Class III reservists (inactive).

National Archives and Records Service, National Archives Building, Washington, DC 20408—for Army officers separated before 7-1-17 and enlisted separated before 11-1-12.

Commanding Officer, U.S. Army Administration Center, TAGO, 9700 Page Boulevard, St Louis, MO 63132—for active Army officers, current National Guard members, records of active duty in U.S. Army, and living retired members other than general officers.

The Adjutant General, ATTN: AGPF, Department of the Army, Washington, DC 20310—for active Army officers including National Guard on active duty in the U.S. Army, and retired general officers.

Commanding Officer, U.S. Army Enlisted Personnel Support Center, Ft Benjamin Harrison, IN 46249—for active enlisted personnel, including National Guard, on active duty in the U.S. Army.

Chief of Naval Personnel, Department of the Navy, Washington, DC 20370—for Navy active members, Reserve officers; and enlisted reserve in drill status.

National Guard Bureau, Washington, DC 20310—for current National Guard officers not on active duty in the Army or Air Force.

The Adjutant General of the Appropriate State, District of Columbia, or Puerto Rico—for current National Guard enlisted personnel not on active duty in the Army or Air Force.

28

As registrar of a four-year college, I use only the upper-division baccalaureate category in granting credit for military courses listed in your Guide. That is the correct approach, isn't it? Not necessarily. Depending on the recommendation, the programs of study available at the institution, and the objectives of the student, four-year colleges and universities can use any or all of the four categories used in the Guide, namely the vocational/certificate category, the lower-division baccalaureate/associate degree category, the upper-division baccalaureate category, and the graduate degree category. Please read questions 19-25 and "Categories of Credit," p. A-6, of the 1980 edition of the Guide to the Evaluation of Educational Experiences in the Armed Services.

29

We have received from a military service school a transcript listing semester credits and carrying the statement that the school is accredited by one of the six regional accrediting associations. How do we handle this? At this time we know of no military schools that are accredited above the certificate level other than the following: Community College of the Air Force, which is accredited at the two-year community college level, Army Command and Staff College at Fort Leavenworth, Kansas, which is accredited to grant an M.A. degree, Armed Forces Institute of Technology at Wright Patterson Air Force Base, which is accredited through the doctoral level and the service academies.

We recommend that you handle the certificate level credit listings in accordance with your institutional policy regarding certificate level credit.

30

I understand that basic training was recently evaluated. What happened to OECC's former statement on basic and recruit training, and where do I find the new credit recommendations? We did conduct on-site evaluations of the basic training offered for both men and women by the Army, Coast Guard, Marine Corps, and the Navy. We believed that the differences in the missions of the services had not been sufficiently addressed by our earlier policies and believed that the differences in training for males and females also were not reflected. Consequently, you will find our credit recommendations in the Course Exhibits section of each volume of the Guide: look under "basic" or "recruit" in each Keyword Index to find the course exhibit number.

Additional questions and answers about using the Guide and the recommendations appear in the OECC Newsletter. If you are not already receiving the newsletter, write to the Editor, OECC Newsletter, Office on Educational Credit and Credentials, American Council on Education, One Dupont Circle, Washington, DC 20036.
Transfer and Award of Credit

This statement was developed by the three national associations whose member institutions are directly involved in the transfer and award of academic credit—the American Association of Collegiate Registrars and Admissions Officers, the American Council on Education, and the Council on Postsecondary Accreditation. The need for such a statement came from an awareness of the growing complexity of transfer policies and practices, which have been brought about, in part, by the changing contours of postsecondary education. With increasing frequency, students are pursuing their education in a variety of institutional and extra-institutional settings. Social equity and the intelligent use of resources require that validated learning be recognized wherever it takes place.

The statement is intended to serve as a guide to institutions in the development or review of policies dealing with transfer and award of credit. It is under periodic review by the three associations and reactions would, of course, be welcome. Comments may be directed to Henry Spille, Director of the Office on Educational Credit and Credentials, ACE.

J. W. Peltason, President

This statement is directed to institutions of postsecondary education and others concerned with the transfer of academic credit among institutions and award of academic credit for extra-institutional learning. Basic to this statement is the principle that each institution is responsible for determining its own policies and practices with regard to the transfer and award of credit. Institutions are encouraged to review their policies and practices periodically to assure that they accomplish the institution's objectives and that they function in a manner that is fair and equitable to students. Any statements, this one or others referred to, should be used as guides, not as substitutes, for institutional policies and practices.

Transfer of credit is a concept that now involves transfer between dissimilar institutions and curricula and recognition of extra-institutional learning, as well as transfer between institutions and curricula of similar characteristics. As their personal circumstances and educational objectives change, students seek to have their learning, wherever and however attained, recognized by institutions where they enroll for further study. It is important for reasons of social equity and educational effectiveness, as well as the wise use of resources, for all institutions to develop reasonable and definitive policies and procedures for acceptance of transfer credit. Such policies and procedures should provide maximum consideration for the individual student who has changed institutions or objectives. It is the receiving institution's responsibility to provide reasonable and definitive policies and procedures for determining a student's knowledge in required subject areas. All institutions have a responsibility to furnish transcripts and other documents necessary for a receiving institution to judge the quality and quantity of the work. Institutions also have a responsibility to advise the students that the work reflected on the transcript may or may not be accepted by a receiving institution.

INTERINSTITUTIONAL TRANSFER OF CREDIT

Transfer of credit from one institution to another involves at least three considerations:

1. the educational quality of the institution from which the student transfers;

2. the comparability of the nature, content, and level of credit earned to that offered by the receiving institution; and

3. the appropriateness and applicability of the credit earned to the programs offered by the receiving institution, in light of the student's educational goals.

Accredited Institutions

Accreditation speaks primarily to the first of these considerations, serving as the basic indicator that an institution meets certain minimum standards. Users of accreditation are urged to give careful attention to the accreditation conferred by accrediting bodies recognized by the Council on Postsecondary Accreditation (COPA). COPA has a formal process of recognition which requires that any accrediting body so recognized must meet the same standards. Under these standards, COPA has recognized a number of accrediting bodies, including:

1. regional accrediting commissions (which historically accredited the more traditional colleges and universities but which now accredit proprietary, vocational-technical, and single-purpose institutions as well);
TRANSFER AND AWARD OF CREDIT

(2) national accrediting bodies that accredit various kinds of specialized institutions, and

(3) certain professional organizations that accredit free-standing professional schools, in addition to programs within multi-purpose institutions. (COPA annually publishes a list of recognized accrediting bodies, as well as a directory of institutions accredited by these organizations.)

Although accrediting agencies vary in the ways they are organized and in their statements of scope and mission, all accrediting bodies that meet COPA's standards for recognition function to assure that the institutions or programs they accredit have met generally accepted minimum standards for accreditation.

Accreditation affords reason for confidence in an institution's or a program's purposes, in the appropriateness of its resources and plans for carrying out these purposes, and in its effectiveness in accomplishing its goals, insofar as these things can be judged. Accreditation speaks to the probability, but does not guarantee, that students have met acceptable standards of educational accomplishment.

Comparability and Applicability

Comparability of the nature, content, and level of transfer credit and the appropriateness and applicability of the credit earned to programs offered by the receiving institution are as important in the evaluation process as the accreditation status of the institution at which the transfer credit was awarded. Since accreditation does not address these questions, this information must be obtained from catalogues and other materials and from direct contact between knowledgeable and experienced faculty and staff at both the receiving and sending institutions. When such considerations as comparability and appropriateness of credit are satisfied, however, the receiving institution should have reasonable confidence that students from accredited institutions are qualified to undertake the receiving institution’s educational programs.

Admissions and Degree Purposes

At some institutions there may be differences between the acceptance of credit for admission purposes, and the applicability of credit for degree purposes. A receiving institution may accept previous work, place a credit value on it, and enter it on the transcript. However, that previous work, because of its nature and not its inherent quality, may be determined to have no applicability to a specific degree to be pursued by the student.

Institutions have a responsibility to make this distinction, and its implications, clear to students before they decide to enroll. This should be a matter of full disclosure, with the best interests of the student in mind. Institutions also should make every reasonable effort to reduce the gap between credits accepted and credits applied toward an educational credential.

Unaccredited Institutions

Institutions of postsecondary education that are not accredited by COPA-recognized accrediting bodies may lack that status for reasons unrelated to questions of quality. Such institutions, however, cannot provide a reliable third-party assurance that they meet or exceed minimum standards. That being the case, students transferring from such institutions may encounter special problems in gaining acceptance and transferring credits to accredited institutions. Institutions admitting students from unaccredited institutions should take special steps to validate credits previously earned.

Foreign Institutions

In most cases, foreign institutions are chartered and authorized by their national governments, usually through a ministry of education. Although this provides for a standardization within a country, it does not produce useful information about comparability from one country to another. No other nation has a system comparable to voluntary accreditation. The Division of Higher Education of the United Nations Educational, Scientific, and Cultural Organization (UNESCO) is engaged in a project to develop international compacts for the acceptance of educational credentials. At the operational level, four organizations—the Council on International Educational Exchange (CIEE), the National Council on the Evaluation of Foreign Student Credentials (CEC), the National Association for Foreign Student Admissions (NAFA), and the National Liaison Committee on Foreign Student Admissions (NLC)—often can assist institutions by distributing general guidelines on admission and placement of foreign students. Equivalency or placement recommendations are to be evaluated in terms of the programs and policies of the individual receiving institution.

VALIDATION OF EXTRA-INSTITUTIONAL AND EXPERIENTIAL LEARNING FOR TRANSFER PURPOSES

Transfer-of-credit policies should encompass educational accomplishment attained in extra-institutional settings as well as at accredited postsecondary institutions. In deciding on the award of credit for extra-institutional learning, institutions will find the services of the American Council on Education's Office of Educational Credit helpful. One of the Office's functions is to operate and foster programs to determine credit equivalencies for various modes of extra-institutional learning. The Office maintains evaluation pro-
grams for formally structured courses offered by the military and civilian non-collegiate sponsors such as business, corporations, government agencies, and labor unions. Evaluation services are also available for examination programs, for occupations with validated job proficiency evaluation systems, and for correspondence courses offered by schools accredited by the National Home Study Council. The results are published in a Guide series. Another resource is the General Education Development (GED) Testing Program, which provides a means for assessing high school equivalency.

For learning that has not been validated through the ACE formal credit recommendations process or through credit-by-examination programs, institutions are urged to explore the Council for Advancement of Experiential Learning (CAEL) procedures and processes. Pertinent CAEL publications designed for this purpose are also listed.

USES OF THIS STATEMENT

This statement has been endorsed by the three national associations most concerned with practices in the area of transfer and award of credit—the American Association of Collegiate Registrars and Admissions Officers, the American Council on Education/Commission on Educational Credit, and the Council on Postsecondary Accreditation.

Institutions are encouraged to use this statement as a basis for discussions in developing or reviewing institutional policies with regard to transfer. If the statement reflects an institution's policies, that institution might want to use this publication to inform faculty, staff, and students.

It is recommended that accrediting bodies reflect the essential precepts of this statement in their criteria.

Approved by the COPA Board
October 10, 1978

Approved by the American Council on Education/Commission on Educational Credit
December 5, 1978

Approved by the Executive Committee, American Association of Collegiate Registrars and Admissions Officers
November 21, 1978
Course Exhibits

CG

CG-0419-0001

MERCHANT MARINE SAFETY

INSTRUCTION SCHOOL

Course Number: None

Location: Coast Guard Academy, New London, CT

Length: 12 weeks (340 hours)

Exhibit Dates: 2/6/12-6/8

Objectives: To prepare officers for assignment to duty in a marine inspection office.

Instruction: Introduction to marine inspection; merchant marine investigation and revocation proceedings; licensing and certifying of merchant marine personnel; naval architecture and ship construction; regulations for passenger, cargo, and uninspected vessels; dangerous cargo, load line, and marine and electrical engineering regulations; equipment specifications; welding, hull and boiler vessel inspection, dry-dock and vessel repair.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 5 semester hours in transportation operations (12/68).

CG-0701-0001

DENTAL TECHNICIAN A SCHOOL

Course Number: None

Location: Coast Guard Training Center, Cape May, NJ

Length: Version 1: 2 weeks (387-433 hours); Version 2: 17 weeks (423 hours)


Objectives: To provide basic techniques and skills required for dental assisting.

Instruction: All Versions. Lectures and practical experience in chairside assisting, basic radiology techniques, prophylaxis, operating room assisting, dental anatomy, first aid, preventive dentistry, and dental office management.

Students learn to prepare patients for dental treatment, and can identify, sharpen, and maintain instruments for all phases of hygiene. Students are trained to sterilize instruments and materials. Students learn to instruct in proper daily oral health, scale, and polish teeth, apply caries preventive agents, and render emergency basic treatment.

Instruction includes practical experience in chairside assisting, basic radiology techniques, prophylaxis, operating room assisting, dental anatomy, first aid, preventive dentistry, and dental office management.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in anatomy and physiology, 2 in pharmacology, 2 in health and hygiene or preventive medicine, 2 in emergency medical techniques, 3 in nursing techniques, and 3 in medical and surgical technology (11/77).

CG-0709-0001

HOSPITAL CORPSMAN (HM)

Course Number: None

Location: Hospital Corps School, Groton, CT

Length: 24 weeks (800 hours)

Exhibit Dates: 10/60-12/67.

Objectives: To train personnel in the fundamental principles of health and nursing.

Instruction: Nursing, anatomy and physiology, first aid, preventive medicine, medical and surgical technology, laboratory, dental, x-ray, clinical experience.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 4 semester hours in hygiene, sanitation, and first aid and 2 in anatomy and physiology (12/68).

CG-0709-0002

EMERGENCY MEDICAL TECHNICIAN

Course Number: None

Location: Training Center, Petaluma, CA

Length: 2-3 weeks (104 hours)

Exhibit Dates: 2/79-Present.

Objectives: To train personnel, especially those engaged in search and rescue activities, to provide basic life support and emergency medical care.

Instruction: Course provides lectures and laboratories covering legal aspects of emergency care, anatomy and physiology of the respiratory and cardiovascular systems, use of cardiopulmonary resuscitation equipment, oxygen delivery systems, and assisted ventilation techniques.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 6 semester hours in basic emergency care and 5 in clinical experience (6/79). Version 2: Credit is not recommended for use of the limited specialized nature of the course (2/74).

CG-0703-0001

BASIC HOSPITAL CORPSMAN, CLASS A

Course Number: O1009

Location: Coast Guard Academy, New London, CT

Length: 16 weeks (640 hours)

Exhibit Dates: 4/74-Present.

Objectives: To train enlisted personnel in the basic principles and techniques necessary to provide direct patient care to the sick and injured with the main emphasis on independent duty.

Instruction: Introduction includes general anatomy and physiology, medical and surgical conditions, preventive medicine, principles and techniques of patient care, medical administration, medical mathematics and pharmacology, laboratory techniques, instructional and leadership techniques, first aid, military administration, and supervised clinical experiences.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in first aid or emergency technology (8/79).

CG-0802-0001

BOATING SAFETY BY CORRESPONDENCE

Course Number: 417-4

Location: Coast Guard Institute, Oklahoma City, OK

Length: Maximum 52 weeks (Oklahoma City, OK hours)

Exhibit Dates: 11/78-Present.

Objectives: To provide training in the area of boating safety activities (policies, laws, law enforcement, inspection, public education) to persons whose duties require a knowledge of the area. Student will read and study textual materials, answer lesson questions both in course book and text and pass comprehensive proctored end-of-course examination.

Instruction: Topics covered include jurisdiction, laws, numbering, registration, documentation and licensing, legal requirements, and rules of the road, negligent operation, correction of hazardous conditions, motor boat examination techniques, C.G. 410Q and warnings, arrest, state boating safety programs, and USCG auxiliary, boating accidents, marine events and regattas, and water pollution.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in elements of marine law and safety regulations (5/79).

CG-0802-0002

1. MARINE SAFETY BASIC

2. MERCHANT MARINE SAFETY

Course Number: None

Location: Reserve Training School, Yorktown, VA

Length: 11-12 weeks (243-418 hours)


Objectives: To train merchant marine personnel in the laws, regulations and policies governing marine safety.

Instruction: All Versions. Lectures and practical exercises in ship construction, engineering materials, welding, non-destructive testing, hull repair, boilers and pressure vessels, piping-systems, life-saving equipment, deck and electrical inspection, fire engine servicing, refrigeration, piping, and rules of the road, negligent operation, correction of hazardous conditions, motor boat examination techniques, C.G. 410Q and warnings, arrest, state boating safety programs, and USCG auxiliary, boating accidents, marine events and regattas, and water pollution.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in elements of marine law and safety regulations (5/79).
1-2 COURSE EXHIBITS

length and covers port safety approaches and environmental protection functions.

Credit Recommendation: Version 1: In the lower-division baccalaureate/associate degree category, 4 semester hours in marine science and safety for phase I, 2 semester hours in marine environmental safety, and 1 in port terminal management for phase II, for a total of 6 semester hours in marine safety, and 1 in port terminal management (12/79). Version 2: In the vocational certificate category, 4 semester hours in marine safety (6/75).

CG-0802-0003

SEARCH AND RESCUE CLASS C (Search and Rescue)

Course Number: None.
Location: Search and Rescue School, Governors Island, NY.
Length: 4 weeks (124-134 hours).
Exhibit Dates: Version 1: 11/77-Present
Version 2: 9/66-10/77
Objectives: To train personnel in search and rescue procedures.

Instruction: Version 1: Covers organization, documentation, public information and legal aspects of the process. Version 2: Lectures, presentations, and exercises in search and rescue facilities, search planning, conduct of the search, rescue equipment and techniques, and precautionary and special mission techniques.

Credit Recommendation: Version 1: In the lower-division baccalaureate/associate degree category, 3 semester hours of elective credit. Version 2: Credit is not recommended because of the limited specialized nature of the course (6/75).

CG-0802-0004

NATIONAL BOATING SAFETY

Course Number: None.
Location: Reserve Training Center, Yorktown, VA.
Length: 6 weeks (210 hours).
Exhibit Dates: Version 7/92-Present

Objectives: To train personnel in boating safety.

Instruction: Lectures and practical exercises include boating safety; federal law; definitions and terminology, equipment for various crafts; boating communication and lighting; first aid, board procedures and techniques; and rules of the road.

Credit Recommendation: In the vocational certificate category, 4 semester hours in federal and state boating safety instruction (7/74).

CG-0802-0005

RESCUE COORDINATION CENTER FOR RESERVISTS (RCC Reservists)

Course Number: None.
Location: Training Center, Governors Island, NY.
Length: 2 weeks (75 hours).
Exhibit Dates: 3/78-Present

Objectives: To provide training in the duties of a search and rescue mission coordinator and rescue coordination center controller.

Instruction: Course includes lectures and laboratory exercises in search and rescue planning and facilities.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (8/76).

CG-0802-0006

HAZARDOUS CHEMICALS TRAINING

Course Number: None.
Location: Reserve Training Center, Yorktown, VA.
Length: 3 weeks (105 hours).
Exhibit Dates: 6/78-Present.

Objectives: To train Coast Guard personnel with extensive experience in marine safety in the hazards of transporting and handling chemicals and petroleum products, inspection techniques required for hazardous cargo, the duties of on-scene coordinator and the requirements for occupational safety as pertains to chemicals and petroleum products.

Instruction: Lectures and practical exercises on hazardous chemical regulations, physical, chemical and toxicological properties of hazardous chemicals, hazardous cargo vessel and terminal arrangements, duties of on-scene coordinator, study of previous hazardous cargo accidents and inspection requirements for vessels, terminals and transfer equipment.

Credit Recommendation: In the upper-division baccalaureate category, 3 semester hours in marine/industrial safety (12/79).

CG-1304-0001

1. CLASS A MARINE SCIENCE TECHNICIAN
2. MARINE SCIENCE TECHNICIAN

Course Number: None.
Location: Reserve Training Center, Yorktown, VA.
Length: Version 1: 13-14 weeks (475-510 hours).
Version 2: 16-19 weeks (385-593 hours).

Objectives: Version 1: To train qualified nonrated Coast Guard personnel in basic meteorological and oceanographic theory and skills necessary to operate equipment and perform basic observations and analyses.

Instruction: Version 1: Lectures, programmed instructions in basic physical science, practical experience making and processing meteorological and oceanographic data at sea. Publications needed in observing, recording, encoding and decoding, oceanographic and meteorological data.

Instruction: This nonresident course consists of ten lessons including coordinate systems, time, description of marine sextant, use of the nautical almanac and H.O. Tables 229, the celestial fix and running fix, the dead reckoner, and how to determine gyro error at sea. There is a proctored end-of-course examination.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in meteorology, 2 in technical mathematics (6/79).

CG-1304-0004

CELESTIAL NAVIGATION BY CORRESPONDENCE

Course Number: 463-4
Location: Coast Guard Institute, Oklahoma City, OK.
Length: 52 weeks (Oklahoma City, OK hours).

Objectives: To provide training in celestial navigation.

Instruction: This nonresident course consists of ten lessons including coordinate systems, time, description of marine sextant, use of the nautical almanac and H.O. Tables 229, the celestial fix and running fix, the dead reckoner, and how to determine gyro error at sea. There is a proctored end-of-course examination.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in celestial navigation (5/79).

CG-1304-0005

OCEANOGRAPHIC TECHNICIAN

Course Number: None.
Location: Oceanographic School, Grifton, CT.
Length: 8-9 weeks (323-359 hours).
Exhibit Dates: 4/66-12/68.

Objectives: To train enlisted personnel in the fundamentals of oceanography.

Instruction: Lectures and practical experience in the fundamentals of biological, chemical, and physical oceanography essential to the operation of instruments for gathering data at sea.

Credit Recommendation: In the vocational certificate category, 4 semester hours in oceanography (12/73), in the lower-division baccalaureate/associate degree category, 4 semester hours in oceanography (12/73), in the upper-division baccalaureate category, 3 semester hours in oceanography (12/68).

CG-1304-0003

MARINE SCIENCE TECHNICIAN BY CORRESPONDENCE

Course Number: 234-1.
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).

Objectives: To familiarize the student with marine science equipment and instrumentation needed in observing, recording, encoding and decoding, oceanographic and meteorological data.

Instruction: Course includes a review of appropriate mathematics and basic physics; the hydrosphere and atmosphere are described. The instruments used to measure relevant attributes of the hydrosphere and atmosphere are described and their reading and codes are discussed. How this data is entered into the computer and processed for certain analysis is demonstrated. There is a proctored end-of-course examination.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in meteorology, 2 in technical mathematics (6/79).

CG-1304-0004
Instruction: This nonresident course requires a textbook, oceanographic manual, course book with eight lessons, and a comprehensive proctored end-of-course examination. The course includes geolbal, biological, and physical oceanography, and provides descriptions of basic sampling procedures and processing of oceanographic data.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 4 semester hours in marine science (5/79).

**CG-1304-0006**

**ICE OBSERVER BY CORRESPONDENCE**

**Course Number:** 476-1.

**Location:** Coast Guard Institute, Oklahoma City, OK.

**Length:** Maximum 52 weeks (Oklahoma City, OK hours).

**Exhibit Dates:** 4/78-Present.

**Objectives:** To train Coast Guard personnel to observe land and sea ice concentrations and topographical conditions and to report these observations to superiors.

**Instruction:** A brief nonresident course to cover responsibilities in ice breaking, description of basic breaking and ice reconnaissance procedures. Course teaches stages of water freezing and thawing and provides analysis of ice charts.

**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (5/79).

**CG-1304-0007**

**QUARTERMASTER FIRST CLASS BY CORRESPONDENCE**

**Course Number:** 137-4.

**Location:** Coast Guard Institute, Oklahoma City, OK.

**Length:** Maximum 52 weeks (Oklahoma City, OK hours).

**Exhibit Dates:** 8/69-Present.

**Objectives:** To provide training for prospective quartermasters in communication, navigation (and celestial), meteorology, and related topics.

**Instruction:** This nonresident course covers ship conning, naval communications, rules of the road, compasses and dead reckoning, piloting and navigation (including celestial), and meteorology. There is a proctored end-of-course examination.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 3 semester hours in coastwise navigation and piloting; 2 in applied meteorology, 2 in celestial navigation (5/79).

**CG-1304-0008**

**METEOROLOGY BY CORRESPONDENCE**

**Course Number:** 475-5.

**Location:** Coast Guard Institute, Oklahoma City, OK.

**Length:** Maximum 52 weeks (Oklahoma City, OK hours).

**Exhibit Dates:** 10/75-Present.

**Objectives:** To expose personnel to the various aspects of weather and to enable them to perform basic forecasting.

**Instruction:** This nonresident course includes weather warnings and displays, worldwind patterns, clouds, weather instruments, air masses, frontal systems, storms, fog, icing problems, waves, and forecasting methods. Course has proctored end-of-course examination.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 3 semester hours in meteorology (5/79).

**CG-1304-0009**

**Location:** 1051L.

**Length:** 213L hours.

**Exhibit Dates:** 11L.

**CG-1304-0009**

**WEATHER BRIEFER**

**Course Number:** None.

**Location:** Reserve Training Center, Yorktown, VA.

**Length:** 3 weeks (90-105 hours).

**Exhibit Dates:** 2/78-Present.

**Objectives:** To train Coast Guard rated marine science technicians (MST) to provide weather briefing services for surface and aviation units.

**Instruction:** Lectures and programmed instruction concerning properties of air masses, structure of frontal systems, and formation of severe weather. Instruction and practical experience in methods of meteorological data acquisition, coding and decoding data, techniques of weather briefing and basic analysis of weather charts.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 4 semester hours in basic nonlaboratory education (12/79).

**CG-1304-0010**

**MARINE ENVIRONMENT AND SYSTEMS**

**OFFICER CLASS C**

**Course Number:** None.

**Location:** Reserve Training Center, Yorktown, VA.

**Length:** 6 weeks (140-210 hours).

**Exhibit Dates:** 4/77-Present.

**Objectives:** To prepare officers to undertake the duties and responsibilities in marine environmental protection and port safety law enforcement.

**Instruction:** Lectures and practical exercises in basic law enforcement, industry/Coast Guard regulations, management of pollution removal, supervision of investigative procedures and reports, and public education concerning the Coast Guard's role in marine environmental protection.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 2 semester hours in marine pollution control, 1 in port terminal management (12/79).

**CG-1304-0011**

**MARINE ENVIRONMENT AND SYSTEMS**

**PETTY OFFICER (CLASS C)**

**Course Number:** None.

**Location:** Reserve Training Center, Yorktown, VA.

**Length:** 5 weeks (180-200 hours).

**Exhibit Dates:** 7/77-Present.

**Objectives:** To prepare petty officers to undertake the duties and responsibilities placed upon the Coast Guard in marine environmental protection and port safety law enforcement.

**Instruction:** Lectures and practical exercises in basic law enforcement, understanding of pollution removal, gathering of evidence for investigative procedures and reports, and public education concerning the Coast Guard's role in marine environmental protection.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 3 semester hours in marine pollution control, 1 in port terminal management (12/79).

**CG-1304-0012**

**MARINE ENVIRONMENTAL PROTECTION**

**Course Number:** None.

**Location:** Reserve Training Center, Yorktown, VA.

**Length:** 3 weeks (77 hours).

**Exhibit Dates:** 9/78-Present.

**Objectives:** To prepare officers and petty officers for response and enforcement duties in marine environmental protection.

**Instruction:** Lectures and practical experiences in the law, regulations and standards of the Coast Guard's marine environmental program; oil and chemical spills investigations and response are included.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 2 semester hours in oil and chemical spill control (12/79).

**CG-1404-0001**

**RADIONIAN**

(Radionian Class A)

**Course Number:** None.

**Location:** Version 1: Radoman School, Petaluma, CA Version 2: Training Center, Governors Island, NY; Training Center, Groton, CT.

**Length:** Version 1: 21 weeks (705 hours).

**Version 2:** 24 weeks (903 hours).

**Exhibit Dates:** Version 1: 1/72-Present.

**Version 2:** 11/58-12/71.

**Objectives:** To train enlisted personnel to be radomians.

**Instruction:** Lectures and practical exercises in typing, voice procedures, communications technology, Morse code, electronics, teletype operations, publications, security, leadership, and first aid.

**Credit Recommendation:** In the vocational certificate category, 2 semester hours in typewriting (6/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in typewriting (6/74).

**CG-1404-0002**

**RADOMIAN SECOND CLASS BY CORRESPONDENCE**

**Course Number:** 241-6.

**Location:** Coast Guard Institute, Oklahoma City, OK.

**Length:** Maximum 52 weeks (Oklahoma City, OK hours).

**Exhibit Dates:** 1/75-Present.

**Objectives:** To provide information on security; administration; communications systems, equipment, and procedures; and antennas.

**Instruction:** The technical portion of this correspondence course provides a brief coverage, of the basic operating characteristics of communication receivers and transmitters used in CW, voice, and telephone modes, and of antenna and wave propagation.

**Credit Recommendation:** Credit is not recommended because of the military-specific content of the course (1/79).

**CG-1405-0001**

**AVIATION ELECTRONICS TECHNICIAN (AT)**

**COMMUNICATIONS, CLASS A**

**Course Number:** None.

**Location:** Training Center, Groton, CT.

**Length:** 3 weeks (102 hours).

**Exhibit Dates:** 4/66-12/68
COURSE EXHIBITS

Objectives: To train enlisted personnel to receive, copy, and send international Morse code.

Instruction: Lectures and practical exercises in the use of Morse code and telegraphic equipment. Course includes learning Morse code alphanumeric symbols, basic message procedures, formats, and developing skills in copying and sending at the rate of eight words a minute.

Credit Recommendation: Credit is not recommended because of the limited-specialized nature of the course (6/74).

CG-1406-0001
INSTRUCTOR TRAINING, CLASS C
Course Number: None.
Location: Coast Guard Training Center, Groton, CT.
Length: 4 weeks (83 hours).
Exhibit Dates: 3/66-12/68.
Objectives: To prepare qualified enlisted personnel of the Coast Guard for assignment to instructor duties at major training centers, ship training detachments, district training teams, and military missions and other instructional duties.

Instruction: This course includes teaching methodology, teaching aids, lesson plans, and practice teaching.

Credit Recommendation: In the vocational certificate category, 2 semester hours in instructional aids (7/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in instructional aids (7/74); in the upper-division baccalaureate category, 2 semester hours in instructional aids (7/74).

CG-1406-0002
INSTRUCTOR TRAINING
Course Number: None.
Location: Training Center, Governors Island, NY.
Length: 2 weeks (85 hours).
Exhibit Dates: 9/76-Present.
Objectives: To prepare staff in effective methods of instruction, media, and training aids.

Instruction: Course covers leadership, public speaking, methods of instruction, principles of learning, methods of testing, and other aspects in the teaching-learning process.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in teaching methods (9/78).

CC-1408-0001
SMALL ARMS INSTRUCTOR
Course Number: None.
Location: Reserve Training Center, Yorktown, VA.
Length: 3 weeks (105 hours).
Exhibit Dates: 3/79-Present.
Objectives: To train Coast Guard petty officers in the basic skills and advanced knowledge to act as range officers or coaches and to establish small arms ranges and small arms training programs.

Instruction: Training in safety and marksmanship on a .45 pistol, .38 revolver, M-16 rifle, and 12 ga. shotgun. Students will be required to demonstrate proficiency in range safety and approved methods of instruction in the care and use of small arms.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in small arms range management (12/79).

CG-1409-0001
YEOH MAN SCHOOL, CLASS A
Course Number: None.
Location: Coast Guard Training Center, Groton, CT.
Length: 3 weeks (436 hours).
Exhibit Dates: 6/66-12/68.
Objectives: To provide yeomen with training in office and clerical procedures, including operation and maintenance of typewriters.

Instruction: Lectures and practical exercises in typing, filing, correspondence, personnel records, office procedures, and etiquette.

Credit Recommendation: In the vocational certificate category, 3 semester hours in typing, 3 in office practices (3/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in typing, 3 in office practices (3/74); in the upper-division baccalaureate category, 3 semester hours in typing (12/68).

CG-1409-0002
STOREKEEPER, CLASS A
Course Number: None.
Location: Training Center, Petaluma, CA.
Length: 12 weeks (436-464 hours).
Objectives: To train enlisted personnel to be storekeepers.

Instruction: Lectures and practical exercises in procurement, typing, use of office machines, correspondence, inventory control, requisitions, publishing, disbursing, transportation, property, travel, and pay and allowances.

Credit Recommendation: In the vocational certificate category, 1 hour in typing (6/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in typing (6/74); in the upper-division baccalaureate category, credit in typing on the basis of institutional evaluation (12/68).

CG-1601-0001
CLASS C FIELD OIL IDENTIFICATION LABORATORY
Course Number: None.
Location: Reserve Training Center, Yorktown, VA.
Length: 2 weeks (75 hours).
Exhibit Dates: 7/78-Present.
Objectives: To train Coast Guard petty officers to be field oil identification laboratory technicians.

Instruction: Theory and extensive laboratory practice on fluorescence, spectroscopy, and thin layer chromatography. Theory of basic petroleum chemistry laboratory procedures for constituent identification of oil samples.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in fluorescence spectroscopy, thin film chromatography, and laboratory practices (12/79).

CG-1701-0001
REFRIGERATION AND AIR CONDITIONING (OPERATION AND MAINTENANCE)
Course Number: MK-22.
Location: Reserve Training Center, Yorktown, VA.
Length: 5-6 weeks (175-210 hours).
Exhibit Dates: 6/77-Present.
Objectives: To train engineering petty officers in the operation and maintenance of refrigeration, air conditioning, and heat pump equipment used on Coast Guard cutters, boats and stations.

Instruction: Lectures and practical exercises in gas laws, the properties of heat, pressure-temperature relationship, the refrigeration-cycle, refrigerants, safety, leaks, and the use of detectors and temperatures as they pertain to refrigeration, air conditioning, and heat pumps.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 4 semester hours in air conditioning and refrigeration (12/79).

CG-1704-0001
AVIATION MECHANIST'S MATE CLASS A
(AVIA LATION MACHINIST'S MATE)
Course Number: None.
Location: Aircraft Repair and Supply Center, Elizabeth City, NC.
Objectives: To provide fundamental principles of aviation, aviation electronics and aerodynamics for further study on specific A/C systems and to provide training at entry-level in aircraft maintenance on specific aircraft.

Instruction: Lectures and practical exercises in physics, mechanics, theory of flight, power plants, instruments, electrical systems, and propeller inspection and maintenance.

Credit Recommendation: Version 1: In the vocational certificate category, 1 semester hour in basic shop practice, 4 in basic aircraft maintenance (9/77). Version 2: In the vocational certificate category, 2 semester hours in flight theory, 2 in instruments and electrical/hydraulic systems, 2 in propeller and helicopter familiarization, 1 in inspection and maintenance procedures, 1 in helicopter power plants, and 5 in power plant theory, inspection, and maintenance (2/74).

Version 3: In the lower-division baccalaureate/associate degree category, 2 semester hours in flight theory (2/74). Version 3: In the vocational certificate category, 2 semester hours in flight theory, 2 in instruments and electrical/hydraulic systems, 2 in propeller and helicopter familiarization, 1 in inspection and maintenance procedures, and 5 in power plant theory, inspection, and maintenance (2/74).

Version 2: In the lower-division baccalaureate/associate degree category, 2 semester hours in flight theory, 1 in propeller and helicopter familiarization, 2 in power plant theory, inspection, and maintenance, and, on the basis of institutional evaluation, credit in instruments and electrical/hydraulic systems (2/74); in the upper-division baccalaureate category, 2 semester hours in flight theory (2/74).

CG-1704-0002
43D50 PROPELLER MAINTENANCE CLASS C
Course Number: None.
Location: Aircraft Repair and Supply Center, Elizabeth City, NC.
Objectives: To train engineering petty officers in the operation and maintenance of refrigeration, air conditioning, and heat pump equipment used on Coast Guard cutters, boats and stations.

Instruction: Lectures and practical exercises in gas laws, the properties of heat, pressure-temperature relationship, the refrigeration-cycle, refrigerants, safety, leaks, and the use of detectors and temperatures as they pertain to refrigeration, air conditioning, and heat pumps.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 4 semester hours in air conditioning and refrigeration (12/79).
Length: 2 weeks (60 hours)
Exhibit Dates: 2/76-Present.
Objectives: To develop skills in the maintenance and repair of a Hamilton Standard propeller.

Instruction: Instruction in disassembling, cleaning, inspecting, repairing, assembling, and maintaining Hamilton Standard propellers.

Credit Recommendation: In the vocational certificate category, 2 semester hours in aviation maintenance (9/77).

CG-1704-0003
HU-16E AIRCRAFT MAINTENANCE CLASS C

Course Number: None.
Location: Aircraft Repair and Supply Center, Elizabeth City, NC.
Length: 5 weeks (215 hours).
Exhibit Dates: 5/76-Present.
Objectives: To provide advanced technical training in the troubleshooting, repair, and maintenance of the HU-16E aircraft.

Instruction: Provides general instruction on the HU-16E aircraft and in the various major systems, including engine, fuel, aircraft electrical, fire control, and oxygen subsystems.

Credit Recommendation: In the vocational certificate category, 4 semester hours in aviation maintenance (9/77); in the lower-division baccalaureate/associate degree category, 4 semester-hours in aviation maintenance technology (9/77).

CG-1704-0004
T6-GE-6B ENGINE MAINTENANCE CLASS C

Course Number: None.
Location: Aircraft Repair and Supply Center, Elizabeth City, NC.
Length: 3-4 weeks (138 hours).
Exhibit Dates: 5/76-Present.
Objectives: To train students in the maintenance and adjustment of T6-GE-6B Turb Shaft engines.

Instruction: Students remove engines; disassemble, inspect, assemble, and install power plants in airframes; run engines; and make adjustments. Corrosion control and preservation techniques are included.

Credit Recommendation: In the vocational certificate category, 2 semester hours in aviation maintenance (9/77); in the lower-division baccalaureate/associate degree category, 3 semester-hours toward an aviation technology degree (9/77).

CG-1704-0005
HH-52A AIRFRAME AND POWERTRAIN, CLASS C

Course Number: None.
Location: Aircraft Repair and Supply Center, Elizabeth City, NC.
Length: 5 weeks (215 hours).
Exhibit Dates: 5/76-Present.
Objectives: To train students to maintain and adjust HH-52A airframe and powertrain systems.

Instruction: Maintenance instruction is in the area of gear boxes, drive shafts, main and tail rotor loads, and fuel, hydraulics, and oil systems. Students also learn how to replace and adjust components.

Credit Recommendation: In the vocational certificate category, 4 semester hours toward aviation airframe mechanics (9/77); in the lower-division baccalaureate/associate degree category, 4 semester-hours toward an aviation technology degree (9/77).

CG-1704-0006
HC-131A AIRCRAFT MAINTENANCE CLASS C

Course Number: None.
Location: Aircraft Repair and Supply Center, Elizabeth City, NC.
Length: 5 weeks (210 hours).
Exhibit Dates: 5/76-Present.
Objectives: Provides training in the repair, troubleshooting, and general maintenance of HC-131A aircraft.

Instruction: Introduction to HC-131A aircraft and ground handling equipment, instruction in the operation and maintenance of major engine subsystems, including fuel instrumentation and propellers, and in other aircraft subsystems, including electrical, safety, hydraulic, landing gear, air conditioning, pressurization, fire detection, and automatic pilot.

Credit Recommendation: In the vocational certificate category, 4 semester-hours in aircraft maintenance (9/77).

CG-1704-0007
AVIATION MECHANIC'S MATE, SECOND CLASS, BY CORRESPONDENCE (Aviation Mechanic's Mate, Second Class, by Correspondence)

Course Number: 205-7.
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 25 weeks (Oklahoma City, OK hours).
Exhibit Dates: 10/77-Present.
Objectives: To provide the second class mechanic's mate with those basic aircraft subjects needed for the mission.

Instruction: This correspondence course outlines aviation safety precautions, states the purpose and scope of the Coast Guard aircraft maintenance management system. Lists the kinds of aviation directives and publications, explains technical orders (T.O.), and identifies and explains the purpose of the Coast Guard aviation forms and reports. Aircraft hardware selection and identification is presented along with various safety methods. Basic corrosion control and preventive measures are discussed. Jet propulsion engines, jet engine, and their systems are presented. A proctored end-of-course examination is required.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in power plant maintenance (1/79).

CG-1704-0008
AVIATION MECHANIC'S MATE, FIRST CLASS, BY CORRESPONDENCE (Aviation Mechanic's Mate, First Class, by Correspondence)

Course Number: 105-6.
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 1/77-Present.
Objectives: To provide the student with aircraft powerplant and management training including records and forms and to present general propeller principles.

Instruction: The correspondence course presents major subsections of an aircraft engineering section while describing the duties of each subsection. The technical order (T.O.) system and related records and maintenance publications are discussed. The operating principles of the 43D50 and 54H(6) propellers are covered including their components and electrical systems.

Credit Recommendation: No credit is recommended because of the military-specific nature of the course (1/79).

CG-1704-0009
HC-130 FLIGHT ENGINEER BY CORRESPONDENCE

Course Number: 445-1.
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 4/77-Present.
Objectives: To provide standardized special training and introductory information to prospective flight engineer candidates.

Instruction: This correspondence course includes descriptions of the mechanical, communications, and navigational systems of the HC-130 aircraft. It also includes descriptions of preflight, inflight and postflight duties of the flight engineer on the HC-130 aircraft. The course includes ground handling, servicing, and safety precautions. Course includes proctored end-of-course examination.

Credit Recommendation: No credit is recommended because of the military-specific nature of the course (1/79).

CG-1704-0010
FLIGHT MECHANIC HH-52A BY CORRESPONDENCE

Course Number: 441-2.
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 1/77-Present.
Objectives: To provide specialized training on the HH-52A helicopter.

Instruction: This correspondence course contains helicopter aerodynamics and control definitions. Also included are the mechanical, communications, and navigational systems along with preflight, inflight, and postflight duties.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (1/79).

CG-1704-0011
HH-3F FLIGHT MECHANIC BY CORRESPONDENCE

Course Number: 443-1.
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 4/76-Present.
Objectives: To introduce the HH-3F helicopter to prospective flight mechanic candidates.

Instruction: This correspondence course includes basic helicopter theory of flight characteristics, aircraft and power-train systems, equipment and furnishings, and rescue equipment and procedures.

Credit Recommendation: No credit is recommended because of the military-specific nature of the course (1/79).

CG-1704-0012
C-131A PROPELLER MAINTENANCE, CLASS C

Course Number: None.
Location: Aviation Technical Training Center, Elizabeth City, NC.
CG-1704-0013
AVIATION STRUCTURAL MECHANIC, SECOND CLASS, BY CORRESPONDENCE

Course Number: 207-6
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 10/77-Present
Objectives: To provide an understanding of aviation maintenance administration, with specific information on hardware and advanced corrosion control.

Instruction: This correspondence course prepares students to perform general aviation safety in ground equipment, fuel and oxygen systems; student will be able to describe the Coast Guard a/c maintenance management system; student will use and explain records, directions, publications, and the TO system and use technical manuals and directives Proper use and identification of aircraft hardware is presented; the theory of basic and advanced corrosion control is covered including painting for corrosion protection. There is a proctored end-of-course examination.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in basic aircraft maintenance (1/79).

CG-1704-0014
INDUSTRIAL HYDRAULICS, BY CORRESPONDENCE

Course Number: 431-1
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 5/79-Present
Objectives: To provide a general overview of the operations and maintenance of industrial hydraulic systems.

Instruction: Course stresses indepth instruction about the elements of a total hydraulic system using the Sperry Vickers approach to hydraulic mechanisms. The student is introduced to hydraulics and the principles of hydraulics power. Each element of a typical hydraulic system is studied, starting with hydraulic fluids, piping and sealing, reservoirs and fluid condition, actuators, directional control units, servo, valves, pressure controls, volume, pumps, instruments, and accessories. The proper definition of technical terms and principles is stressed as well as their standard geographical symbolic representation. There is a proctored end-of-course examination.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in basic industrial hydraulics (5/79).

CG-1704-0015
AVIATION STRUCTURAL MECHANIC, FIRST CLASS, BY CORRESPONDENCE

Course Number: 107-5
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 7/77-Present
Objectives: To introduce the student to aviation maintenance administration and sheet metal layout and forming.

Instruction: This correspondence course explains the Coast Guard aircraft maintenance management systems, standard aircraft maintenance procedures, records, and required inspections. A description of the technical order system and procedures for requisitioning, aviation material, are included. The proper layout procedures used to fabricate and assemble aircraft sheet metal structural components are discussed; also included is a review of mathematics and blueprint reading. Emphasis is on Coast Guard procedures and application. There is no practical laboratory.

Credit Recommendation: Credit is not recommended due to the limited nature of the course (1/79).

CG-1704-0016
AVIATION CORROSION CONTROL, BY CORRESPONDENCE

Course Number: 439-1
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 1/78-Present
Objectives: To familiarize the student with aircraft corrosion and control

Instruction: This correspondence course contains the theory of corrosion, the different forms of corrosion, preventive measures and the preservation of the aircraft surfaces. Course has a proctored end-of-course examination.

Credit Recommendation: Credit is not recommended due to the limited scope of the course (1/79).

CG-1704-0017
HC-130 DROPMASTER (AC-130D-I), BY CORRESPONDENCE

Course Number: 446-1
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 8/78-Present
Objectives: To provide standardized speciality training on the HC-130 aircraft and to teach proper procedures and safety precautions for rescue equipment airdrop.

Instruction: The student will become familiar with the HC-130 aircraft including general arrangement, dimensions, emergency exits, powertrains, engine, and communication systems; student will understand groundhanding and servicing procedures, and safety precautions, and be familiar with procedures for cargo restraint, procedures for rescue equipment airdrop, and the safety precautions involved.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (5/79).

CG-1704-0018
AVIATION SURVIVALMAN, SECOND CLASS, BY CORRESPONDENCE

Course Number: 208-2
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 7/77-Present
Objectives: To provide the student with the fundamentals of survival equipment.

Instruction: This correspondence course contains a review of physics and electricity and describes jato, pyrotechnics and parachute lofts. Identification of basic survival equipment, protective clothing, small arms and ammunition, the function of the oxygen system and use of related hand tools are covered as well as the inspection and repair of parachutes.

Credit Recommendation: Credit is not recommended due to the military-specific nature of the training involved (2/79).

CG-1704-0019
AVIATION SURVIVALMAN, FIRST CLASS, BY CORRESPONDENCE

Course Number: 108-3
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 10/77-Present
Objectives: To provide the student with the basic knowledge in aviation administration, maintenance, and fabric repair.

Instruction: This correspondence course describes the Coast Guard aircraft maintenance management system, and maintenance inspectors and cites the maintenance level structure and the prime unit concept. It further includes records, technical order systems, supply system, and the establishment of an ordnance library. In addition, it presents parachute lofts and parachute maintenance. It also covers pyrotechnics and jato systems.

Credit Recommendation: Credit is not recommended due to its military-specific application (1/79).

CG-1704-0020
HYDRAULIC SYSTEMS AND EQUIPMENT, BY CORRESPONDENCE

Course Number: MK-8
Location: Reserve Training Center, Yorktown, VA.
Length: 2 weeks (68 hours).
Exhibit Dates: 5/78-Present
Objectives: To train qualified enlisted personnel (machine technicians) to operate and maintain hydraulic components and systems.

Instruction: Lectures and practical exercises in fundamentals of hydraulics and associated subjects including operations and repair of hydraulic systems and components, hydraulic circuit construction and operation, troubleshooting and adjustment techniques and maintenance procedures.

Credit Recommendation: In the vocational certificate category, 2 semester hours in hydraulics and pneumatics (12/79); in the lower-division baccalaureate/associate degree category, 1 semester hour in hydraulics and pneumatics laboratory (12/79).

CG-1708-0001
BOATSWAIN'S MATE, CLASS A

(Boatswain's Mate School)

Course Number: None.
Objectives: To train enlisted personnel to perform as boatswain's mates

Instruction: All varying Lectures and practical exercises in seamanship and associated subjects, including information, nomenclature, and exercises in marlinspike, boat handling, cargo handling, piloting, nuclear, biological, and chemical defenses, radiotelephone operation and semaphore communications, and fire-fighting procedures. Version I. Credit Recommendation: Version I. In the lower-division baccalaureate/associate degree category, 6 semester hours in marine technology (12/79). The lower-division baccalaureate/associate degree category, 2 semester hours in marine technology (6/74).

CG-1708-0002

BOATSWAIN'S MATE THIRD CLASS BY CORRESPONDENCE

Course Number: 609-9
Location: Coast Guard Institute, Oklahoma City, OK
Length: Maximum 52 weeks (Oklahoma City, OK hours)
Exhibit Dates: 2/76-Present

Instruction: This is a nonresident course to train Boatswain's Mates at the seaman level

Objectives: To provide training concerned with the basic minor aids to navigation, their functions, and how to troubleshoot minor aids to navigation.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in Seamanship II (5/79).

CG-1708-0004

BOATSWAIN'S MATE FIRST CLASS BY CORRESPONDENCE

Course Number: 469.1
Location: Coast Guard Institute, Oklahoma City, OK
Length: Maximum 52 weeks (Oklahoma City, OK hours)
Exhibit Dates: 6/78-Present

Objectives: To provide training to boatswain's mates at the second class level through minor aids to navigation, visual markers, nautical charts, and semaphore communications, and training to basic minor aids to navigation.

Instruction: The course includes discussion on charts, aids to navigation, magnetic compass, dead reckoning, piloting, current sailing and review of how these fit together in a navigational system of piloting in a boat. There is a proctored end-of-course-examination.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in coastal navigation (5/79).

CG-1710-0001

DAMAGE CONTROL MAN

Course Number: None
Location: Training Station, Governors Island, NY, Training Station, Groton, CT
Length: Version 1. 15 weeks (434 hours). Version 2. 16 weeks (537 hours).

Exhibit Dates: Version 1. 5/74-Present. Version 2. 1/64-4/74

Objectives: To train enlisted personnel to maintain and repair boats

Instruction: Lectures and practical exercises in boat damage repair, including finish and rough carpentry, concrete mixing, pouring, and forming, plumbing fittings and piping, sheet metal, structural steel welding, fire-fighting, and first aid.

Credit Recommendation: Version 1. In the vocational certificate category, 5 semester hours in welding, 2 in pipefitting, 2 in maintenance and repair (8/78). Version 2. In the vocational certificate category, 12 semester hours in repair and maintenance ashore and afloat (5/74), in the lower-division baccalaureate/associate degree category, 8 semester hours in repair and maintenance ashore and afloat (5/74).

CG-1710-0002

DAMAGE CONTROL WELDING, CLASS C

(Damage Controlman Welding, Class C) (Damage Controlman Welding, Class C)

Course Number: None
Location: Training Station, Governors Island, NY
Length: 7 weeks (226-310 hours)
Exhibit Dates: 8/77-Present

Objectives: To provide advanced skills in welding (gas and arc) of ferrous and nonferrous metals.

Instruction: Course includes welding fundamentals, metal arc welding, and gas-shielded arc welding. Students will learn fundamentals of flat, horizontal, vertical, and overhead position welding, gas tungsten arc welding to include familiarization with parts, settings, safety precautions, and practical application of the process in steel and aluminum, gas metal arc welding to include familiarization with torch, settings, etc.

Coast Guard gory, 3 semester hours in navigation rules (5/79).

CG-1708-0006

PILOTING BY CORRESPONDENCE

Course Number: 416.3
Location: Coast Guard Institute, Oklahoma City, OK
Length: Maximum 52 weeks (Oklahoma City, OK hours)
Exhibit Dates: 2/79-Present

Objectives: The course presents coastal navigation principles.

Instruction: The student will be able to define, list, or draw various charts, rules, and techniques as presented in the course. The course includes discussion on charts, aids to navigation, magnetic compass, dead reckoning, piloting, current sailing and review of how these fit together in a navigational system of piloting in a boat. There is a proctored end-of-course-examination.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in coastal navigation (5/79).
COURSE EXHIBITS

safety precautions, practical application of the process, and basic theory of aluminum welding.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 6 semester hours in welding (9/78)

CG-1710-0003
DAMAGE CONTROLMAN FIRST CLASS BY CORRESPONDENCE

Course Number: 115-4
Location: Coast Guard Institute, Oklahoma City, OK
Length: Maximum 52 weeks (Oklahoma City, OK hours)
Exhibit Dates: 2/72-Present.
Objectives: The purpose of this course is to provide a basic understanding in performing shore structure carpentry, piping layout and maintenance, and sheet metal fabrication.

Instruction: This correspondence course covers basic wood carpentry for building, piping layout and maintenance, sheet metal and sheet plate fabrication and the principles of various types of welding joints, both in ferrous and nonferrous metals, especially aluminum welding. All these activities are tied together in material on coast estimating for buildings. There is a proctored end-of-course examination.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in basic wood building carpentry, 1 in sheet metal fabrication, 1 in ferrous and nonferrous welding (5/79).

CG-1710-0004
DAMAGE CONTROLMAN SECOND CLASS BY CORRESPONDENCE

Course Number: 215-5
Location: Coast Guard Institute, Oklahoma City, OK
Length: Maximum 52 weeks (Oklahoma City, OK hours)
Exhibit Dates: 8/77-Present.
Objectives: A nonresident course designed to provide basic skills in and understanding of damage control.

Instruction: The areas of instruction covered by the course are nuclear, biological and chemical (NBC) warfare defense, welding principles, shielding metal arc welding, gas metal arc welding, oxyacetylene cutting and welding, installing suspended ceilings, acoustical tile, installing roofing, laminated and finishing woods, plumbing, blueprint and diagram reading, and inspection and maintenance of firefighting equipment. There is a proctored end-of-course examination.

Credit Recommendation: In the vocational certificate category, 2 semester hours in basic welding, 2 in blueprint reading, 2 in basic carpentry, 2 in basic plumbing (5/79).

CG-1710-0005
SHORE STRUCTURE MAINTENANCE BY CORRESPONDENCE

Course Number: 479-3
Location: Reserve Training Center, Yorktown, VA
Length: 2 weeks (70 hours)
Exhibit Dates: 9/78-8/79.
Objectives: To train machinery technician petty officers and service workers in the operation and maintenance of the T-10005 emergency gas turbine.

Instruction: Lectures and practical exercises pertain to the T-10005 emergency gas turbine, including gas turbine operation, control, construction, lubrication, inspection, maintenance and malfunction analysis.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in gas turbine laboratory (12/79).

CG-1710-0007
GENERAL ELECTRIC LM100 AND SOLAR T-1000 EMERGENCY GAS TURBINE

Course Number: MK-3
Location: Reserve Training Center, Yorktown, VA.
Length: 2 weeks (70 hours)
Exhibit Dates: 9/78-8/79.
Objectives: To train machinery technician petty officers and service workers in the operation and maintenance of the T-10005 emergency gas turbine.

Instruction: Lectures and practical exercises pertain to the operation and maintenance of the T-10005 emergency gas turbine.

Credit Recommendation: In the vocational certificate category, 1 semester hour in gas turbine laboratory (12/79).

CG-1710-0001
ENGINEER, CLASS A

Course Number: None
Location: Training Center, Groton, CT
Length: 16 weeks (510 hours)
Exhibit Dates: 7/80-Present.
Objectives: To train personnel to perform as engine room technician.

Instruction: Lectures and practical exercises pertain to the functions of engine room technicians, engine room maintenance, gas welding and cutting, hydraulic systems, engine systems, general motors, auxiliary systems, engine controls, GM-71 auxiliary pumps, engine overhaul, diesel engine troubleshooting, lubricating oil testing, jacket water treatment and testing, centrifugal purifiers, electricity, outboard motors, boilers, and gas turbines, refrigeration, and power transmission systems.

Credit Recommendation: In the vocational certificate category, 6 semester hours in diesel engines and auxiliaries (6/75) in the lower-division baccalaureate/associate degree category, 4 semester hours in automation technology, 4 as an elective in mechanical technology (6/75).

CG-1710-0002
DIESEL ENGINE AND ELECTRICAL OPERATION AND MAINTENANCE

Course Number: MK-24
Location: Training Center, Groton, CT.
Length: 3 weeks (103 hours)
Exhibit Dates: 10/79-Present.
Objectives: To train qualified enlisted personnel (machinery technicians) in diesel operation and maintenance.

Instruction: Students learn the operation and maintenance of 200-300 KW Caterpillar diesel generator sets including the disassembly and inspection of diesel engine camshaft bearings, connecting rods, pistons, cylinder liners and head assemblies, fuel pump assembly, accessory drive, voltage control components, brushes, sliprings, bearings and generator drive alignment.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in diesel generator sets (12/79).

CG-1714-0001
ELECTRICIAN'S MATE CLASS A

Course Number: None
Location: Training Station, Groton, CT
Length: Version 1: 1 week (587 hours)
Version 2: 16 weeks (580 hours)
Exhibit Dates: Version 1: 1/78-Present.
Version 2: 8/61-12/77.
Objectives: To train enlisted personnel to inspect, maintain, and operate electrical equipment on small boats.

Instruction: Version 1: Instruction is oriented toward teaching the fundamentals of electricity on the basis of institutional evaluation.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electricity (6/75).

CG-1714-0002
GENERAL ELECTRIC LM100 AND SOLAR T-1000 EMERGENCY GAS TURBINE

Course Number: None
Location: Training Center, Governors Island, NY
Length: Version 1: 1 week (587 hours)
Version 2: 8/61-12/77.
Objectives: To train enlisted personnel to inspect, maintain, and operate electrical equipment on small boats.

Instruction: Version 1: Instruction is oriented toward teaching the fundamentals of electricity on the basis of institutional evaluation.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electricity (6/75).

CG-1714-0003
ELECTRICIAN'S MATE CLASS A

Course Number: None
Location: Training Station, Groton, CT
Length: Version 1: 1 week (587 hours)
Version 2: 16 weeks (580 hours)
Exhibit Dates: Version 1: 1/78-Present.
Version 2: 8/61-12/77.
Objectives: To train enlisted personnel to inspect, maintain, and operate electrical equipment on small boats.

Instruction: Version 1: Instruction is oriented toward teaching the fundamentals of electricity on the basis of institutional evaluation.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electricity (6/75).

CG-1714-0004
ELECTRICIAN'S MATE CLASS A

Course Number: None
Location: Training Station, Groton, CT
Length: Version 1: 1 week (587 hours)
Version 2: 16 weeks (580 hours)
Exhibit Dates: Version 1: 1/78-Present.
Version 2: 8/61-12/77.
Objectives: To train enlisted personnel to inspect, maintain, and operate electrical equipment on small boats.

Instruction: Version 1: Instruction is oriented toward teaching the fundamentals of electricity on the basis of institutional evaluation.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electricity (6/75).
CG-1714-0004

AVIATION ELECTRICIAN'S MATE, FIRST CLASS, BY CORRESPONDENCE
(Aviation Electrician Mate, First Class, by Correspondence)

Course Number: 101-3

Location: Coast Guard Institute, Oklahoma City, OK

Length: Maximum 52 weeks (Oklahoma City, OK hours).

Exhibit Dates: 10/77-Present

Objectives: To provide an overview of line safety and maintenance management while providing specific knowledge on the electrical and electronic systems and equipment.

Instruction: The correspondence course contains line safety measures, maintenance management systems, aircraft hardware, communication and control. In addition, it covers alternating current (a/c) electrical techniques, use of meters, electrical symbols, types of instruments and test equipment, covers aircraft storage, batteries, generators, power systems and their control devices. Course has required end-of-course examination.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (9/78).

CG-1714-0007

GUNNER'S MATE-ADVANCED
(Gunner's Mate Advanced ADT)

Course Number: None

Location: Training Center, Governors Island, NY.

Length: 50 weeks (316 hours).

Exhibit Dates: 1/74-Present

Objectives: To provide advanced training in the use of antisubmarine warfare equipment, fire control, and 5" gun use.

Instruction: Course teaches administration and management of various ordnance systems and the operation, adjustment, and maintenance of weapons and associated equipment.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (9/78).

CG-1714-0009

GUNNER'S MATE SECOND CLASS BY CORRESPONDENCE
(Electrician Mate Second Class by Correspondence)

Course Number: 229-3

Location: Coast Guard Institute, Oklahoma City, OK

Length: Maximum 52 weeks (Oklahoma City, OK hours).

Exhibit Dates: 5/70-Present

Objectives: To provide training to the gunner's mate second class to assist in the attainment of second class rating.

Instruction: The correspondence course includes basic electricity, hydraulic system components, the fuse setting, projectile hoists, the 5'/38 rammer machine gun, surface vessel torpedo tube MK.32. There is a proctored end-of-course examination.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (9/78).
principles including number systems, Boolean algebra, logic gates, flip-flops, counters, registers, decoders and adders. The course requires a proctored end-of-course examination.

Credit Recommendation:
In the vocational certificate category, 2 semester hours in electrical power theory (1/79); in the lower-division baccalaureate/associate degree category, 1 semester hour in digital electronics theory (1/79).

CG-7114-0012
GUNNER'S MATE FIRST CLASS BY COURSE EXHIBITS

Course Number: 129-4.
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 7/4-4/7/Present
Objectives: To provide training for the second class gunner's mate to progress to first-class status.

Instruction: This nonresident course covers basic electronics, planned maintenance systems, ammunition, explosives, electrical power systems components, the General Electric drive, dual purpose gun, alignment, and fire control systems. There is a proctored end-of-course examination.

Credit Recommendation:
In the lower-division baccalaureate/associate degree category, 1 semester hour in electronics, 2 in fundamentals of synchro, 1 in hydraulics (5/79).

CG-1715-0001
AVIATION ELECTRONICS TECHNICIAN, CLASS A

Course Number: None.
Location: Aviation Repair and Supply Center, Elizabeth City, NC; Aircraft Repair and Supply Center, Elizabeth City, NC; Training Center, Groton, CT.
Objectives: To provide selected enlisted personnel with the understanding and knowledge necessary to fulfill the requirements for Aviation Electronics Technician, Third Class.

Instruction: Electronics fundamentals, theory of operation of airborne electronics systems; troubleshooting and testing airborne electronics systems, operating associated test equipment. Lecture and testing (28 weeks) with approximately 70% of time devoted to general electronics topics, remainder is devoted to military specific subjects.

Credit Recommendation: All Versions: In the vocational certificate category, 15 semester hours toward a certificate in electronics technology (9/77); in the lower-division baccalaureate/associate degree category, 12 semester hours as an elective in electronics (9/77). Version 2: In the vocational certificate category, 21 semester hours for technical courses, 13 in mathematics (3/74), in the lower-division baccalaureate/associate degree category, 12 semester hours in electricity and electronics (3/74), in the upper-division baccalaureate category, 4 semester hours in electricity and electronics (3/74).

CG-1715-0002
TELEPHONE TECHNICIAN A SCHOOL

Course Number: None.
Location: Training Center, Groton, CT.
Objectives: To train enlisted personnel to perform as telephone technicians.

Instruction: Version 1: A qualitative study of telephony with descriptions of telephone sets and associated equipment including: switchboards, public address and intercom systems; teletypewriter and radio teletype to include their installation, maintenance and repair. Version 2: Lectures and practical exercises in model 28/KSR/ASR teletypes, telephone line construction; cable splicing, switchboard and intercommunication systems; theory of telephony, and radio teletype. Version 3: Lectures and practical exercises in telephone repair and maintenance procedures, including training in mathematics, electronic circuits, electronics, vacuum tubes, and telephony.

Credit Recommendation: Version 1: In the vocational certificate category, 9 semester hours in telecommunications systems (8/78). Version 2: In the vocational certificate category, 9 semester hours in telecommunications systems (6/75). Version 3: In the vocational certificate category, 20 semester hours in electricity or electronics (3/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in electricity or electronics (3/74); in the upper-division baccalaureate category, 3 semester hours in electricity or electronics, and additional credit in electrical laboratory on the basis of institutional evaluation.

CG-1715-0003
TELEPHONE TECHNICIAN, CLASS B

Course Number: None.
Location: Training Center, Groton, CT.
Length: 6 weeks (165 hours).
Exhibit Dates: 7/62-12/68.
Objectives: To train enlisted personnel to perform as telephone technicians.

Instruction: Lectures and practical exercises in telephone systems, including military basic telephony, AC and DC circuits, vacuum tubes and transistors, electronic circuits, telephone and telegraph systems (baseband and carrier), microwave radio, and operation of specific telephone systems.

Credit Recommendation: In the vocational certificate category, 6 semester hours in electricity or electronics, and credit in electrical laboratory on the basis of institutional evaluation (4/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in electricity or electronics, and credit in electrical laboratory on the basis of institutional evaluation (4/74); in the upper-division baccalaureate category, 2 semester hours in electricity (12/68).

CG-1715-0004
AN/FPN-38 TIMER SYNCHRONIZER

Course Number: None.
Location: Version 1: Lorcan-C School, Groton, CT. Version 2: Electronics Engineering Station, Wildwood, NJ.
Length: 6 weeks (163 hours).
Exhibit Dates: 7/62-12/68.
Objectives: To train personnel to operate and maintain a specific Loran system.

Instruction: Lectures and practical exercises in the operation and maintenance of the AN/FPN-38 Loran system, including components, circuitry, timing anddivider action, and alignment procedures.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (4/74).

CG-1715-0005
AN/FPN-41 TIMER

Course Number: None.
Location: Version 3: Lorcan-C School, Groton, CT.
Length: 4 weeks (173 hours).
Exhibit Dates: 7/62-12/68.
Objectives: To train enlisted personnel to operate and maintain AN/FPN-41 timers.

Instruction: Lectures and laboratories in timing and signal handling, basic servo loops, including envelope and phase timing, multiple shooting procedures, and detailed maintenance procedures.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (4/74).

CG-1715-0006
AN/SPN-29 RECEIVER

Course Number: None.
Location: Lorcan-C School, Groton, CT.
Length: 5 weeks (203 hours).
Exhibit Dates: 1/66-12/68.
Objectives: To train enlisted personnel to operate, maintain, and align AN/SPN-29 receivers.

Instruction: Lectures and laboratories in fundamentals of Loran-C and AN/SPN-29 receivers, and operation and maintenance procedures.

Credit Recommendation: No credit because of the limited specialized nature of the course (4/74).

CG-1715-0007
LORAN A ENLISTED, CLASS C

Course Number: None.
Location: Training Center, Groton, CT.
Length: 4 weeks (141 hours).
Exhibit Dates: 8/66-12/68.
Objectives: To train technicians to perform maintenance on Loran transmitting stations.

Instruction: Lectures and practical exercises in Loran system maintenance, including Loran antennas and timer introduction; block diagram, voltage regulator, power supplies, oscillator, synchronizer control unit, frequency divider, time delay unit, radio receiver, electrical synchronizer and synchronizer indicator, oscilloscope, switchgear, transmitter and amplifier, and transmitting antenna coupler maintenance;wartstanding techniques, and Loran publications, reports, and forms.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (4/74).

CG-1715-0008
AN/SPN-30 RECEIVER

Course Number: None.
Location: Training Center, Groton, CT.
Length: 8 weeks (110 hours).
Objectives: To train enlisted personnel to operate and maintain the Loran C and AN/SPN-30 receiver.

Instruction: Lectures and laboratories in Loran C, and AN/SPN-30 receiver introduction, power supplies, servo loops, and automatic gain control. Sign, and systems.

CG-1715-0009
AN/FPN-4 MONITOR/TIMER
(A/N/FPN-46 Timer)

Course Number: None
Location: Loran-C School, Groton, CT
Length: 4-5 weeks (170 hours)
Exhibit Dates: 11/62-Present.
Objectives: To train enlisted personnel to operate, maintain, and align the AN/FPN-46 timer.

Instruction: Lectures and laboratories in AN/FPN-46 timer (Loran C system) operation, maintenance, and alignment, including Loran C system review, timing and signal handling, basic servo loops, master and slave, envelope control, pulse template, and phase control unit chassis, frequency divider unit, multipulse unit, switchable attenuator, detector unit, and oscilloscope control unit familiarization and alignment, testing, and troubleshooting procedures.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (4/74).

CG-1715-0010
ELECTRONICS TECHNICIAN, CLASS A
(Electronics Technician, A School)

Course Number: None
Location: Version 1: Training Center, Governors Island, NY
Version 2: Training Center, Governors Island, NY
Version 3: Training Center, Groton, CT
Length: Version 1: 17 weeks (512 hours)
Version 2: 17 weeks (578 hours)
Version 3: 24 weeks (888-922 hours)
Exhibit Dates: Version 1: 3/72-Present
Version 2: 4/68-2/72
Version 3: 6/65-3/68
Objectives: To train enlisted personnel to operate, maintain, and repair electronics equipment.

Instruction: Version 1: Lectures and practical exercises to include AC and DC circuit theory, vacuum tube and transistor electronics and communication principles and systems. Version 2: Lectures and practical exercises in electronic equipment circuit analysis, AC and DC circuits, transformers, power supplies, vacuum tubes, transistors, AM/FM/SSB transmitters and receivers, VHF/UHF systems, servo systems, radar, sonar, sound, fathometers, and test equipment operation, maintenance, and repair. Version 3: Lectures and practical exercises in electronic equipment circuit analysis, AC and DC circuits, transformers, power supplies, vacuum tubes, transistors, AM/FM/SSB transmitters, VHF/UHF systems, servo systems, radar, Loran, sonar, fathometers, and test equipment operation, maintenance and repair with basic mathematics and physics and a more thorough coverage of electronic circuits.

Credit Recommendation: Version 1 in the vocational certificate category, 2 semester hours in electronic circuit theory (6/75), in the lower-division baccalaureate/associate degree category, 6 semester hours in electronic technology, 2 in electronic technology laboratory (6/76). In the vocational certificate category, 15 semester hours in electricity or electronics (3/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in electricity or electronics (12/68), in the upper-division baccalaureate category, 2 semester hours in electricity or electronics, and credit in electrical laboratory on the basis of institutional evaluation (3/74).

CG-1715-0011
ELECTRONICS TECHNICIAN, COMMUNICATIONS, CLASS A
(Basic Electronics, Class A)

Course Number: None
Location: Training Center, Groton, CT
Length: 24 weeks (888-922 hours)
Exhibit Dates: 6/65-Present.
Objectives: To train enlisted personnel to operate, repair, and maintain electronic communications equipment.

Instruction: Lectures and practical exercises in electronic communications equipment circuit configuration and systems analysis, including AC and DC circuits, transformers, power supplies, vacuum tubes, transistors, test equipment, electronics circuits, transmitters and receivers, VHF and UHF systems, servo systems, digital circuits, teletype, radio beacon, antennas and transmission lines, and computer mathematics. Basic Electronics, Class A course includes basic mathematics and physics, more electronic circuit theory, and less study of equipment and techniques.

Credit Recommendation: In the vocational certificate category, 20 semester hours in electricity or electronics (3/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in electricity or electronics (12/68), in the upper-division baccalaureate category, 3 semester hours in electricity or electronics, and credit in electrical laboratory on the basis of institutional evaluation (3/74).

CG-1715-0012
AVIATION ELECTRONICS TECHNICIAN, CLASS A

Course Number: None
Location: Version 1: Training Center, Groton, CT
Version 2: Aircraft Repair and Supply Center, Elizabeth City, NC
Length: 16-31 weeks (513-994 hours)
Exhibit Dates: 9/76-Present.
Objectives: To train enlisted personnel to operate, repair, and maintain aviation electronics equipment.

Instruction: Lectures and practical exercises in aviation electronic equipment circuit analysis, basic mathematics, AC and DC circuits, basic physics, magnetism, transformers, basic electronics, and test equipment maintenance and repair with basic mathematics and physics and a more thorough coverage of electronic circuits.

Credit Recommendation: Version 1 in the vocational certificate category, 2 semester hours in electronic circuit theory (6/75), in the lower-division baccalaureate/associate degree category, 6 semester hours in electronic technology, 2 in electronic technology laboratory (6/76). In the vocational certificate category, 15 semester hours in electricity or electronics (3/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in electricity or electronics, and additional credit in electrical laboratory on the basis of institutional evaluation (3/74).

CG-1715-0013
ORDNANCE EQUIPMENT, CLASS C

Course Number: None
Location: Training Center, Groton, CT
Length: 8 weeks (429 hours)
Exhibit Dates: 6/66-12/68.
Objectives: To upgrade knowledge and practical skills of fire control technicians and gunner's mates in specific Coast Guard ordnance, fire control, and antisubmarine warfare systems.

Instruction: Lectures and practical exercises in operation and maintenance of five-inch gun power drive, gun radar system, fire control systems, projectile hoists, loading systems, mounting systems, battery alignment, explosive demolition, 50 caliber machine gun, antisubmarine warfare devices, and .81mm mortar, and review of electrical and hydraulic systems.

Credit Recommendation: In the vocational certificate category, 2 semester hours in basic electricity, 2 in basic hydraulics (6/75).

CG-1715-0014
AN/AYN-2, AN/ASN-15 FLIGHT DIRECTOR AND GYROCOMPASS SYSTEMS CLASS Q

Course Number: None
Location: Aircraft Repair and Supply Center, Elizabeth City, NC
Length: 3 weeks (105 hours)
Exhibit Dates: 9/76-Present.
Objectives: To train students to recognize, isolate, and correct malfunctions in AN/AYN-2 Flight Director/AN/ASN-15 Attitude Reference Systems, and to calibrate and perform maintenance on systems, including a brief review of the flight director and gyro fundamentals Study, beyond lecture/laboratory (7/32) hours recommended but not required.

Credit Recommendation: In the vocational certificate category, 2 semester hours in avionics maintenance (9/77).

CG-1715-0015
AIDS TO NAVIGATION MECHANICIAN

Course Number: None
Location: Training Center, Groton, CT
Length: 6 weeks (212 hours)
Exhibit Dates: 7/65-12/68.
Objectives: To train enlisted personnel in the installation, maintenance, repair, and shop overhaul of aids to navigation equipment.

Instruction: Lectures and practical exercises in basic, concepts and theory of electronics including AC and DC fundamentals, AC and DC motors and generators, batteries, minor air lenses and lanterns, lamp chargers, radio beacons, transmitters, and fog signals.
COURSE EXHIBITS

Credit Recommendation: In the vocational certificate category, 3 semester hours in basic electricity, 3 in maritime trades (navigational aids repair) (6/75); in the lower-division baccalaureate/associate degree category, 2 semester hours in basic electricity, 3 in maritime trades (navigational aids repair) (6/75).

CG-1715-0016
FIRE CONTROL TECHNICIAN: CLASS C (Gun Fire Control Systems MK-52 and MK-56)
Course Number: None.
Location: Training Center, Governors Island, NY.
Objectives: To train personnel to operate and maintain a gun fire control system.
Instruction: Version 1: Course covers fixed and mixed trigger circuits, gate circuits, pulse and trigger circuits, receiver and AFC circuits, range error and sense circuits, and tracking and angle error circuits. Also includes radar operation and troubleshooting, train amplifiers, amplidyne generators, filter, coast and switch smoothing circuits. Version 2: Lectures and practical exercises in the operation, maintenance, and repair of a military gun fire control system, including information on the radar transmitter and receiver system, power systems, and a brief overview of fire control computers.

Credit Recommendation: Version 1: In the lower-division baccalaureate/associate degree category, 3 semester hours in communications electronics (6/78). Version 2: In the vocational certificate category, 1 semester hour in basic communications laboratory (6/75).

CG-1715-0017
RADARMAN, CLASS A
Course Number: None.
Location: Radarman, Class A School, Governors Island, NY.
Length: 18 weeks (450-540 hours).
Exhibit Dates: 7/72-Present.
Objectives: To train personnel in the operation of a radar system aboard a Coast Guard cutter.
Instruction: Lectures and practical exercises in the use of radar in plotting and echo interpretation, radar operation and equipment, and specific techniques relating to shipboard operation of radar systems. Special sections of course dealing with Naval operations and communications are classified.

Credit Recommendation: In the vocational certificate category, 1 semester hour in basic radar use and operation (6/75).

CG-1715-0018
CLARINET PILGRIM
Course Number: None.
Location: Training School, Governors Island, NY.
Length: 3 weeks (90 hours).
Exhibit Dates: 9/72-Present.
Objectives: To train personnel in the operation and maintenance of specialized military communication equipment.
Instruction: Lectures and practical exercises in the theory, operation, maintenance, and troubleshooting of special military communication systems including 1K flip flop, shift registers, ring counters, signal selectors, digital data receivers, and specialized equipment related to the military system.

Credit Recommendation: In the vocational certificate category, 2 semester hours in basic communications laboratory (6/75).

CG-1715-0019
1. AVIATION ELECTRONICS TECHNICIAN
CLASS C AN/ARC-94
(A/N/ARC-94 C and 490 T High Frequency (HF) Communications System and Antenna Coupler)
Course Number: None.
Location: Aircraft Repair and Supply School, Elizabeth City, NC.
Objectives: To train personnel in the operation, maintenance, and repair procedures of a high-frequency communication transceiver.
Instruction: All Versions. Lectures and practical exercises in the specific circuitry and modules associated with specific military communication equipment. Version 2. Includes 490 T HF communications systems and antenna coupler.

Credit Recommendation: Version 1: In the vocational certificate category, 2 semester hours in basic communication laboratory (6/75). Version 2: In the vocational certificate category, 1 semester hour in basic communication laboratory (6/75).

CG-1715-0020
AVIONICS EQUIPMENT, CLASS C, AN/ARN-79
Course Number: None.
Location: Aircraft Repair and Supply School, Elizabeth City, NC.
Length: 2 weeks (65 hours).
Exhibit Dates: 9/76-Present.
Objectives: To train personnel to operate, maintain, and repair a military electronic oscillator.
Instruction: Lectures and practical exercises in the specific modules used in a military communication system, including information on the radar transmitter and receiver system, power systems, and a brief overview of fire control computers.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (6/75).

CG-1715-0021
AVIONICS EQUIPMENT, CLASS C, AN/ARN-52/V
Course Number: None.
Location: Aircraft Repair and Supply School, Elizabeth City, NC.
Length: 3 weeks (98 hours).
Exhibit Dates: 1/73-Present.
Objectives: To provide personnel with background needed to operate, maintain and repair a specific navigation system.
Instruction: Lectures and practical exercises in the subsystems associated with a specific navigation system including block diagram analysis, IF amplifiers, RF amplifiers, and testing of components with specialized test equipment.

Credit Recommendation: In the vocational certificate category, 1 semester hour in basic communication laboratory (6/75).

CG-1715-0022
AVIONICS EQUIPMENT, CLASS C, AN/ARC-51A
Course Number: None.
Location: Aircraft Repair and Supply School, Elizabeth City, NC.
Length: 2 weeks (65 hours).
Exhibit Dates: 1/73-Present.
Objectives: To train personnel to operate, maintain, and repair an ultra high frequency communication transceiver.
Instruction: Lectures and practical exercises in the basic modules used in a military communication transceiver, using specific military test equipment.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (6/75).

CG-1715-0023
 Lorans Officers Indocitination
Course Number: None.
Location: Training Center, Groton, CT.
Length: 3 weeks (106 hours).
Exhibit Dates: 9/76-12/76.
Objectives: To qualify personnel to perform supervisory duties and to operate and maintain Loran communication stations.
Instruction: Lectures and practical exercises in the operation of Loran transmitters and receivers.

Credit Recommendation: In the vocational certificate category, 1 semester hour in basic communication laboratory (6/75).

CG-1715-0024
CLASS C AN/AYN-1 MAINTENANCE
(AN/AYN-1 Navigational Computer Systems Class C)
Course Number: None.
Location: Aircraft Repair and Supply Center, Elizabeth City, NC.
Length: 6-7 weeks (210-231 hours).
Exhibit Dates: 9/76-Present.
Objectives: To provide specialized training in the theory and maintenance of the AN/AYN-1 navigational computer so that the graduate will be able to operate, troubleshoot, test and maintain the equipment.
Instruction: Students will obtain basic instruction in digital computer systems, including an introduction to number systems, binary arithmetic, Boolean algebra, logic and machine language programming, and to train them to interpret outputs and troubleshooting the AN/AYN-1 navigational computer system. Lectures and testing (170 hours) and laboratory (40 hours), with about 80 percent of the lecture and 25 percent of the laboratory work on general, real-time computer systems. Concentration is on block-diagram, signal-processing approach, including digital electronic circuits. Study beyond lecture/laboratory work suggested but not required.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in digital communications laboratory (6/77).

CG-1715-0025
AN/APN-193 WEATHER RADAR SYSTEMS
CLASS C
Course Number: None.
Location: Aircraft Repair and Supply Center, Elizabeth City, NC.
Length: 3 weeks (105 hours).
Exhibit Dates: 9/76-Present.
Objectives: Course is designed to teach theory, operation, and maintenance of spe-
Coast Guard

Exhibit Dates: 6/77-Present
Objectives: To provide training in basic electronics and administration for the aviation electronics technician, first class
Instruction: This correspondence course contains the basic theory and characteristics of solid-state components and their circuits, and the operation and construction of solid-state power supplies. Course further details aircraft management systems and offers a mathematics review. There is a proctored end-of-course examination. This course does not have any prerequisites, however, student must have a background in basic algebra, trigonometry, and electronics. Course has a proctored end-of-course examination.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in fundamentals of electronics. Recommendation is for theory knowledge only (1/79).

CG-1715-0033
SONAR TECHNICIAN SECOND CLASS BY CORRESPONDENCE
Course Number: 243-1
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 8/75-Present.
Objectives: Course presents responsibilities of a military technician in the operation and maintenance procedures of specific military equipment.
Instruction: This correspondence course outlines the responsibilities of a sonar technician and studies operations for various tactical situations. Briefly reviews electronics, mathematics, transistors, amplifiers, logic circuits, and maintenance procedures in specific military equipment. There is a brief introduction to synchros, servos, and resolvers. A proctored end-of-course examination is required.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in electronics theory (1/79).

CG-1715-0034
SONAR TECHNICIAN FIRST CLASS BY CORRESPONDENCE
Course Number: 143-1
Location: Coast Guard Institute, Oklahoma City, OK
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 10/73-Present.
Objectives: To provide information on the responsibilities and supervision of the operating procedures for specific military equipment and to introduce the basic characteristics of semiconductor devices and circuits.
Instruction: This correspondence course covers the introduction to operating procedures and definitions of terms for specific military equipment. The introduction to semiconductor devices includes the operation of transistors, bipolar junction transistors, FETs, and ICs, and printed circuit boards. Course includes a proctored end-of-course examination.
Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics technology (1/79).

CG-1715-0026
AN/APN-175 DOPPLER RADAR, NAVIGATION
Course Number: None.
Location: Aircraft Repair and Supply Center, Elizabeth City, NC.
Length: 2 weeks (70 hours).
Exhibit Dates: 9/76-Present.
Objectives: To train students to troubleshoot, adjust, and maintain AN/APN-175 Doppler radars. Course covers the study of Doppler radars, their operation, and troubleshooting of the navigation equipment.
Credit Recommendation: Credit is not recommended because of the limited, specialized nature of the course.

CG-1715-0027
AN/APN-180 LORAN A NAVIGATION SYSTEM CLASS C
Course Number: None.
Location: Aircraft Repair and Supply Center, Elizabeth City, NC.
Length: 2 weeks (140 hours).
Exhibit Dates: 9/76-Present.
Objectives: To train students to service AN/APN-175 Doppler radars.
Instruction: Course will give students an understanding of the Doppler principle in navigation and provide them with practical experience in the operation and troubleshooting of this navigation equipment.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course.

CG-1715-0028
AN/APN-180 LORAN A NAVIGATION SYSTEM CLASS C
Course Number: None.
Location: Aircraft Repair and Supply Center, Elizabeth City, NC.
Length: 2 weeks (140 hours).
Exhibit Dates: 9/76-Present.
Objectives: To train students to service AN/APN-180 Loran A navigation system.
Instruction: Course covers the study of logic circuits, operational amplifiers, and waveforms, and the analysis of timing and logic diagrams of the specific Loran A navigational system. A review of transistors and integrator circuits is included.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours as an elective in engineering technology (9/77).

CG-1715-0029
ARC-160 COMMUNICATIONS SYSTEM (AN/ARC-160 Communications System) (Class C Aviation Electronics Technician AN/ARC-160)
Course Number: None.
Location: Aircraft Repair and Supply Center, Elizabeth City, NC.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 7/76-Present.
Objectives: To train students to troubleshoot, adjust, and maintain AN/ARC-160 VHF-FM radios, receiver sets, and associated electronic equipment. Course is designed to provide students with a comprehensive understanding of the engineering design and operational characteristics of the AN/ARC-160 communications system. The course covers the theory of electronic devices, basic electronics, and basic electrical principles. Course further details aircraft management systems and offers a mathematics review. There is a proctored end-of-course examination.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in fundamentals of electronics. Recommendation is for theory knowledge only (1/79).

CG-1715-0030
AN/SPS-66 MAINTENANCE AND REPAIR, CLASS A
Course Number: NAV-122
Location: Training Center, Governors Island, NY.
Length: 2 weeks (70 hours).
Exhibit Dates: 4/75-Present.
Objectives: To train entry-level technicians to perform the maintenance of the AN/SPS-66 radar set.
Instruction: Course includes set operation and maintenance, system block diagrams, and functional description of the system and its subassemblies. Course further details aircraft management systems and offers a mathematics review. There is a proctored end-of-course examination.
Credit Recommendation: Credit is not recommended because of the limited, specialized nature of the course.

CG-1715-0031
AVIATION ELECTRONICS TECHNICIAN, SECOND CLASS, BY CORRESPONDENCE
Course Number: 203-4
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 4/77-Present.
Objectives: To provide training in basic electronics theory and operation of the AN/ARC-160 communications system. Course provides an overview of safety, administration, corrosion, and hardware in addition to basic electronics theory. Course further details aircraft management systems and offers a mathematics review. There is a proctored end-of-course examination.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in electronics theory (1/79).

CG-1715-0032
AVIATION ELECTRONICS TECHNICIAN, FIRST CLASS, BY CORRESPONDENCE
Course Number: 103-3
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 1/79.
Objectives: To provide information on the responsibilities and supervision of the operating procedures for specific military equipment and to introduce the basic characteristics of semiconductor devices and circuits.
Instruction: This correspondence course covers the introduction to operating procedures and definitions of terms for specific military equipment. The introduction to semiconductor devices includes the operation of transistors, bipolar junction transistors, FETs, and ICs, and printed circuit boards. Course includes a proctored end-of-course examination.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics technology (1/79).

CG-1715-0033
SONAR TECHNICIAN SECOND CLASS BY CORRESPONDENCE
Course Number: 243-1.
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 8/75-Present.
Objectives: Course presents responsibilities of a military technician in the operation and maintenance procedures of specific military equipment.
Instruction: This correspondence course outlines the responsibilities of a sonar technician and studies operations for various tactical situations. Briefly reviews electronics, mathematics, transistors, amplifiers, logic circuits, and maintenance procedures in specific military equipment. There is a brief introduction to synchros, servos, and resolvers. A proctored end-of-course examination is required.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in electronics theory (1/79).

CG-1715-0034
SONAR TECHNICIAN FIRST CLASS BY CORRESPONDENCE
Course Number: 143-1.
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 10/73-Present.
Objectives: To provide information on the responsibilities and supervision of the operating procedures for specific military equipment and to introduce the basic characteristics of semiconductor devices and circuits.
Instruction: This correspondence course covers the introduction to operating procedures and definitions of terms for specific military equipment. The introduction to semiconductor devices includes the operation of transistors, bipolar junction transistors, FETs, and ICs, and printed circuit boards. Course includes a proctored end-of-course examination.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics technology (1/79).
COURSE EXHIBITS

CG-1715-0035
FIRE CONTROL TECHNICIAN SECOND CLASS BY CORRESPONDENCE

Course Number: 227-6
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 10/74-Present.
Objectives: To provide an introduction to ordnance administration and a familiarity with ordnance control problems and procedures.

Instruction: Course provides an explanation of ordnance administration, electrical distribution symbols, fire control problems, and fire control problems and procedures for mechanical alignment, and maintenance of specialized military equipment.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (1/79).

CG-1715-0036
FIRE CONTROL TECHNICIAN FIRST CLASS BY CORRESPONDENCE

Course Number: 127-5
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 8/75-Present.
Objectives: To present solid-state devices and testing procedures, "Servo systems, gyro devices, antenna principles, and microwave components as they pertain to fire control systems.

Instruction: This course teaches the theory of operation of vacuum tubes and transistors and their applications in audio and RF amplifiers, oscillators and wave shaping circuits. A study of these methods of coupling and of frequency compensation for amplifiers, DC amplifiers, phase inverters, sawtooth generators, blocking oscillators, triaxial circuits, multivibrators, clamping circuits. Differentiating and integrating circuits and delay lines and covers. An introduction to the terms and functions of electromagnetic interference and methods and circuits for suppressing interference in audio and radio equipment are given. The theory of operation and use of various electronic test equipment including VTVM's, transistorized voltmeters, digital voltmeters, differential voltmeters, phase-angle meters, bridge measurement instruments, frequency meters, curve tracers, oscilloscopes, and probes are covered. Course also contains a study of solid-state power supplies including DC-to-DC converters, series and shunt voltage regulators, constant-current, and constant-current regulators. Also presented are theories of operation of AM, SSB, and FM communications systems; a study of modulation techniques; an introduction to troubleshooting charts to repair transmitters and receivers and to permit the student to become familiar with procedures for the alignment of FM receivers. No formal laboratory experience is required. There is a proctored end-of-course examination.

Credit Recommendation: Credit is not recommended because of the limited nature of the course (1/79).

CG-1715-0037
ELECTRONICS TECHNICIAN SECOND CLASS BY CORRESPONDENCE

(Electronic Technician Second Class by Correspondence)

Course Number: 221-5
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 10/77-Present.
Objectives: To teach basic electrical and electronic circuit theory as required to understand the operation of solid-state power supplies, synchros, servomechanisms, and electronic test equipment.

Instruction: This correspondence course includes AC and DC circuit analysis using Ohm's Law and Kirchhoff's Laws. Bipolar, field-effect transistors, and silicon-controlled rectifiers are studied as are integrated circuits. Solid-state power supplies, including voltage and current regulators, are discussed. The construction and use of voltage meters, ammeters, electronic multimeters, and basic oscilloscopes is included as is a limited coverage of synchrons and servomechanisms. No formal laboratory experience is required. There is a proctored end-of-course examination.

Credit Recommendation: Recommended because of limited nature of the course (1/79).

CG-1715-0038
ELECTRONICS TECHNICIAN FIRST CLASS BY CORRESPONDENCE

(Electronic Technician First Class by Correspondence)

Course Number: 121-5
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 2/77-Present.
Objectives: To present the theory of operation of vacuum tube, solid-state, audio and RF amplifiers, oscillators and wave shaping circuits. A study of a number of methods of coupling and of frequency compensation for amplifiers, DC amplifiers, phase inverters, sawtooth generators, blocking oscillators, triaxial circuits, multivibrators, clamping circuits. Differentiating and integrating circuits and delay lines and covers. An introduction to the terms and sources of electromagnetic interference methods and circuits for suppressing interference in radio and radar equipment are given. The theory of operation and use of various electronic test equipment including VTVM's, transistorized voltmeters, digital voltmeters, differential voltmeters, phase-angle meters, bridge measurement instruments, frequency meters, curve tracers, oscilloscopes, and probes are covered. Course also contains a study of solid-state power supplies including DC-to-DC converters, series and shunt voltage regulators, constant-current, and constant-current regulated power supplies. Also presented are theories of operation of AM, SSB, and FM communications systems; a study of modulation techniques; an introduction to troubleshooting charts to repair transmitters and receivers and to permit the student to become familiar with procedures for the alignment of FM receivers. No formal laboratory experience is required. There is a proctored end-of-course examination.

Credit Recommendation: Credit is not recommended because of the limited nature of the course (1/79).

CG-1715-0040
AUTOMATED AIDS-TO-NAVIGATION ELECTRONICS MAINTENANCE

Course Number: 444-1
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 9/77-Present.
Objectives: To provide a standard introduction to the avionics systems to an avionicsman training candidate.

Instruction: This correspondence course includes descriptions of the mechanical, communications, navigational, and electronic flight aids systems that pertain to HC-130 aircraft.

Credit Recommendation: Credit is not recommended because of limited nature of the course (1/79).

CG-1715-0041
AUTOMATIC AIDS-TO-NAVIGATION ELECTRONICS MAINTENANCE

Course Number: ANC-6
Location: Training Center, Governors Island, NY.
Length: 5 weeks (150-153 hours).
Exhibit Dates: 2/77-Present.
Objectives: To provide practical training in the maintenance of the lighthouse automation and modernization program (LAMP) monitor and control equipment.

Instruction: The course prepares technicians to operate, maintain, troubleshoot, and repair various subsystems of the automated lighthouse system. Topics include electronics logic, controls, radio links, and power generation.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in automated electrical systems (8/78).

CG-1715-0042
BASIC MINOR AIDS TO NAVIGATION

Course Number: ANC-3
Location: Training Center, Governors Island, NY.
Length: 2 weeks (57-80 hours).
Exhibit Dates: 9/74-Present.
Objectives: To provide practical training in the maintenance of 12-volt DC minor-aid systems.

Instruction: Students are instructed in the use of DC electrical meters and familiarized with various lamps which they assemble, adjust, and troubleshoot.

Credit Recommendation: Credit is not recommended because of the limited nature of the course (8/78).

CG-1715-0043
ELECTRONICS FUNDAMENTALS (Basic Electronics)

Course Number: None.
Location: Training Center, Governors Island, NY.
Length: 14 weeks (476 hours).
Exhibit Dates: 9/77-Present.
Objectives: To teach the basics of electronic maintenance, troubleshooting, and rescue procedures, explain the operation of the mechanical, communication, and navigational systems, and describe the electronics flight aids.

Credit Recommendation: No credit is recommended due to the limited nature of the training (1/79).
repair fundamentals to personnel with no prior background, in preparation for more specialized courses.

Instruction: A qualitative series of sub- courses stressing language component identification, functional description of equipment, and minor troubleshooting procedures of components. Topics covered include power supplies, amplifiers, generators, logic circuits, and single sideband and FM principles.

Credit Recommendation: In the vocational certificate category, 10 semester hours in basic electricity, 2 in maritime trades (navigation) (8/78).

CG-1715-0047 COMMUNICATIONS SYSTEMS, CLASS 'C'
Course Number: COMO6
Location: Training Center, Governors Island, NY
Length: 2 weeks (70 hours)
Exhibit Dates: 3/77-Present
Objectives: To train electronics technicians to operate, maintain, and repair a radio telegraph communications system.
Instruction: Course content includes lectures and laboratory exercises (approximately 50 percent) on the operation and maintenance of the telegraph, patch panels, teletype control, teletype converter, radio, and MF transmitter. Failure diagnosis and repair procedures are also included.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in communications electronics (9/78).

CG-1715-0051 AN/SPS-44(V) -1,2,4 RADAR
Course Number: NAV01
Location: Training Center, Governors Island, NY
Length: 4 weeks (125 hours)
Exhibit Dates: 7/78-Present
Objectives: To train electronics technicians to maintain and repair a surface-search navigational radar system.
Instruction: Topics covered include a review of basic radar principles and digital logic, system configuration, operator control, and a functional description of the modulator-receiver-transmitter, antenna, and azimuth range indicator subsystems. Data converters, interface units, and the antenna servomechanisms are also covered. Testing and troubleshooting of the system is stressed. Over 50 percent of allocated time is spent in laboratory exercises.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in electronic communications systems (9/78).

CG-1715-0052 AN/URC77 MAINTENANCE AND REPAIR
Course Number: COMO1
Location: Training Center, Governors Island, NY
Length: 2 weeks (72 hours)
Exhibit Dates: 7/78-Present
Objectives: To train technicians to perform preventive and operational maintenance on a representative transceiver in accordance with its manual.
Instruction: When taken in conjunction with AN/ SRC-42(V) Radio Set, this course presents a qualitative coverage of radiotelephone procedures, SSB/AM theory, receiver and transmitter specifications, block diagrams and circuits, signal tracing, testing, tuning, and troubleshooting of both the receiver and transmitter of a representative AN/SSR radio set.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in electronic communications (9/78).
CG-1715-0054
AN/SPS-37 MAINTENANCE AND REPAIR, CLASS A
Course Number: NAV02
Location: Training Center, Governors Island, NY.
Length: 2 weeks (56 hours).
Exhibit Dates: 7/78-Present.
Objectives: This correspondence course is designed to train electronic technicians to perform preventive and operational maintenance of the AN/SPS-37 radars. Topics include system identification and troubleshooting procedures for the components of the transmitter and antenna servo systems, system operation, block diagram, and functional description of all subassemblies. Practical troubleshooting, testing, and alignment maintenance procedures are stressed.
Credit Recommendation: Credit is recommended for the limited, specialized nature of the course (9/78).

CG-1715-0055
AN/UQN-1 H, MOTOROLA TRITON VHF-FM TRANSCEIVERS
Course Number: COM02
Location: Training Center, Governors Island, NY.
Length: 3 weeks (75 hours).
Exhibit Dates: 3/78-Present.
Objectives: To train technicians to perform preventive and operational maintenance on the CCI-611 and Motorola Triton VHF-FM transceiver. Instruction includes system identification and troubleshooting procedures for the components of the transmitter and antenna servo system, system operation, block diagram, and functional description of all subassemblies. Practical troubleshooting, testing, and alignment maintenance procedures are stressed.
Credit Recommendation: Credit is recommended for the limited, specialized nature of the course (9/78).

CG-1715-0056
PATHOMETERS
Course Number: NAV04.
Location: Training Center, Governors Island, NY.
Length: 2 weeks (70 hours).
Exhibit Dates: 7/78-Present.
Objectives: To train entry-level electronic technicians to perform the preventive maintenance and repair of pathometers AN/UQN-3, AN/UQN-1H, and AN/UQN-4 in accordance with their technical manuals.
Instruction: Topics covered include basic principles of sonar, specifications, capabilities, and functional description of each of the cited fathometers, alignment of a fathometer, isolation of equipment malfunctions using appropriate test equipment and the technical manual. More than 50 percent of the time is spent in laboratory exercises on the system.
Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (8/78).

CG-1715-0057
LORENZ ELECTRONICS BY CORRESPONDENCE
Course Number: 472-1
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 8/78-Present.
Objectives: To provide basic coverage of electronics and electrical circuit theory from which the student is able to progress into a limited study of semiconductors devices and fundamental electronic circuits.
Instruction: This correspondence course presents basic mathematics from addition and subtraction to algebra and elementary trigonometry. AC and DC circuits are covered to a limited degree from Ohm’s Law to polyphase circuits and transformers. Basic electronic circuits such as rectifiers, transistor amplifiers, oscillators, and wave shapers are presented to a limited degree. No formal laboratory experience is required. Course has a proctored end-of-course examination.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics theory (1/79).

CG-1715-0062
JUNIOR OFFICER ELECTRONIC INSTRUCTION BY CORRESPONDENCE
Course Number: 405-3
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 12/73-Present.
Objectives: To train the junior officer in the duties of an electronic material officer.
Instruction: This correspondence course provides a brief introduction to wave propagation, electronic aids to navigation, and an introduction to electronic administration for a shipboard electronic department.
Credit Recommendation: Credit is not recommended due to the military-specific nature of the course (1/79).

CG-1715-0063
TELEPHONE TECHNICIAN SECOND CLASS
BY CORRESPONDENCE
Course Number: 245-4
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 5/78-Present.
Objectives: To train the theory and operation of telephone systems, including station installation and maintenance, central office equipment, outside equipment, carrier equipment, intercom systems, and telegraphy.

Instruction: This correspondence course offers an introduction to the basic principles of step-by-step, cross bar, and electronic switching systems. Student will become familiar with procedures for the installation and repair of telephone cables, inside and outside equipment, carrier equipment, public address systems, and intercom systems.

Credit Recommendation: Recommended due to the military-specific nature of the course (1/79).

CG-1715-0066
ADVANCED ELECTRICAL/ELECTRONICS
Course Number: EM-17.
Location: Reserve Training Center, Yorktown, VA.
Length: 12 weeks (420 hours).
Exhibit Dates: 3/78-Present.
Objectives: To train qualified enlisted electrician's mates in the theory, analysis, and repair of solid state electrical/electronic shipboard control systems.

Instruction: Lectures and practical exercises in integrated circuit operational amplifiers, magnetic amplifiers and uses of modern electronic test instruments. Review of mathematics, beginning algebra, and theory of AC and DC electrical circuits.

Credit Recommendation: In the vocational certificate category, 1 semester hour in basic mathematics, 2 semester hours in the lower-divi
don baccalaureate/associate degree category, 4 semester hours in solid state amplifier and control circuits, 3 in logic devices and control modules, 2 in introduction to AC and DC electricity (12/79).

CG-1717-0001
SENIOR PETTY OFFICER LEADERSHIP AND MANAGEMENT
Course Number: None.
Location: Reserve Training Center, Yorktown, VA; Training Center, Petaluma, CA.
Length: 3 weeks (107 hours).
Exhibit Dates: 5/78-Present.
Objectives: Student will have a basic theoretical understanding and practical working knowledge of basic principles of management, leadership, and human resource development.

Instruction: Topics include group dynamics, motivation theory, interpersonal relations through Transactional Analysis, organizational communications, situational leadership and work planning techniques. Instructional methods include lectures, case studies, role playing, and discussions.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in introduction to management or leadership development and human relations (12/77).

CG-1717-0002
RESERVE PETTY OFFICER LEADERSHIP AND MANAGEMENT
Course Number: None.
Location: Reserve Training Center, Yorktown, VA; Training Center, Alameda, CA; Training Center, Petaluma, CA.
Length: 2 weeks (70 hours).
Exhibit Dates: 12/76-Present.
Objectives: To train qualified enlisted petty officers and junior petty officers in the theory, analysis, and repair of telephone cables, inside and outside equipment, carrier equipment, public address systems, and intercom systems.

Instruction: Lectures and practical exercises in integrated circuit operational amplifiers, magnetic amplifiers and uses of modern electronic test instruments. Review of mathematics, beginning algebra, and theory of AC and DC electrical circuits.

Credit Recommendation: In the lower-divi
don baccalaureate/associate degree category, 3 semester hours in introduction to management or leadership development and human relations (12/77).

CG-1722-0001
FIREMAN BY CORRESPONDENCE
Course Number: 450-7.
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 11/74-Present.
Objectives: To provide basic nonresident training for firemen apprentices in the area of main propulsion machinery, damage control, auxiliary machinery and hand tools.

Instruction: The course presents names and functions of the various types of main propulsion machinery, damage control, auxiliary machinery and hand tools.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in marine auxiliary studies, role playing, simulation and discussion.

Credit Recommendation: In the lower-divi
don baccalaureate/associate degree category, 3 semester hours in introduction to management or leadership development and human relations (12/77).

CG-1717-0003
LEADERSHIP AND MANAGEMENT (FOR JUNIOR AND SENIOR PETTY OFFICERS, AND RESERVE PETTY OFFICERS AND CHIEFS)
(Junior Officer Leadership and Management Program)
Course Number: None.
Location: Reserve Training Center, Yorktown, VA; Training Center, Petaluma, CA.
Length: 2 weeks (70 hours).
Exhibit Dates: 12/76-Present.
Objectives: The student will have a theoretical understanding and practical working knowledge of principles of management, leadership, and human resources development.

Instruction: Topics include group dynamics, motivation theory, interpersonal relations through Transactional Analysis, organizational communications, situational leadership and work planning techniques. Instructional methods include lectures, case studies, role playing, and discussions.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in introduction to management or leadership development and human relations (12/77).
equipment, I in introduction to marine engines (5/79).

CG-1722-0002
QUARTERMASTER SECOND CLASS BY 
CORRESPONDENCE
Course Number: 337-5.
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 5/75-Present.
Objectives: To provide nonresident training in the areas of engine efficiency, clutches and reduction gears; fuel systems, lathe operation, and bench work.
Instruction: Upon completion, of the course the student will be able to describe the engine operation and associated bench work. The trainee should understand how clutches and reduction gears are used in marine engines and will explain the Detroit diesel fuel systems used by the Coast Guard. Description of the engine operation and maintenance will be covered. Description of the engine operation and maintenance is also included. Also includes training in shipboard electricity (5/79) and in shipboard electricity (5/79).

CG-1722-0003
QUARTERMASTER THIRD CLASS BY 
CORRESPONDENCE
Course Number: 337-7.
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 10/73-Present.
Objectives: To provide training for prospective quartermasters third class in basic navigational and related topics needed to attain that rate.
Instruction: This is a nonresident course covering basic navigation, the magnetic compass, navigation charts and rules. It includes basic navigational aids to navigation and piloting, I in applied meteorology (5/79).

CG-1722-0004
AIDS TO NAVIGATION CONSTRUCTION
Course Number: None.
Location: Training Center, Governors Island, NY.
Length: 2 weeks (72 hours).
Exhibit Dates: 7/78-Present.
Objectives: To teach Coast Guard personnel how to fabricate and construct aids to navigational structures.
Instruction: Course is designed to develop knowledge and skills in crane operation as follows: leading, unloading, pile driving, servicing of crane equipment. Also includes soil analysis, pneumatic equipment and information on wire and synthetic lines. Course concludes with proctored examination.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hours in construction field (5/78).

CG-1723-0002
MACHINE TECHNICIAN SECOND CLASS BY 
CORRESPONDENCE
Course Number: 332-4.
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 5/78-Present.
Objectives: To provide nonresident training in the areas of engine efficiency, clutches and reduction gears; fuel systems, lathe operation, and bench work.
Instruction: Upon completion, of the course the student will be able to describe the engine operation and associated bench work. The trainee should understand how clutches and reduction gears are used in marine engines and will explain the Detroit diesel fuel systems used by the Coast Guard. Description of the engine operation and maintenance will be covered. Description of the engine operation and maintenance is also included. Also includes training in shipboard electricity (5/79) and in shipboard electricity (5/79).

CG-1723-0003
MACHINE TECHNICIAN THIRD CLASS BY 
CORRESPONDENCE
Course Number: 332-1.
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK hours).
Exhibit Dates: 11/76-Present.
Objectives: To provide training for prospective machine technicians in basic refrigeration and airtight systems, fuel systems, cooling systems, starting systems, and fuel systems.
Instruction: The student will study fuel system fundamentals, beginning and advanced engine systems. Course also includes review of basic principles of electricity and how it is used aboard ship. Student learns basic principles of refrigeration and airtight compressor systems as they exist in a shipboard environment. The operation of distill-
Credit Recommendation: In the vocational certificate category, 3 semester hours in criminal justice (11/73)

CG-1728-0003
MARITIME LAW ENFORCEMENT
Course Number: None.
Location: Reserve Training Center, Yorktown, VA.
Length: 5 weeks (150-200 hours).
Exhibit Dates: 12/77-Present.

Objectives: To train commissioned and non-commissioned officers as federal law enforcement officials.

Instruction: Lectures and practical exercises in the duties and skills necessary to act as an agent of the federal government in legal and court situations. Topics include a brief history of the U.S. government, constitutional, international and criminal law, military law, court procedures, prosecution, laws of evidence, search and seizure, surveillance, weapons training, authority and interrogation procedures.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in law enforcement, in political science (12/79).

CG-1728-0004
PORT SECURITY SCHOOL
Course Number: None; None.
Location: Reserve Training Center, Yorktown, VA.
Length: 6 weeks (204 hours).
Exhibit Dates: 3/79-Present.

Objectives: To train students in criminal justice techniques and port security operations.

Instruction: Lectures and practical exercises in general law, law enforcement, jurisdiction, evidence, arrest, investigation and reporting, port security operations, public relations and communications, riot control, alarm, water pollution, cargo control, dangerous cargo and firefighting.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in law enforcement, 2 in political science (12/79).

CG-1729-0001
COMMISSARYMAN, CLASS A
Course Number: None.
Location: Coast Guard Training Center, Groton, CT.
Length: 16 weeks (668 hours).
Exhibit Dates: 6/64-10/72.

Objectives: To train cooks and bakers for mess operations.

Instruction: Principles and techniques of cooking and baking, with some instruction in purchasing and menu planning.

Credit Recommendation: In the vocational certificate category, 3 semester hours in hotel, restaurant, and institutional curricula (12/73); in the lower-division baccalaureate/associate degree category, 3 semester hours in hotel, restaurant, and institutional curricula (12/73).

CG-1729-0002
SUBSISTENCE SPECIALIST
Course Number: None.
Location: Coast Guard Training Center, Petaluma, CA.
Length: 18 weeks (909 hours).

Exhibit Dates: 11/72-Present.

Objectives: To train subsistence specialists to operate and manage general messes, officer messes, and private messes.

Instruction: Training covers all subject matter found in introductory food production and volume food service management courses.

Credit Recommendation: In the vocational certificate category, 6 semester hours in hotel, restaurant, and institutional management (12/73); in the lower-division baccalaureate/associate degree category, 6 semester hours in hotel, restaurant, and institutional management (12/73).

CG-1731-0001
1. OUTBOARD ENGINES OPERATION AND MAINTENANCE
2. OUTBOARD MOTORS, MOTOR MAINTENANCE AND OVERHAUL, CLASS C

Location: Reserve Training Center, Yorktown, VA.
Length: 2 weeks (60-70 hours).

Objectives: To train enlisted personnel to operate, maintain, overhaul, and perform malfunction analysis of outboard and inboard/outboard engines.

Instruction: Version 1: Lectures and practical exercises in the disassembly, reassembly, and performance testing of two and four cylinder outboard marine engines and inboard/outboard stern drive units. Version 2: Lectures and practical exercises in the disassembly, reassembly, and testing of the two- and four-cylinder inboard/outboard marine engines.

Credit Recommendation: Version 1: In the vocational certificate category, 1 semester hour in small engine maintenance and repair (10/79); in the lower-division baccalaureate/associate degree category, 1 semester hour in small engine laboratory (10/79). Version 2: In the vocational certificate category, 1 semester hour in small engine repair (10/79); in the lower-division baccalaureate/associate degree category, 1 semester hour in small engine laboratory (6/75).

CG-1731-0002
GAS TURBINE BY CORRESPONDENCE
Course Number: 453-1.
Location: Coast Guard Institute, Oklahoma City, OK.
Length: Maximum 52 weeks (Oklahoma City, OK). Credit.
Exhibit Dates: 5/78-Present.

Objectives: This nonresident course provides basic understanding of gas turbine fundamentals.

Instruction: The course consists of five lessons and a proctored end-of-course examination. Each lesson has one or more reading assignments followed by a series of questions. After completing the course the student will be able to explain gas turbine components and their functions; explain safety requirements for gas turbine; and perform some preventive and corrective maintenance on gas turbine engines.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in gas turbine engine familiarization and fundamentals (5/79).

Coast Guard
1-19

CG-2202-0001
OFFICER CANDIDATE SCHOOL (SEAMANSHIP, ORIENTATION)
OPERATIONS & MILITARY Indoctrination
Course Number: None.
Location: Reserve Training Center, Yorktown, VA.
Length: 15 weeks (420 hours).
Exhibit Dates: 7/79-Present.
Objectives: To provide officer candidates with the training prerequisite to active duty as a commissioned officer in the U.S. Coast Guard.

Instruction: Lectures and practical exercises covering Coast Guard orientation, career information, administrative procedures, leadership, seamanship, electronic navigation, physical education, small arms, military law and safety.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in naval science, 3 in human relations/management (12/79).

CG-2202-0002
DIRECT COMMISSION CLASS
Course Number: None.
Location: Reserve Training Center, Yorktown, VA.
Length: 2 weeks (73 hours).
Exhibit Dates: 8/79-Present.

Objectives: To provide candidates with a basic orientation to active duty or commissioned office in the Coast Guard.

Instruction: Topics include history of the Coast Guard, mission and scope of the Coast Guard law enforcement program, jurisdiction, service etiquette, officer career information, leadership and administrative procedures.

Credit Recommendation: Credit is not recommended due to the limited, specialized nature of the course (12/79).

CG-2205-0001
AUTOMATED AIDS TO NAVIGATION MAINTENANCE (MAJOR AIDS TO NAVIGATION)
Course Number: ANC-1.

Objectives: To train enlisted personnel to operate major light stations, fog signal stations, and lightships.

Instruction: Version 1: Covers minor and major navigational aids. Version 2: Lectures and practical exercises in basic electricity, minor aid power, major aids, visual signaling, sound signals, minor lights, and introduction to outboard motors. Version 3: Lectures and practical exercises in aids to navigation, including function, operation, preventive maintenance, testing, and troubleshooting of major navigational aids equipment, test equipment, problems and hazards, training, first aid, and installation, operation and maintenance of major aid apparatus and special testing equipment.

Credit Recommendation: Version 1: In the vocational certificate category, 2 semester hours in basic electricity, 4 in maritime navigation (light station operations). Version 2: In the vocational certificate category, 2 semester hours in basic electricity, 2 in...
1-20 COURSE EXHIBITS

maritime trades (light station operator) (6/75); in the lower-division baccalaureate/associate degree category, 2 semester hours in maritime trades (light station operator) and on the basis of institutional evaluation, 2 in basic electricity (6/75). Version 3: In the vocational certificate category, 5 semester hours in marine technology or oceanography, 2 as an elective in automotive technology, 2 as an elective in electrical technology (5/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in marine technology or oceanography, 2 as an elective in automotive technology, 1 as an elective in electrical technology (5/74).

CG-2205-0002
MINOR AIDS TO NAVIGATION
Course Number: None
Location: Version 1: Training Center, Governors Island, NY. Version 2: Training Center, Groton, CT
Length: Version 1: 6 weeks (163 hours). Version 2: 6 weeks (221 hours)
Exhibit Dates: Version 1: 1/69-Present
Version 2: 7/65-12/68
Objectives: To train enlisted personnel for duty aboard tenders and at light-aided stations.
Instruction: Lectures in piloting and buoy positioning, charts; basic electricity, AC and DC theory and equipment, engine operation and maintenance, including theory, fuels, cooling systems, electrical and mechanical systems, piping and exhaust systems, vessel fire, safety, minor light and fog equipment, and buoys, minor structures, burning equipment, and power tools operation.
Credit Recommendation: Version 1: In the vocational certificate category, 2 semester hours in maritime trade (minor aids to navigation maintenance) (6/75); in the lower-division baccalaureate/associate degree category, 2 semester hours in maritime trade (minor aids to navigation maintenance) (6/75). Version 2: In the vocational certificate category, 2 semester hours as an elective in electrical technology, 2 as an elective in automotive technology, and 5 in marine technology or oceanography (5/74), in the lower-division baccalaureate/associate degree category, 1 semester hour as an elective in electrical technology, 1 as an elective in automotive technology, and 3 in marine technology or oceanography (5/74).

CG-2205-0003
AIDS TO NAVIGATION SCHOOL (SHORT COURSE FOR OFFICERS)
Course Number: None
Location: Training Station, Groton, CT.
Length: 3 weeks (120 hours).
Exhibit Dates: 4/54-12/68.
Objectives: To train officers to operate standard aids to navigation.
Instruction: Lectures in aids to navigation significance, battery-operated lights, acetylene-operated lights, light station management, radiobeacon operation, diesel generator operation, and electrical and maintenance inspection. Students learn to use the devices, the day mark, the buoy and minor aids to navigation and working environment with crews, with emphasis on the caliber .45 automatic pistol and M-16 rifle.
Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (6/75).

CG-2205-0004
OFFICER CANDIDATE SCHOOL
Course Number: None.
Location: Reserve Training Center, Yorktown, VA.
Length: 17 weeks (480 hours).
Exhibit Dates: 2/61-12/68.
Objectives: To prepare candidates with the training prerequisite to active duty as commissioned officers in the Coast Guard.
Instruction: Combat information center; Coast Guard orientation; communications; damage control—atomic, biological, and chemical warfare; gunnery, navigation, seamanship, training vessel; drill physical education; military law; safety and first aid.
Credit Recommendation: In the upper-division baccalaureate category, 6 semester hours in advanced naval science (12/68).

CG-2205-0005
GENERAL SERVICE INDRODUCTION
Course Number: None
Location: Coast Guard Academy, New London, CT, Reserve Training Center, Yorktown, VA.
Length: 12 weeks (340 hours).
Exhibit Dates: 2/61-12/68.
Objectives: To train officers commissioned from the U.S. Merchant Marine in the fundamentals necessary for performance of duty as commissioned officers in the Coast Guard.
Instruction: Coast Guard orientation; communications; rules of the road; navigation; combat information center; gunnery; antiship warfare, damage control, including atomic, biological, and chemical warfare; Coast Guard engineering.
Credit Recommendation: In the upper-division baccalaureate category, 6 semester hours in advanced naval science (12/68).

CG-2205-0006
RADIOBEACON OPERATION
Course Number: None.
Location: Aids to Navigation School, Governors Island, NY.
Length: 2 weeks (58 hours).
Exhibit Dates: 7/65-12/68.
Objectives: To train personnel in the operation, watchstanding, reporting, maintenance, and minor repair of radiobeacon equipment.
Instruction: Lectures and practical exercises in the operation, monitoring, maintenance, and minor repair of an unspecified radiobeacon.
Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (6/75).

CG-2205-0008
OFFICERS ADVANCED AIDS TO NAVIGATION (Aids to Navigation Officer Advanced)
Course Number: None.
Location: Aids to Navigation School, Governors Island, NY.
Length: 2 weeks (60-64 hours).
Exhibit Dates: 4/66-Present.
Objectives: To provide personnel with advanced training in signals engineering and administration.
Instruction: Lectures and practical exercises in signals arrangements, system evaluation, administration, and legal aspects of aids-to-navigation.
Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (6/75).

CG-2205-0009
OFFICERS BASIC AIDS TO NAVIGATION (Officers Basic Aids to Navigation, Class 1)
Course Number: ANC-4
Location: Aids to Navigation Officer Basic
Length: 3 weeks (86 hours).
Version 1: 3 weeks (86 hours).
Version 2: 4 weeks (120-137 hours).
Objectives: Training in the administration, evaluation, maintenance, and operation of the federal system of aids to Navigation.
Instruction: Version 1: Students are familiarized with batteries, various lamps, buoys, reflectors, and minor navigational aids and structures. Students learn to use the devices as aids to navigation. Version 2: Lectures and practical exercises in minor aids, minor aid power, major aids, major aid power, sound and visual signaling, minor structures, the day mark, the buoy tender, safety, and administration.
Credit Recommendation: Version 1: No credit is recommended due to the diversity of training (8/75). Version 2: In the vocational certificate category, 1 semester hour in maritime trades (navigation aids) (6/75); in the lower-division baccalaureate/associate degree category, 1 semester hour in maritime trades (navigation aids) (6/75).

CG-2205-0011
BASIC MILITARY TRAINING (Recruit Training)
Course Number: None
Location: Training Center, Cape May, NJ; Training Center, Alameda, CA.
Length: 8 weeks (240-320 hours).
Exhibit Dates: 12/75-Present.
Objectives: To provide training for personnel with no previous military experience.
Instruction: Course acquaints students with missions and operations of the Coast Guard and opportunities for professional growth, teaches basic seamanship skills, motivates the individual to regard unit goals as her/his own and to develop a sense of pride, self-discipline, self-confidence and a sense of the need for teamwork to accomplish a mission. This is achieved by formal classroom training as well as by creating a living and working environment with group
living, standing watches, work detail assignments, discipline standards, and such routine activities as personnel and barracks inspections and marching. Course includes drug abuse, first aid, safety and survi-

Credit Recommendation: In the lower-di-

VCATION BACCALAUREATE ASSOCIATE DEGREE CATE-

GORY, 3 SEMESTER HOURS IN INTERNATIONAL BUSINESS (11/78)

DD-0504-0001

INFORMATION SPECIALIST (JOURNALIST)

(Basic Military Journalist)

Course Number: ABA 79130-1 (USA F); 570-71020, A-570-0001 (USN); 28-R-701.1

Location: Defense Information School, Ft. Benjamin Harrison, IN; Defense Information School, Ft. Slocum, NY


Objectives: To teach selected enlisted personnel the principles of journalism, and skills required in public information, service information, and community relations.

Instruction: Lectures, readings, and student research and discussions in joint and combined military organization, planning, and operations, and in related aspects of national and international security.

Credit Recommendation: Version 1: In the upper-division baccalaureate category, 5 semester hours in management and systems analysis (8/74) NOTE. Credit recommendation is based on an on-site evaluation. Related Occupation Codes: 71Q; 71Q

DD-0377-0001

DEFENSE SECURITY ASSISTANCE MANAGEMENT OVERSEAS

(COIN COUNTRY)

Course Number: SAM-0

Location: Defense Institute of Security Assistance, Wright-Patterson AFB, OH.

Length: 4-5 weeks (114 hours)

Exhibit Dates: 10/78-Present

Objectives: To provide Department of Defense overseas representatives with the policies and procedures governing their conduct and operation overseas. Security assistance management is discussed from the national policy level through implementation by responsible agencies.

Instruction: This course covers the management of military sales to foreign countries as it relates to planning programming budget systems (PPBS), foreign policy, legal status, overseas, physical security, cross cultural communications, government contracting, export controls and government procurement management. The method of instruction includes lecture, real-life case studies, simulator exercises and interaction with other participants in the field.

Credit Recommendation: In the upper-di-

VCATION BACCALAUREATE ASSOCIATE DEGREE CATE-

GORY, 3 SEMESTER HOURS IN INTERNATIONAL BUSINESS (11/78)

DD-0504-0002

ADVANCED INFORMATION SPECIALIST

Course Number: Version 1: 570-F; Version 2: 5A-A79170 (USA F); A-570-0012 (USN), 570-F1; 570-F1; A-570-0012; 5A-A79170. Version 3: 28-R-711


Length: Version 1: 3 weeks (106 hours) Version 2: 3 weeks (90-106 hours) Version 3: 8 weeks (352 hours)


Objectives: To teach the principles of advanced training in the planning, supervision, and coordination of information activities for selected noncommissioned and petty officers who will perform duties as assistants to the officer-in-charge of an information office or section or a radio and television facility.

Instruction: All Versions: including news, headline, editorial, and feature writing; page layout and makeup, radio and television, including news and feature writing, blocking, announcing, studio operations, television camera techniques, control room operation, news broadcast preparation and production, blocking scripts, and television feature production.

Version 1: Emphasis is placed on applied management and supervisory skills.

Credit Recommendation: Version 1: In the upper-division baccalaureate category, 3 semester hours in media management (journalism) (8/78). Version 3: In the vocational certificate category, 3 semester hours in mass media (12/73); in the lower-division baccalaureate/associate degree category, 3 semester hours in mass media (12/73), in the upper-division baccalaureate category, 3 semester hours in journalism and media production (journalism) (12/68).

Related Occupation Codes: 71Q; 71Q

DD-0504-0003

NEWSPAPER EDITOR

Course Number: 570-F2, A-570-0013, 5A-ZA79150

Location: Defense Information School, Ft. Benjamin Harrison, IN

Length: 3 weeks (118-132 hours)

Exhibit Dates: 7/68-Present

Objectives: To provide additional print journalism instruction to personnel assigned as editors of military newspapers and magazines.

Instruction: Beginning in 1976, course becomes a highly individualized, self-paced program consisting of pretest, group-paced, self-paced, final performance test and newspaper improvement project. Subject areas include photojournalism, print journalism and public affairs. Lectures and practical experience cover all phases of newspaper production, culminating with a 4-page service newspaper or, beginning in 1976, a tabloid size page of a hypothetical military newspaper. Workshop includes communications law, Department of Defense policy on release of information, newspaper writing, editing, style, deadlines, photo selection and editing, and layout and page makeup.

Credit Recommendation: In the upper-di-

VCATION BACCALAUREATE ASSOCIATE DEGREE CATE-

GORY, 2 SEMESTER HOURS IN NEWSPAPER PRODUCTION (JOURNALISM) (2/78)
plied journalism, with performance skills in all tasks required to publish a service newspaper; research communications, stressing preparation of the information specialist for public speaking, speech writing, briefings, and group discussions; radio and television, including training in writing, announcing, and production staff functions, internal relations and government, stressing the U.S. international position in terms of world patterns.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in mass media (12/73); in the upper-division baccalaureate category, 2 semester hours in social studies, 1 in oral communications, and credit in journalism on the basis of institutional evaluation (12/68).

DD-0504-0005

TROOP INFORMATION AND EDUCATION OFFICER

Course Number: 28-E-1
Location: Defense Information School, Ft. Slocum, NY.
Length: 8 weeks (352 hours)
Exhibit Dates: 4/54-12/68
Objectives: To train enlisted personnel to assist in the organization, operation, and supervision of troop information and education programs.

Instruction: Policies and operational procedures; speech preparation and presentation, discussion-leading techniques, organization of group study activities; testing procedures; advising principles; practical exercises in newsgathering and newswriting, troop information radio broadcasting; introduction to video production (2/78).

Credit Recommendation: In the vocational certificate category, 2 semester hours in social studies, 1 in mass communications (12/73); in the lower-division baccalaureate/associate degree category, 2 semester hours in social studies, 1 in mass communications (12/73), in the upper-division baccalaureate category, 2 semester hours in social studies, 1 in oral communications (12/68).

DD-0504-0006

TROOP INFORMATION AND EDUCATION OFFICER

Course Number: 28-O-6
Location: Defense Information School, Ft. Slocum, NY.
Length: 8 weeks (352-360 hours)
Exhibit Dates: 5/54-12/68
Objectives: To train officers to supervise instruction periods and other activities of the Army's troop information and education programs.

Instruction: Policies and procedures, speech preparation and presentation, discussion-leading techniques, organization of group study activities, instructor selection, testing procedures; advising principles; practical exercises in newsgathering and newswriting; troop information radio broadcasting, comprehensive study of citizenship, history, government, and international affairs.

Credit Recommendation: In the vocational certificate category, 2 semester hours in social studies, 1 in journalism (12/73); in the lower-division baccalaureate/associate degree category, 2 semester hours in social studies, 1 in journalism (12/73); in the upper-division baccalaureate category, 2 semester hours in social studies, 1 in oral communications (12/68).

DD-0504-0007

PUBLIC INFORMATION OFFICER

Course Number: 28-O-5
Location: Information School, Ft. Slocum, NY.
Length: 8 weeks (360 hours)
Exhibit Dates: 5/54-12/68
Objectives: To train officers to perform and/or supervise the preparation of news stories, special articles, posters, photographs, radio and television programs, and other informational material for release to information media; to establish speakers bureaus; and to promote friendly relations with information media representatives and civilian communities.

Instruction: Policies and procedures, speech preparation and presentation, public speaking exercises; use of visual-mechanical aids, basic photographic techniques, including camera operation, film processing, photo printing, picture selection, film types and exposures, and picture story assignments; civilian press operation, organization, and philosophy, newswriting; preparation of material for radio and television broadcasts, citizenship, history, government, and international affairs.

Credit Recommendation: In the vocational certificate category, 2 semester hours in social studies, 1 in mass media (12/73), in the lower-division baccalaureate/associate degree category, 2 semester hours in social studies, 1 in mass media (12/73), in the upper-division baccalaureate category, 2 semester hours in social studies, 1 in oral communications (12/68).

DD-0504-0008

PUBLIC INFORMATION ENLISTED

Course Number: 28-E-2
Location: Information School, Ft. Slocum, NY.
Length: 8 weeks (360 hours)
Exhibit Dates: 4/54-12/68
Objectives: To train enlisted personnel to collect, prepare, and disseminate information to newspapers, radio, television, and other informational media, and to assist in promotion of other public relations activities.

Instruction: Policies and procedures, speech preparation and presentation, public speaking exercises, use of visual-mechanical aids; basic photographic techniques; including camera operation, film processing, photo printing, picture selection, film types and exposures, and picture story assignments; civilian press operation, organization, and philosophy, newswriting and related activities; preparation of material for radio and television broadcasts, citizenship, government, history, and international affairs; typing.

Credit Recommendation: In the vocational certificate category, 2 semester hours in social studies, 1 in mass media (12/73), in the lower-division baccalaureate/associate degree category, 2 semester hours in social studies, 1 in mass media (12/73), in the upper-division baccalaureate category, 2 semester hours in social studies, 1 in oral communications (12/68).

DD-0504-0009

Information Officer

Course Number: 7G-F3 (RC)
Location: Defense Information School, Ft. Benjamin Harrison, IN.
Length: 8 weeks (60 hours)
Exhibit Dates: 6/72-Present
Objectives: To train reserve officers in functions of information specialists with emphasis on public relations writing for print and broadcast media, photo editing and composition, internal information and community relations,

Instruction: Lectures and exercises in the duties of an information specialist including public relations principles, writing and editing for print and broadcast media, tech-
inques for use of broadcast equipment and exercises in public information problems.

Credit Recommendation: In the upper-di-
vision baccalaureate category, 1 semester hour in public relations (journalism)(2/78).

DD-0505-0001
1. INFORMATION SPECIALIST
   (BROADCASTER)
2. INFORMATION SPECIALIST
   (BROADCAST)
3. BROADCAST SPECIALIST
4. BROADCAST SPECIALIST
   (Radio and Television Production)

   Version 2: 12/67-2/72. Version 3: 7/64-
   11/67.

Objectives: To train selected commis-
sioned officers, warrant officers, and civilian
in the basics of radio and television production.
Additional management skills are introduced to provide the basic skills
needed for management of an American Forces Radio and Television Service
(AFRTS) outlet, management of broadcast operations in a public affairs office,
and management of a state-side closed-circuit broadcast facilities.

Instruction: Course includes lectures and practical experiences in radio and television
programming and production, additional individual attention to basic management
skills.

Credit Recommendation: Version 1: In the lower-di-
vision baccalaureate/associate degree category, 3 semester hours in intro-
duction to radio and television production (2/78).

DD-0505-0003

ELECTRONIC JOURNALISM

Course Number: 570-F3.
Location: Defense Information School, Ft.
Benjamin Harrison, IN.

Length: Version 1: 2 weeks (75 hours).
Exhibit Dates: 11/79-Present.

Objectives: To train officers in the planning,
production, and editing of news and information features for television,
utilizing electronic news gathering equipment and techniques.

Instruction: Training and practical experi-
ence in videotelecopy editing techniques, porta-
pak operations, and news gathering.

Credit Recommendation: In the lower-di-
vision baccalaureate/associate degree cate-
ory, 2 semester hours in electronic news
gathering and editing techniques (2/80).

DD-0602-0001

DEFENSE LANGUAGE INSTITUTE BASIC

COURSES (1954-1956)

Albanian
(Bulgarian)
(Czech
(Chinese-Cantonese)
(Czech)
(Danish)
(English)
(French)
(Artalian)
(Hebrew)
(Korean)
(Norwegian)
(Persian)
(Polish)
(Portuguese)
(Romanian)
(Russian)
(Serbo-Croatian)
(Spanish)
(Swedish)
(Turkish)

Objectives: To train officers and enlisted
personnel in the interpretation or translation of a foreign language, and to provide basic
military, geographic, historical, and political information about the country or
area in which the language is spoken. (These area studies are taught in the foreign
languages department). Lectures, discussions, and oral drills on the language of a foreign
country and basic military, geographic, eco-

NOTE: The credit recommended for these
programs is based not only upon the type
courses given by the Defense Lan-
guage Institute are listed in accordance
with their level of difficulty as follows: (1)
The least difficult languages for the English
speaking learner (Danish, French, German,
Italian, Norwegian, Portuguese, Russian,
Spanish, Swedish, and Swahili); (2) lan-
guages of greater difficulty, but with alpha-
This progress in learning the
spoken language (Albanian, Bulgarian, Bur-
hines, Czech, Finnish, Greek, Hungarian,
Indonesian, Lithuanian, Persian, Polish,
Russian, Serbo-Croatian, Slovenian, Thai,
Turkish, Ukrainian, and Vietnamese); and
(3) the more difficult languages where the
reading problem is complicated (Arabic,

DD-0602-0082

DEFENSE LANGUAGE INSTITUTE BASIC

COURSES (AFTER 1956)

Albanian
(Bulgarian)

48
1-24 COURSE EXHIBITS

(Burmese) (Chinese—Cantonese)

(Chinese—Fukienese) (Chinese—Toishan)

(Chinese—Mandarin) (Czech)

(Danish) (Finish)

(French) (German)

(Greek) (Hungarian)

(Indonesian) (Indonesian—Maly)

(Indonesian—Malay) (Italian)

(Italian—Sicilian) (Japanese)

(Korean) (Lithuanian)

(Malay) (Norwegian)

(Persian) (Polish)

(Portuguese) (Rumanian)

(Russian) (Serbo-Croatian)

(Slovak) (Slovenian)

(Swahili) (Swedish)

(Turkish) (Vietnamese—Hanoi Dialect)

(Vietnamese—Sagon Dialect) (Vietnamese—Hanoi Dialect)


*Course Number: None.

*Location: West Coast Branch, Presidio of Monterey, CA.

*Length: 24-47 weeks.

*Exhibit Dates: 1/54-Present.

*Objectives: To train military personnel in the interpretation and translation of the designated language and to provide basic military, geographic, economic, historical, and political information about the country, and/or area, in which the language is spoken. (These area studies are taught in the foreign language.)

*Instruction: Lectures, discussions, and oral drills in the interpretation and translation of the designated language, and additional training in the basic military, geographic, economic, historical, and political information about the country in which the language is spoken. NOTE: While these courses are listed as Basic, it should be understood that this is the terminology used by the Armed Forces to indicate that the courses are their "regular" programs in the various languages. They are not limited to what most civil institutions would term beginning or basic courses in a language.

*Credit Recommendation: In the lower-division baccalaureate/associate degree category, extending into the upper-division baccalaureate category, 21 semester hours in ALBANIAN for the 47-week course; 27 in ARABIC for the 47-week course (21 semester hours if the course was taken prior to 1970); 21 in BULGARIAN for the 47-week course; 21 in BURMESE for the 47-week course; 27 in CHINESE—CANTONESE for the 47-week course; 27 in CHINESE—FUKIENISE for the 47-week course; 27 in CHINESE—TOISHAN for the 47-week course; 27 in CHINESE—MANDARIN for the 47-week course; 21 in CZECH for the 47-week course; 15 in DANISH for the 24-week course; 21 in FINNISH for the 47-week course; 15 in FRENCH for the 24-week course; 15 in GERMAN for the 24-week course; 17 for the 32-week course (15 semester hours if the course was taken prior to 1970); 21 in GREEK for the 47-week course; 21 in HUNGARIAN for the 47-week course; 18 in INDONESIAN for the 36-week course, 21 for the 47-week course; 21 in INDONESIAN—MALAY for the 47-week course; 15 in ITALIAN for the 24-week course; 18 in ITALIAN—SICILIAN for the 37-week course; 27 in JAPANESE for the 47-week course; 27 in KOREAN for the 47-week course; 21 in LITHUANIAN for the 47-week course; 18 in MALAY for the 36-week course; 15 in NORWEGIAN for the 24-week course; 12 in PORTUGUESE for the 24-week course; 21 in POLISH for the 47-week course; 15 in PORTUGUESE for the 24-week course; 18 in RUSSIAN for the 37-week course; 15 in RUSSIAN for the 47-week course; 21 in SERBO-CROATIAN for the 47-week course; 15 in SLOVENIAN for the 47-week course; 18 in SPANISH for the 24-week course; 18 in SWAHILI for the 37-week course; 15 in SWEDISH for the 24-week course; 21 in THAI for the 47-week course; 18 in TURKISH for the 41-week course; 21 for the 47-week course; 21 in UKRAINIAN for the 47-week course; 21 in VIETNAMESE—HANOI DIALECT for the 47-week course; 21 in VIETNAMESE—SAIGON DIALECT for the 47-week course (8/74).

DD-0062-0003

DEFENSE LANGUAGE INSTITUTE AURAL COMPREHENSION COURSES

(Albanian) (Arabic)

(Bulgarian) (Burmeese)

(Chinese—Mandarin) (Czech)

(French) (German)

(Hungarian) (Indonesian)

(Japanese) (Korean)

(Persian) (Polish)

(Portuguese) (Rumanian)

(Russian) (Russian Stenotype)

(Serbo-Croatian) (Spanish)

(Thai) (Turkish)

(Vietnamese—Hanoi Dialect)


*Course Number: None.

*Location: West Coast Branch, Presidio of Monterey, CA.

*Length: 23-50 weeks.

*Exhibit Dates: 1/54-Present.

*Objectives: To train students to comprehend the designated language as spoken by a foreign national.

*Instruction: The Aural Comprehension Courses were established at the West Coast Branch on July 1, 1964 (except for the courses in Russian, which were offered previously). Although some reading and writing is included in the courses, it is designed primarily to teach students to comprehend the language as spoken by a foreign national. The spoken language is emphasized as primary material for developing comprehension skill.

*Credit Recommendation: In the lower-division baccalaureate/associate degree category, extending into the upper-division baccalaureate category, 15 semester hours in ARABIC for the 47-week course; 15 in BULGARIAN for the 37-week course; 12 in BURMESE for the 37-week course; 12 in CHINESE—MANDARIN for the 33-week course; 15 for the 37-week course, 18 for the 47-week course, and 12 for the 32-week SPECIAL course; 15 in CZECH for the 37-week course; 12 in FRENCH for the 24-week course; 12 in GERMAN for the 24-week course; 15 in HUNGARIAN for the 37-week course, 15 in INDONESIAN for the 37-week course; 15 in INCREASE for the 37-week course; 12 in KOREAN for the 37-week course; 15 in PERSIAN for the 37-week course; 15 in PolISH for the 37-week course; 12 in PORTUGUESE for the 24-week course; 15 in ROMANIAN for the 37-week course; 15 in RUSSIAN for the 23- or the 24-week course, 18 for the 37-week RUSSIAN course or the 50-week RUSSIAN STENO TYPE course; 15 in SERBO-CROATIAN for the 37-week course; 12 in SPANISH for the 24-week course; 12 in THAI for the 37-week course; 15 in TURKISH for the 37-week course; 15 in VIETNAMESE—HANOI DIALECT for the 37-week course, 18 for the 47-week course (9/74). NOTE: Since the Aural Comprehension Courses do not place equal stress on the four language skills, they are recommended for less credit than the Basic Courses. It will be noted that the maximum credit recommended for a 37-week Aural Comprehension Course varies from 12 to 18 semester hours. The credit variation is based primarily upon the nature of the reading and writing content in these courses recommended for 15 and 8 semester hours. The 50-week Russian Stenotype Course includes the regular 37-week Russian Aural Comprehension Course and 13 weeks of stenotype training. Also, the credit recommended for the program is based not only upon the type of course given, but also upon the relative difficulty of the language studied. The various languages given by the Defense Language Institute are listed in accordance with their level of difficulty as follows: (1) the least difficult languages for the English-speaking learner (Danish, French, German, Italian, Norwegian, Portuguese, Romanian, Spanish, Swedish, and Swahili); (2) languages of greater difficulty, but with alphabetical writing systems which may be learned concurrently without appreciably affecting the program in learning the spoken language (Albanian, Bulgarian, Burmese, Czech, Danish, Finnish, Greek, Hungarian, Indonesian, Lithuanian, Persian, Polish, Russian, Serbo-Croatian, Slovenian, Thai, Turkish, Ukrainian, and Vietnamese); and (3) the more difficult languages where the reading problem is complicated (Arabic, Chinese, Japanese, and Korean).

DD-0062-0004

DEFENSE LANGUAGE INSTITUTE SHORT BASIC COURSES

(Albanian) (Arabic)

(Bulgarian) (French)

(German) (Greek)

(Indonesian) (Italian)

(Japanese) (Korean)

(Persian) (Portuguese)

(Romanian) (Spanish)

(Turkish) (Vietnamese—Saigon Dialect)


*Course Number: None.

*Location: West Coast Branch, Presidio of Monterey, CA.

*Length: 6-24 weeks.

*Exhibit Dates: 1/54-Present.
DEFENSE LANGUAGE INSTITUTE
EXTENDED OR BASIC-INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Language</th>
<th>Code</th>
<th>Location</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHINESE (Mandarin)</td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>GERMAN</td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>JAPANESE</td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>KOREAN</td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>RUSSIAN</td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>VIETNAMESE</td>
<td></td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

Objectives: To train military personnel to a higher level of proficiency in the comprehension, speaking, reading, and writing of the target language. Fluency in reading is developed to the point of direct comprehension of the printed page. Vocabulary is expected to double, and passive vocabulary count, constantly used terms, and idioms, are expected to undergo considerable refinement. 

Instruction: BASIC-INTERMEDIATE COURSES. The designation "basic-intermediate" given by the military to the courses should not be confused with this term as used by civilian educational institutions. The Commission's consultants recommend that not only the size of the student's vocabulary, but the grammar and sentence structure, be taken into account in recommending courses. (1) the least difficult languages for the English-speaking learner (Danish, French, German, Italian, Norwegian, Portuguese, Romanian, Spanish, Swedish, and Swahili); (2) languages of second difficulty, but with alphabetical writing systems which may be learned concurrently without appreciably affecting the progress in learning the spoken language (Albanian, Bulgarian, Burmese, Greek, Finnish, Farsi, Lithuanian, Indonesian, Lithuanian, Persian, Polish, Russian, Serbo-Croatian, Slovenian, Thai, Turkish, Ukrainian, and Vietnamese); (3) the more difficult languages where the reading problem is complicated (Arabic, Chinese, Japanese, and Korean). 

Course Number: None. Location: West Coast Branch, Presidio of Monterey. Length: 24-week. Exhibit Dates: 1/24-Present.

Department of Defense

DD-0602-0006

DEFENSE LANGUAGE INSTITUTE
INTERMEDIATE COURSES

<table>
<thead>
<tr>
<th>Language</th>
<th>Code</th>
<th>Location</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARABIC (Bulgarian)</td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>CHINESE (Mandarin)</td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>CZECHE (Polish)</td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>FINNISH (Russian)</td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>HUNGARIAN (Serbo-Croatian)</td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>ITALIAN (Spanish)</td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>JAPANESE (Arabic)</td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>KOREAN</td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>RUSSIAN</td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>VIETNAMESE</td>
<td></td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

Objectives: The Intermediate Courses at the West Coast Branch are a continuation of the Basic Courses with objectives of reaching a higher level of general language ability in all four language skills. 

Instruction: Whereas in the Basic Course the audio-lingual skills were stressed, equal emphasis is put on all four language skills in the Intermediate Course. Pronunciation is expected to undergo considerable refinement, as is the mastery of the student's vocabulary. Flueney in reading is developed to the point of direct comprehension of the printed page. Proficiency in writing includes mastery of the country's alphabet and language structure, functional and social correspondence. Equal in importance to language competency is the matter of area knowledge. The Extended Course takes into consideration the needs of the country's contemporary civilization together with a study of the historical development of the area. 

Credit Recommendations: In the lower-degree baccalaureate/associate degree category, extending into the upper-degree baccalaureate/associate degree category, 40 semester hours in CHINESE (Mandarin) for the 74- to 75-week course; 15 in GERMAN for the 24-week course; 40 in JAPANESE for the 74- to 75-week course; 18 in KOREAN for the 74- to 75-week course; 40 in RUSSIAN for the 74- to 75-week course; 40 in VIETNAMESE for the 74- to 75-week course (8/74). In the graduate category, 6 semester hours in CHINESE-MANDARIN for the 74- to 75-week course; 6 in JAPANESE for the 74- to 75-week course; 6 in KOREAN for the 74- to 75-week course; 6 in RUSSIAN for the 74- to 75-week course; 6 in VIETNAMESE for the 74- to 75-week course (8/74). 

Course Number: None. Location: West Coast Branch, Presidio of Monterey, CA. Length: 16-24 weeks. Exhibit Dates: 1/24-Present. 

Department of Defense
knowledge. The Intermediate Course pur-
poses to treat in considerable depth all
facets of the country's contemporary civil-
ization. Topics studied include aspects of the his-
torical development of the area.

Credit Recommendation: In the lower-di-
vision baccalaureate/associate degree cate-
gory, extending into the upper-division bac-
calaureate category, 18 semester hours in
CHINESE—MANDARIN for the 37-week

COURSE EXHIBITS

Program: The Defense Language Insti-
tute is designed to provide an accelerated,

Location: East Coast Branch, Washington,
DC
Length: 8-60 weeks
Exhibit Dates: 1/54-Present
Objectives: The Intensive Courses are de-
signed to make military personnel thor-
oughly at ease in the speaking, understand-
ing, reading, and writing of a foreign lan-
guage; the shorter courses are designed to give
students a limited command of the lan-
guage.

Instruction: Lectures, discussions, and oral
drills in the speaking, understanding, read-
ing, and writing of a foreign language,

with additional training in area studies,

including the geography, history, politics,

economics, government, social structure,

and military situations pertaining to the
area.

Credit Recommendation: In the lower-
division baccalaureate/associate degree cate-
gory, extending into the upper-division bac-
calaureate category, 18 semester hours in
CHINESE—MANDARIN for the 37-week

Course Number: None.

Location: East Coast Branch, Washington,

DC
Length: 8-60 weeks
Exhibit Dates: 1/54-Present
Objectives: The Intensive Courses are de-
signed to make military personnel thor-
oughly at ease in the speaking, understand-
ing, reading, and writing of a foreign lan-
guage; the shorter courses are designed to give
students a limited command of the lan-
guage.

Instruction: Lectures, discussions, and oral
drills in the speaking, understanding, read-
ing, and writing of a foreign language,

with additional training in area studies,

including the geography, history, politics,

economics, government, social structure,

and military situations pertaining to the
area.

Credit Recommendation: In the lower-
division baccalaureate/associate degree cate-
gory, extending into the upper-division bac-
calaureate category, 18 semester hours in
CHINESE—MANDARIN for the 37-week

Course Number: None.
null
COURSE EXHIBITS

Instruction: The course provides an overview of finance and managerial accounting, emphasizing the case approach. Topics covered include financial statement analysis, cost and budgeting, and contract pricing.

Credit Recommendation: In the upper-division baccalaureate category, 3 semester hours in defense and political management.

DD-1408-0004
PROGRAM MANAGEMENT FOR FUNCTIONAL MANAGERS
(Preparation for Management for Contract Administration)

Course Number: None
Location: Defense Systems Management College, Ft. Belvoir, VA.
Length: 4 weeks (120 hours)
Exhibit Dates: 12/75-Present
Objectives: To introduce contract administrators to program management systems.

Instruction: Lectures, discussion, and cases on defense program and project management, systems acquisition, and financial management.

Credit Recommendation: In the graduate degree category, 3 semester hours in defense program and project management.

DD-1511-0002
NATIONAL WAR COLLEGE

Course Number: None
Location: National War College, Ft. Leslie J. McNair, Washington, DC.
Length: 43 weeks.
Objectives: The National War College provides professional education intended to improve the knowledge and expertise of practitioners of national security and foreign affairs.

Instruction: Lectures, seminars, readings, and student research in military and national security, international relations, and national security affairs.

Credit Recommendation: In the upper-division baccalaureate category, 3 semester hours in defense program and project management.

DD-1511-0001
NATIONAL SECURITY MANAGEMENT
CORRESPONDENCE COURSE OF THE INDUSTRIAL COLLEGE OF THE ARMED FORCES

Course Number: None
Location: Industrial College of the Armed Forces, Ft. Leslie J. McNair, Washington, DC.
Length: 52-104 weeks
Exhibit Dates: 5/71-Present
Objectives: To train officers in economic and industrial aspects of national security and the management of resources under all conditions and in the context of national and world affairs.

Instruction: Individualized readings and student research in economic and industrial aspects of national security and the management of resources under all conditions and in the context of national and world affairs.

Credit Recommendation: 1 in management (Defense Policy and Management) (8/74), in the graduate degree category, 3 semester hours for completion of the entire program with distinction or based upon the admitting institution's evaluation of the applicant's work (8/74). NOTE: Credit recommendation is based on the applicant's academic performance and the regulations of the admitting institution on transfer credit.

DD-1511-0003
INDUSTRIAL COLLEGE OF THE ARMED FORCES: RESIDENT PROGRAM

Course Number: None
Location: Industrial College of the Armed Forces, Ft. Leslie J. McNair, Washington, DC.
Length: 43 weeks.
Objectives: To train officers in the political, military, and economic aspects of national security, including management, and the command, staff, and policy-making functions of the national and international security service.

Instruction: Lectures, practical exercises, seminars, readings, field studies, and student research in the political, military, social, economic, and industrial aspects of national security, including management, and in national and world affairs.

Credit Recommendation: Version 1. In the upper-division baccalaureate category, 3 semester hours in political science, 3 in social science, 3 in national economic problems and policies, 3 in principles of economic analysis, 3 in economic and industrial management, 2 in international relations, 2 in social science, 3 in political science, 9 in contemporary history, 3 in management, and 3 in research and thesis.

Note: Credit granted for

NOTE: Credit granted for the entire program with distinction or based upon the admitting institution's evaluation of the applicant's work (8/74).
theses should be contingent upon the graduate school's evaluation of the research paper. Recommendations of credit are maximum figures. The amount actually accepted or transferred depends upon the student's future academic goals and the regulations of the admitting institution on transfer credit. Version 2: In the upper-division baccalaureate category, 12 semester hours in political science (including international relations), 12 in business administration, 3 in recent history, 6 in economics, 3 in geography, 3 in mathematics (8/74). Version 3: In the upper-division baccalaureate category, 12 semester hours in political science, 9 in business administration, 3 in economics, 3 in geography, 3 in general physics, 3 in mathematics (12/68). Version 4: In the upper-division baccalaureate category, 12 semester hours in political science (including international relations), 6 in business administration, 3 in recent history, 3 in economics, 3 in geography (12/68). Version 5: In the upper-division baccalaureate category, 12 semester hours in political science (including international relations), 6 semester hours in business administration, 3 in economics, 3 in geography, 3 in general physics, 3 in mathematics (12/68). Version 6: In the upper-division baccalaureate category, 15 semester hours in international relations or political science, 3 in recent history, 3 in economics, 3 in geography (12/68). Version 7: In the upper-division baccalaureate category, 12 semester hours in political science (including international relations), 12 in business administration, 3 in recent history, 6 in economics, 3 in geography, 3 in mathematics (8/74).

DD-1511-0005
INTER-AMERICAN DEFENSE COLLEGE
Course Number: None Location: Inter-American Defense College, Ft. Leslie J. McNair, Washington, D.C.
Length: 52 weeks
Exhibit Dates: 7/65-Present
Objectives: To provide training as a military institution for students who wish to prepare for the purpose of preparing military personnel and civilian officials of the American States through the study of the Inter-American System and the political, social, economic and military factors that constitute essential elements for the defense of the hemisphere.

Instruction: The curriculum includes a review of basic theoretical topics in the classical areas of power and general studies of the current world situation, thus providing an adequate framework and for an extension of the hemisphere's situation in the light of political, social, economic and military factors. The students learn and practice, in group discussions, the methodology of international cooperation with aspects of continental security planning at higher levels of general and military strategy. The modality includes numerous lectures by outside experts, seminars, and symposia for discussion of the materials presented, study committees and the preparation of individual research papers.

Credit Recommendation: In the graduate degree category, 6 semester hours in international relations for students rated "very good" or "outstanding" (11/76).

DD-1511-0006
RESERVE COMPONENTS NATIONAL SECURITY SEMINAR
Course Number: None
Location: National Defense University, Vandenberg AFB, CA; National Defense University, Fort Bragg, NC; National Defense University, Ft. Lesley McNair, Washington, DC.
Length: Version 1: 33 weeks (1325 hours) Version 2: 38 weeks (1425-1504 hours)
Objectives: To train officers in intelligence operations and techniques, and management concepts and techniques as they apply to intelligence resources, processes, and information systems, OR in intelligence operations, procedures, and structures as they relate to national action.

Instruction: Lectures, practical exercises, readings, and individualized study in intelligence operations and techniques and in management concepts and techniques as they apply to intelligence resources, processes and information systems at various levels.

Credit Recommendation: Version 1: In the upper-division baccalaureate category, 6 semester hours in modern history, 6 in political science, credit in geography on the basis of institutional examination (upon completion of phases one and two), 3 in principles of management (upon completion of phase three), 3 in the graduate degree category, 6 semester hours in international relations or political science, OR, if the applicant's field of study in graduate school is in the area of economics or political geography, 4 semester hours in international relations or political science (8/74).

Version 2: In the upper-division baccalaureate category, 6 semester hours in modern history, 6 in political science, 3 in geography (12/68), in the graduate degree category, 6 semester hours in international relations or political geography (8/74). Version 3: In the upper-division baccalaureate category, 6 semester hours in international relations or political geography, 3 in recent history, 3 in economics, 3 in geography (8/74). Version 4: In the upper-division baccalaureate category, 6 semester hours in international relations or political geography, 3 in recent history, 3 in economics, 3 in geography (8/74).

Department of Defense.
Aka and mosaic making (5/74); in the upper-di-
vision baccalaureate category, 3 semester
hours in map, and mosaic making (5/74)
vision baccalaureate category, 18 semester
hours in social and behavioral science, to be
assigned among the following subject areas
applied psychology, group dynamics, inter-
group relations, communications theory, his-
tory of minorities and ethnic groups, and

In the upper-division baccalaureate cate-
gory, 4 semester hours in behavioral science
laboratory, and 6 in social and behavioral
science, to be assigned in any of the follow-
ing disciplines applied psychology, group
dynamics, intergroup relations, or history of
minorities and ethnic groups (8/74); in the
graduate degree category, 4 semester hours
in behavioral science laboratory (8/74).

NOTE: Recommendations of credit are
maximum figures. The amount of credit ac-
tually awarded by transfer depends upon
the applicant's future academic goals and
the regulations of the admitting institution
on transfer credit.

DD-1601-0001

BASIC PHOTOGRAMMETRIC CARTOGRAPHIC TECHNIQUES
Course Number: 411-204
Location: Defense Mapping School, Ft.
Belvoir, VA.
Length: 16 weeks (283 hours).
Exhibit Dates: 5/72-Present.
Objectives: To train enlisted personnel to
compile and revise planimetric, topographic
maps, and photomaps using drafting instru-
ments and plotting devices.

Instruction: Lectures and practical exer-
cises in the compilation and revision of
planimetric, topographic maps and photo-
maps, including compilation base and radial
triangulation, map compilation and map re-
vision, aerial photo mosaic, color separa-
tion, maintenance of cartographic equip-
ment and facilities, DMA topographic cen-
ter security, construction, controlled pho-
tomosaic, transfer of revision data to compila-
tion base, and delineation of aerial photo-
graphy.

Credit Recommendation: In the vocational
certificate category, 6 semester hours in
map and mosaic making (5/74); in the
lower-division baccalaureate/associate degree
category, 5 semester hours in map and
mosaic making (5/74); in the upper-
division baccalaureate category, 3 semester
hours in map and mosaic making (5/74)

DD-1601-0002

GEODETIC SURVEYING
Course Number: 412-B2D20; 5ABD2220;
412-102.
Location: Defense Mapping School, Ft.
Belvoir, VA.
Length: 10 weeks (376 hours)

Exhibit Dates: 12/73-Present.
Objectives: To train enlisted personnel in
geodetic surveying.

Instruction: Lectures and practical exer-
cises in geodetic surveying, including the
establishment of ground survey control
through differential leveling, gravity sur-
veys, traverse triangulation, and astronomic
observation, mapping and charting in the
support of weapons systems and other oper-
ations; military construction surveys; estab-
lishment of control, expedition-road and
landing-site planning, and construction-site
layout surveys for theater-of-operations
construction support.

Credit Recommendation: In the vocational
certificate category, 10 semester hours in
plane and geodetic surveying (5/74), in the
lower-division baccalaureate/associate degree
category, 8 semester hours in plane and
geodetic surveying (5/74), in the upper-
division baccalaureate category, 6 semester
hours in plane, and geodetic surveying
(5/74)

Related Occupation Codes: 82D

DD-1601-0003

ADVANCED GEODETIC SURVEYING
Course Number: 4M-710
Location: Defense Mapping School, Ft.
Belvoir, VA.
Length: 20 weeks (707 hours).
Exhibit Dates: 12/73-Present.
Objectives: To provide geodetic survey-
ors with training in advanced geodetic survey
techniques.

Instruction: Lectures and practical exer-
cises in advanced geodetic survey tech-
niques, including astronomical observations
for longitude, latitude, azimuth, compu-
ting and adjusting geodetic figures, direc-
tions, lengths, positions, and differences in
elevation; precise instrumentation related to
high-order control surveys; orientation on analy-
tical point positioning using photogam-
metry, vertical control surveys; geodesy and
gravity surveys; and map compilation, and
digital computers.

Credit Recommendation: In the lower-di-
vision baccalaureate/associate degree cate-
gory, 15 semester hours in advanced geod-
etic surveying (5/74). In the upper-division
baccalaureate category, 10 semester hours
in advanced geodetic surveying (5/74)

DD-1601-0004

TERRAIN ANALYSIS
Course Number: 491-81Q20, 491-101.
Location: Defense Mapping School, Ft.
Belvoir, VA.
Length: 18 weeks (314 hours).
Exhibit Dates: 10/73-Present.
Objectives: To provide geodesy analysts,
map compilers, and map interpreters with
training in geographic analysis.

Instruction: Lectures and practical exer-
cises in terrain analysis, including principles
and techniques of terrain analysis, map
reading and land navigation, basic photo-
graphic interpretation and cartographic
principles, techniques for describing terrai-
geologic and hydrologic concepts, amplifi-
cation of terrain elements, base develop-
ment and terrain planning considerations,
engineer reconnaissance, engineer applica-
tions of photography, and applied terrain
analysis.

Credit Recommendation: In the lower-di-
vision baccalaureate/associate degree cate-
gory, 6 semester hours in terrain analysis
(5/74), in the upper-division baccalaureate
category, 4 semester hours in terrain analy-
sis (5/74).

Related Occupation Codes: 81Q

DD-1601-0005

ADVANCED PHOTOGRAMMETRIC CARTOGRAPHIC TECHNIQUES
Course Number: 411-205
Location: Defense Mapping School, Ft.
Belvoir, VA.
Length: 5 weeks (281 hours).
Exhibit Dates: 5/73-Present.
Objectives: To train noncommissioned offi-
cers to perform as photogrammetric-carto-
graphic technicians.

Instruction: Lectures and practical exer-
cises in earth and physical sciences as relat-
ed to the photogrammetry-cartographic
career area, including regional physio-
graphy, geodetic datums, horizontal and
vertical control, positional evaluation, pho-
tographic metrics, projections, grids, photo
tilt, photo restitution, structural heights, in-
dustrial analysis, photogrammetric equip-
ment, aerial reconnaissance systems, and
special techniques of photographic and lith-
ographic areas.

Credit Recommendation: In the lower-di-
vision baccalaureate/associate degree cate-
gory, 6 semester hours in photogrammetric
interpretations (5/74), in the upper-division
baccalaureate category, 6 semester hours in
photogrammetric interpretations (5/74).

DD-1601-0006

GEODETIC COMPUTING
Course Number: 412-B2E20, 5ABD2221;
412-102.
Location: Defense Mapping School, Ft.
Belvoir, VA.
Length: 11 weeks (378 hours).
Exhibit Dates: 12/72-Present.
Objectives: To train enlisted personnel in
geodetic computing.

Instruction: Lectures and practical exer-
cises in geodetic computing, including com-
prehensive mathematics review, use of elec-
tronic calculators; map reading; computa-
tion in grid and decimal systems; projec-
tions and transformations; grid traverses
and electronic distance measurements; grid
triangulation, leveling, traverse, and tri-
facting; astronomic azimuth and position;
and adjustment of geographic figures, direc-
tions, tilt-length, and elevation difference from
surveyor notes.

Credit Recommendation: In the lower-di-
vision baccalaureate/associate degree cate-
gory, 12 semester hours in geodetic compu-
tations (5/74), in the upper-division baccal-
laureate category, 8 semester hours in geod-
etic computations (5/74).

Related Occupation Codes: 82E.

DD-1601-0007

MAPPING, CHARTING, AND GEODESY OFFICER
Course Number: 4M-7915; 4M-F2;
5QQ2D5724; 4M-701.
Location: Defense Mapping School, Ft.
Belvoir, VA.
Length: 12 weeks (372 hours).
Exhibit Dates: 1/74-Present.
Objectives: To train officers in mapping,
charting, and geodesy.

Instruction: Lectures and practical exer-
cises in mapping, charting, and geodesy
processes, including theory of errors; and
MCG G survey, photogrammetric, carto-
graphic, and reproduction operations.

Credit Recommendation: In the lower-di-
vision baccalaureate/associate degree cate-
gory, 9 semester hours in mapping, charting, and geodesy (5/74); in the upper-division baccalaureate category, 6 semester hours in mapping, charting, and geodesy (3/74).

DD-1601-0008
CONSTRUCTION SURVEYING
Course Number: 412-82B; 412-110
Location: Defense Mapping School, Ft Belvoir, VA.
Length: 11 weeks (362 hours).
Exhibit Dates: 7/72-Present.
Objectives: To train enlisted personnel in plane surveying fundamentals.
Instruction: Lectures and practical exercises in plane surveying fundamentals, including equipment maintenance, recording procedures, map reading, route selection, one-minute theodolite, engineer transit, horizontal taping, traverse layout, plane traverse computation, engineer dumpy level, differential leveling, trigonometric elevations, planeable surveying, transit-stadia, contour strip map, horizontal curves, road layout, profile and cross-section leveling, profile and grade line plotting, vertical curves, sections, boundary alignment, slope and grade staked, site plans and construction drawings, and building utilities and airfield layout.
Credit Recommendation: In the vocational certificate category, 10 semester hours in construction surveying (3/74); in the lower-division baccalaureate/associate degree category, 8 semester hours in construction surveying (3/74); in the upper-division baccalaureate category, 6 semester hours in construction surveying (3/74).
Related Occupation Codes: 82B

DD-1601-0009
PHOTOGRAHMETRIC COMPIILATION
Course Number: 411-203; 411-81C20.
Location: Defense Mapping School, Ft. Belvoir, VA.
Length: 8 weeks (270 hours).
Exhibit Dates: 6/71-Present.
Objectives: To train map compilers in the principles and techniques of photogrammetric map compilation.
Instruction: Lectures and practical exercises in the principles and techniques of photogrammetric map compilation, including multiplex stereoplotter orientation, reducing strip map, photogrammetric map compilation, stereoplotter orientation, reduction printing, stereocompilation, high-precision stereoscopic, stereoengineering, and special operational subjects.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 8 semester hours in photogrammetric compilation (7/74); in the upper-division baccalaureate category, 6 semester hours in photogrammetric compilation (7/74).
Related Occupation Codes: 81C

DD-1601-0010
TOPOGRAPHY AND PRINTING STAFF
NONCOMMISSIONED OFFICER (NCO)
Course Number: 411-751.
Location: Defense Mapping School, Ft. Belvoir, VA.
Length: 2 weeks (80 hours).
Objectives: To provide the skills to permit effective performance of supervisory functions in an Army topographic unit.
Instruction: Topics include production scheduling and quality control.
Credit Recommendation: Pending evaluation.

DD-1601-0011
BASIC CARTOGRAPHY
Course Number: 411-200.
Location: Defense Mapping School, Ft. Belvoir, VA.
Length: 10-17 weeks (498 hours).
Objectives: To prepare required knowledge to perform basic cartographic and photogrammetric tasks with general supervision.
Instruction: Includes cartographic compilation, map revision and color separation techniques.
Credit Recommendation: Pending evaluation.

DD-1601-0012
BASIC TOPOGRAPHIC OFFICERS
Course Number: 411-203; 411-81C30.
Location: Defense Mapping School, Ft. Belvoir, VA.
Length: 14 weeks (460 hours).
Exhibit Dates: 11/76-Present.
Objectives: To teach skills to develop basic technical to complete the photolithographic process.
Instruction: Includes teaching the student to prepare single and multi-color camera ready copy, utilizing cold type equipment and metric measurement; course is devoted primarily to camera operations and stop-out and platemaking operations.
Credit Recommendation: Pending evaluation.

DD-1601-0013
BASIC PHOTOGRAPHIC PROCESSES
Course Number: 740-306
Location: Defense Mapping School, Ft. Belvoir, VA.
Length: 14 weeks (460 hours).
Exhibit Dates: 11/76-Present.
Objectives: To train officer personnel to perform photographic work, including copy camera, processing, offset duplicating, etc.
Instruction: Includes teaching the student to perform photographic work, including copy camera, processing, offset duplicating, etc.
Credit Recommendation: In the vocational certificate category, 3 semester hours in photographic work.

DD-1606-0001
NATIONAL SENIOR INTELLIGENCE
Course Number: None.
Location: Defense Intelligence School, Washington, DC.
Length: 14 weeks (560 hours)
Exhibit Dates: 6/72-Present.
Objectives: To provide officers and civilian personnel with the knowledge necessary to hold management positions in the field of national and international intelligence.
Instruction: Lectures in the processing and management of intelligence information, its development and implementation of U.S. foreign policy, the national intelligence structure, and government agencies involved in foreign policy.
Credit Recommendation: In the upper-division baccalaureate category, 6 semester hours in international relations, public administration, or political science (1/74).

DD-1706-0001
MULTILITH 1250 REPAIR
Course Number: 690-621.
Location: Defense Mapping School, Ft. Belvoir, VA.
Length: 9 weeks (325 hours).
Exhibit Dates: 10/70-Present.

Department of Defense

Length: 2 weeks (80 hours).
Exhibit Dates: 11/73-Present.
Objectives: To train multilith operators to train new hires, and perform preventive maintenance on, 1250 multiliths.
Instruction: Lectures and practical exercises on the preventive maintenance and repair of the 1250 multilith, normal operator adjustments, system alignment and adjustment, maintenance, case problems, and preventive maintenance.
Credit Recommendation: In the vocational certificate category, 3 semester hours in multilith 1250 repair (6/74).

DD-1706-0002
REPRODUCTION EQUIPMENT REPAIR
Course Number: 690-41K20, 690-620.
Location: Defense Mapping School, Ft. Belvoir, VA.
Length: 15 weeks (512 hours).
Exhibit Dates: 6/72-Present.
Objectives: To train enlisted personnel to operate and repair reproduction equipment, including copy camera, power paper cutters, paper folder-stitchers, and offset duplicating machines.
Instruction: Lectures and practical exercises on the operation and maintenance of reproduction equipment. Course includes the 24 X 30 copy camera, introduction to photolithography, repair parts supply, operational adjustments, aligning adjustments, repair procedures, maintenance of layout and platemaking equipment, repair of electrical components, repair and maintenance of power paper cutter, repair, maintenance, and timing of the offset duplicating machine, and the maintenance and repair of the bindery equipment and the paper folder and stitcher.
Credit Recommendation: In the vocational certificate category, 6 semester hours in business machine repair (5/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in business machine repair (5/74).
Related Occupation Codes: 41K.

DD-1709-0001
INTERMEDIATE PHOTOJOURNALISM
Course Number: 570-ASU8.
Location: Defense Information School, Ft. Benjamin Harrison, IN
Length: Self-paced 7 weeks (276-280 hours).
Exhibit Dates: Version 1: 10/78-Present.
Version 2: 10/77-9/78.
Objectives: To provide photojournalism training for journalists and photographers.
Instruction: Students are given instruction in basic camera techniques, basic and advanced black and white darkroom procedures, Ektachrome slide processing, photo layout and design, and multimedia slide presentations. A course option includes news, feature, and cutline writing. Part of course is self-paced.

DD-1713-0001
MAP COMPILATION
Course Number: 413-81B20, 411-202.
Location: Defense Mapping School, Ft. Belvoir, VA
Length: 9 weeks (325 hours).
Exhibit Dates: 10/70-Present.

Related Occupation Codes: 41C.
Objectives: To train enlisted personnel in the compilation and revision of planimetric maps, topographic maps, and photomaps, using drafting instruments and plotting devices.

Instruction: Lectures and practical exercises in the compilation and revision of planimetric maps, topographic maps, and photomaps, including compilation of base and radial triangulation; map compilation and revision; aerial photography planning and mosaics; extraction of cartographic detail from aerial photographs; color separation; situation overlays and special studies; maintenance of cartographic equipment and facilities; and editing of color separation source sheets.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 4 semester hours in cartographic drafting.

DD-1719-0002
CARTOGRAPHIC DRAFTING
Course Number: 740-83D20, 740-303
Location: Defense Mapping School, Ft. Belvoir, VA.

Exhibit Dates: 4/72-Present
Objectives: To train enlisted personnel to prepare and produce offset plates to be used in the lithographic process.

Instruction: Lectures and practical exercises in the preparation and production of offset plates to be used in the lithographic printing process, including layout, stripping, and platemaking procedures.

Credit Recommendation: In the vocational certificate category, 3 semester hours in graphic arts (5/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in graphics or printing (5/74).

DD-1719-0002
OFFSET PRINTING
Course Number: 740-83F20, 740-303
Location: Defense Mapping School, Ft. Belvoir, VA.

Length: 8 weeks (276 hours).

Exhibit Dates: 11/73-Present
Objectives: To train enlisted personnel to operate offset presses in the reproduction of maps, charts, and other printed line work.

Instruction: Lectures and practical exercises in offset printing, including lithography materials, methods of producing military maps, operation of paper cutter, maintenance of offset press, controls, feeder and delivery assemblies, underwound, dampering assembly, linking assembly, printing practice, identification of printing problems, printing a three-color and five-color method, methods of lithographic offset press operations.

Credit Recommendation: In the vocational certificate category, 4 semester hours in graphic arts (5/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in graphic arts (5/74).

DD-1719-0003
LITHOGRAPHIC PHOTOGRAPHY
Course Number: 740-83D20, A-740-0020, 740-303
Location: Defense Mapping School, Ft. Belvoir, VA.

Length: 8 weeks (276 hours).

Exhibit Dates: 11/73-Present
Objectives: To train enlisted personnel to operate copy cameras and related equipment.

Instruction: Lectures and practical exercises in fundamentals of copy photography, camera operation, film processing, exposure, filters, line and continuous-tone copying, halftone magenta screens, contact printing, diazo-type glass plates, pictomaps, electronic contact printer, and preventive maintenance.

Credit Recommendation: In the vocational certificate category, 2 semester hours in basic lithography on the basis of institutional evaluation (7/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in basic lithography on the basis of institutional evaluation (7/74), in the upper-division baccalaureate category, 2 semester hours in basic lithography on the basis of institutional evaluation (7/74).

DD-1719-0004
OFFSET DUPLICATING EQUIPMENT OPERATOR
Course Number: 740-304
Location: Defense Mapping School, Ft. Belvoir, VA.

Length: 5 weeks (145 hours).

Exhibit Dates: 11/72-Present
Objectives: To train enlisted personnel in the operation and basic maintenance of the offset duplicator, camera processor, and photomachine equipment.

Instruction: Courses include introduction to photolithography, training in the operation of the 3M MR-412 Camera Processor and the A-B-D 675 Copier, the ATF Davidson 350 Duplicator, and training in the operation and maintenance of other duplicating equipment, including the A&M-1250 Multi- line Duplicator, the ATF Davidson 500 Duplicator, and the ATF Davidson Perfector Duplicator.

Credit Recommendation: In the vocational certificate category, 5 semester hours in offset duplicating equipment operation (6/74).

DD-1721-0001
OPTICAL SURVEY INSTRUMENT REPAIR
Course Number: 670-41B20, 670-601
Location: Defense Mapping School, Ft. Belvoir, VA.

Length: 12 weeks (382 hours).

Exhibit Dates: 2/74-Present
Objectives: To train enlisted personnel to maintain and repair optical surveying and mapping instruments.

Instruction: Lectures and practical exercises in surveying and mapping instrument maintenance, adjustment, and repair, including abney hand level, dumpy level, telescopic alidade, transit, military level, one-millimeter, and one-second theodolites, and survey tapes.

Credit Recommendation: In the vocational certificate category, 5 semester hours in optical survey equipment repair (6/74).

DD-1728-0001
INDUSTRIAL SECURITY SPECIALIST
Course Number: 5220-2.
Location: Defense Industrial Security Institute, Richmond, VA.

Length: Version 1: 5 weeks (182-183 hours). Version 2. 3 weeks (113 hours).

Exhibit Dates: Version 1: 7/76-Present Version 2. 9/72-6/76

Objectives: To provide industrial security specialists with training in defense industrial security.

Instruction: All Versions: Lectures and practical exercises in the history, management, application, and functions of the defense industrial security program, organization for security cognizance, laws and regulations, security hazards, applicable security resources, responsibilities of contracting officers, personnel clearance programs, inspections, security education program, security arrangements, international aspects, and espionage. Version 1: This version emphasizes the security threat against the U.S. government and industry, facility protection programs; classified document control; electronic and physical security measures, communications security, vulnerabilities of and protective measures for automatic data-processing systems, emergency/disaster planning and procedures. Audio-visual presentations.

Credit Recommendation: Version 1. In the lower-division baccalaureate/associate degree category, 5 semester hours in criminal justice or security administration and management (1/77).

Version 2. In the lower-division baccalaureate/associate degree category, 2 semester hours in criminology (5/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in criminology (5/74); in the upper-division baccalaureate category, 2 semester hours in criminology (5/74).
MC-0419-0001

BASIC FREIGHT OPERATION

Course Number: None
Location: Service Support School, Cpl. Lejeune, NC.
Length: 4 weeks (140 hours).
Exhibit Dates: 12/67-present.
Objectives: To train enlisted personnel in all aspects of freight operation.

Instruction: Lectures and practical experience in the fundamentals of shipping and receiving, the capabilities of the transportation system, rules and regulations governing transportation, freight classification, regulations and storage, use of materials-handling equipment, including the forklift, use of the manifest, and the documentation of freight movement.

Credit Recommendation: In the vocational certificate category, 3 semester hours in freight handling (1/77).

MC-0419-0002

MOTOR TRANSPORT MAINTENANCE

Course Number: None
Location: Supply School, Cpl. Lejeune, NC.
Length: 12 weeks (381-447 hours).
Exhibit Dates: 9/68-12/74.
Objectives: To train enlisted personnel to supervise, manage, and operate a motor transport maintenance facility.

Instruction: Lectures and practical exercises in management principles; maintenance functions, basic shop sets; fuel and electric shop sets; recovery of vehicles, tanks, chassis, and power plants, and on-the-job repairs.

Credit Recommendation: In the vocational certificate category, 3 semester hours in introduction to automotive shop practices. In the upper-division baccalaureate category, 6 semester hours in transportation management, 6 in truck driver training (4/74); in the upper-division baccalaureate category, 4 semester hours in transportation management (4/74).

MC-0419-0003

MOTOR TRANSPORT OFFICER

Course Number: None.
Location: Service Support School, Cpl. Lejeune, NC; Supply School, Cpl. Lejeune, NC.
Length: 12/17 weeks (414-590 hours).
Exhibit Dates: 7/38-present.
Objectives: To train enlisted personnel to inspect and supervise the servicing, repair, and maintenance of automotive vehicles.

Instruction: Lectures and practical exercises in the fundamentals of shipping and receiving, the capabilities of the transportation system, rules and regulations governing transportation, freight classification, regulations and storage, use of materials-handling equipment, including the forklift, use of the manifest, and the documentation of freight movement.

Credit Recommendation: In the vocational certificate category, 9 semester hours in automotive maintenance (7/74).

MC-0419-0004

MOTOR TRANSPORT OFFICER LEADERSHIP

(Motor Transport Officer Orientation)

Course Number: None.
Location: Supply School, Cpl. Lejeune, NC.
Objectives: To train officers to manage motor-transport operations.

Instruction: Version 1: Includes supervision of vehicle maintenance-operations with respect to scheduling cleaning, lubrication, and inspection. Version 2: Lectures and practical exercises in the operation and management of motor transport facilities. Course includes maintenance fundamentals, electrical systems, power transmission, fuel systems, and maintenance management.

Credit Recommendation: Version 1: In the upper-division baccalaureate category, 3 semester hours in automotive or heavy equipment maintenance management (4/74). Version 2: In the vocational certificate category, 2 semester hours in introduction to automotive or transportation technology (7/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in introduction to automotive or transportation technology (7/74); in the upper-division baccalaureate category, 2 semester hours in introduction to automotive or transportation technology (7/74).

MC-0602-0001

HIGH INTENSITY LANGUAGE TRAINING

(VIETNAMESE)

Course Number: None.
Location: Marine Corps Schools, Quantico, VA.
Length: 6 weeks (222 hours).
Exhibit Dates: 8/67-12/70.
Objectives: To prepare selected Marine Corps Educational Center graduates for duty in an area where the primary or secondary language is Vietnamese.

Instruction: Language patterns, lexical units, and fluency necessary to communicate effectively with a native speaker; background information on culture, history, and geography; development of a vocabulary for interaction in civic action programs and liaison duties.

Credit Recommendation: In the upper-division baccalaureate category, 4 semester hours in Vietnamese (12/68).

MC-0801-0001

NUCLEAR, BIOLOGICAL AND CHEMICAL (NBC) WARFARE DEFENSE

Course Number: None.
Location: Recruit Depot, Parris Island, SC.
Length: 3 weeks (105 hours).
Exhibit Dates: 1/63-12/68.
Objectives: To train personnel for NBC defense responsibilities and instructional duties.

Instruction: Lectures and practical exercises on NBC defense, including monitoring and survey teams, decontamination squads, nuclear warfare defense, biological warfare defense, chemical warfare defense, radar instruments, protection, training and operations, types of nuclear bursts and effects, shielding of gamma radiation, dancer and nerve agents, smoke and incendiaries, new developments in NBC equipment, and chemical decontamination techniques.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (12/68).

MC-0802-0001

1. PHYSICAL TRAINING INSTRUCTOR (Marl)

2. PHYSICAL TRAINING INSTRUCTOR

Course Number: None.
Location: Development and Education Command, Quantico, VA.
Objectives: To train enlisted personnel as instructors for close-combat and physical training.

Instruction: Lectures and practical exercises in the skills necessary to be an instructor in combat and physical training. Course provides comprehensive classroom instruction on structural and functional kinesiology, and the principles of physical training.

Credit Recommendation: Version 1: In the vocational certificate category, 4 semester hours in anatomy and physiology, 2 in physical education, 2 in physical education methods (7/74), in the lower-division baccalaureate/associate degree category, 4 semester hours in anatomy and physiology, 2 in physical education, 2 in physical education methods (7/74); in the upper-division baccalaureate category, credit in principles of physical training on the basis of instructional evaluation (12/68). Version 2: In the vocational certificate category, 4 semester hours in anatomy and physiology, 2 in physical education, 2 in physical education methods (7/74), in the lower-division baccalaureate/associate degree category, 4 semester hours in anatomy and physiology, 2 in physical education, 2 in physical education methods (7/74), in the upper-division baccalaureate category, 2 semester hours in anatomy and physiology, 2 in physical education (12/68).

MC-0802-0002

SURVIVAL, ESCAPE, RESISTANCE TO INTERROGATION AND ESCAPE (SERE)

(Evasion, Escape and Survival Training)

Course Number: None.
COURSE EXHIBITS

Location: Mountain Warfare Training Center, Bridgeport, CA.

Length: 4 weeks (169-172 hours).

Exhibit Dates: 5/59-12/68.

Objectives: To train personnel in the practical techniques of survival, escape, resistance to interrogation, and evasion.

Instruction: Lectures and practical exercises to include land navigation, physical preparation, Communist indoctrination and interrogation techniques, resistance to Communist interrogation techniques, and prisoner organization and resistance.

Credit Recommendation: In the upper-division baccalaureate category, 2 semester hours in woodcraft and survival training (5/74).

AMMUNITION HANDLERS

Course Number: None

Location: Ordnance School, Quantico, VA

Length: 6 weeks (180 hours).

Exhibit Dates: 7/58-12/68.

Objectives: To train personnel to safely handle, store, transport, and dispose of ammunition.

Instruction: Lectures and practical exercises in small arms ammunition, hand and rifle grenades, artillery and mortar ammunition, pyrotechnics, demolitions, ground rockets and guided missiles, aircraft munitions, machine guns, and firing devices, flamethrowers, fuels; ammunition disposal, ammunition storage and inspection, and removal and functions.

Credit Recommendation: Credit is not recommended because of the military nature of the course (5/74).

AMMUNITION TECHNICIAN

Course Number: None

Location: Ordnance School, Quantico, VA

Length: 10 weeks (420 hours).

Exhibit Dates: 7/54-12/68.

Objectives: To train noncommissioned officers in ammunition techniques.

Instruction: Lectures and practical exercises in fundamentals of ammunition, small arms ammunition, artillery and mortar ammunition, aircraft munitions, demolition, land mines and firing devices, ammunition ashore, ammunition supply administration, and field storage of ammunition.

Credit Recommendation: In the vocational certificate category, 6 semester hours in armorer/demolitions (7/74).

AMMUNITION TECHNICIAN (ADVANCED)

Course Number: None

Location: Ordnance School, Quantico, VA

Length: 5-8 weeks (192-327 hours).

Exhibit Dates: 7/60-12/68.

Objectives: To train personnel to supervise and manage ammunition storage and handling facility.

Instruction: Lectures and practical exercises in sources of technical information; ammunition principles; ammunition materials; ammunition supply procedures and allowances; detection, protection, and decontamination; identification and control; storage, transportation, and disposal of ammunition, military explosives, and toxic chemical agents; and planning, establishing, and operating an ammunition unit.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour as an elective in chemical technology (5/74).

AMMUNITION TECHNICIAN (BASIC)

Course Number: None

Location: Ordnance School, Quantico, VA.

Length: 5-9 weeks (192-360 hours).

Exhibit Dates: 7/57-12/68.

Objectives: To train personnel in phases of ammunition handling.

Instruction: Lectures and practical exercises to include identification, reception, inspection, storage, transportation, and issuance of ammunition components, military explosives, and toxic chemical agents; disposal of serviceable ammunition; ammunition identification and terminology; technical reference materials; supply procedures; computation of allowances, and decontamination procedures and equipment.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour as an elective in chemical technology (5/74).

CLOSE COMBAT INSTRUCTOR

Course Number: None

Location: Physical Fitness Academy, Quantico, VA

Length: 3-4 weeks (110 hours).

Exhibit Dates: 12/68-12/73.

Objectives: To train Marine Corps personnel in close-combat tactics and techniques.

Instruction: Practical study in kinesthetics and military combat techniques, martial sports, instructor training, individual conditioning, and armed and unarmed combat.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in physical education (2/74).

WATER SAFETY/SURVIVAL INSTRUCTOR

Course Number: 562.

Location: Physical Fitness Academy, Education Center, Quantico, VA.

Length: 3 weeks (100 hours).

Exhibit Dates: 7/62-12/73.

Objectives: To qualify personnel as Marine Corps water survival instructors and American Red Cross water safety instructors.

Instruction: Lectures and practical exercises in safety procedures and problem areas, water survival skills, and teaching techniques.

Credit Recommendation: In the vocational certificate category, 1 semester hour in swimming, 1 in physical education (5/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in swimming, 1 in physical education; in the upper-division baccalaureate category, 1 semester hour in physical education (5/74).

COLD WEATHER FIELD INDIOCTRINATION

(Cold Weather Field Indocitration Training for FMF Cadets and Apprentices)

Course Number: None.
MC-1205-0002
DRUM AND BUGLE CORPS
Course Number: None.
Location: Marine Corps Recruit Depot, Parris Island, SC.
Length: 12 weeks (426 hours).
Exhibit Dates: 1/72-8 weeks.
Objectives: To train personnel in the fundamentals of digital logic preparatory to further training in the maintenance of special devices.
Instruction: Lectures and practical exercises in the use of digital machines and devices in military applications; numbering systems; computer programming; fundamentals of logic design, including Boolean algebra, truth tables, and block-synoptic diagrams, logic circuitry, characteristics of hardware and operations of magnetic drum, tape, disc, magnetic core, and other storage devices; analog-to-digital conversion.
Credit Recommendation: In the vocational certificate category, 2 semester hours in digital computer design (2/74), in the lower-division baccalaureate/associate degree category, 4 semester hours in digital logic (12/88).

MC-1401-0001
SYSTEM ENGINEERING
Course Number: None.
Location: Computer Sciences School, Quantico, VA.
Length: 12 weeks (384 hours).
Exhibit Dates: 1/72-8 weeks.
Objectives: To train personnel having no prior data processing experience to operate and program disk computer systems.
Instruction: Practical exercises and lectures on fundamentals of programming and computing systems; introduction to System 360; DOS concepts and facilities; assembler language coding; DOS I/O coding; COBOL language; programming workshop; and electrical accounting machine operations.
Credit Recommendation: In the vocational certificate category, 3 semester hours in computer programming, 4 in computer operations, 2 in data processing (2/74); in the lower-division baccalaureate/associate degree category, 8 semester hours in computer programming, 4 in computer operations, 2 in data processing (2/74); in the upper-division baccalaureate category, 5 semester hours in computer programming (12/88).

MC-1402-0004
OPERATING SYSTEM PROGRAMMING (Disk Operating System Programming)
Course Number: None.
Location: Computer Sciences School, Quantico, VA.
Length: 2-12 weeks (126-333 hours).
Exhibit Dates: 1/68-Present.
Objectives: To train personnel having no prior data processing experience to operate and program disk computer systems.
Instruction: Practical exercises and lectures on fundamentals of programming and computing systems; introduction to System 360; DOS concepts and facilities; assembler language coding; DOS I/O coding; COBOL language; programming workshop; and electrical accounting machine operations.
Credit Recommendation: In the vocational certificate category, 3 semester hours in computer programming, 4 in computer operations, 2 in data processing (2/74); in the lower-division baccalaureate/associate degree category, 8 semester hours in computer programming, 4 in computer operations, 2 in data processing (2/74); in the upper-division baccalaureate category, 5 semester hours in computer programming (12/88).

MC-1402-0005
SYSTEM 360 OPERATING SYSTEM—CORE PHASE
Course Number: None.
Location: Computer Sciences School, Quantico, VA.
Length: 102 hours.
Exhibit Dates: 9/71-7/73.
Objectives: To provide enlisted personnel with introductory training in data processing.
Instruction: Lectures and practical exercises in punched card accounting, data processing fundamentals, System 360 operating systems, job control language, and utility programs.
Credit Recommendation: In the vocational certificate category, 2 semester hours in data processing principles (2/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in data processing principles (2/74); in the upper-division baccalaureate category, 4 semester hours in data processing principles (2/74).
MC-1402-0006
SYSTEM 360 OPERATING SYSTEM—OPERATIONS PHASE
Course Number: None
Location: Computer Sciences School, Quantico, VA.
Length: 99 hours
Exhibit Dates: 9/71-7/73
Objectives: To train enlisted personnel as System 360 operating system computer operators.
Instruction: Lectures and practical exercises in utility programs, input/output storage devices, operator commands and statements, and machine room procedures.
Credit Recommendation: In the vocational certificate category, 2 semester hours in computer operations (2/74).

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in computer programming (2/74); in the upper-division baccalaureate category, 2 semester hours in computer operations (2/74).

MC-1402-0007
SYSTEM 360 OPERATING SYSTEM—COBOL PROGRAMMING PHASE
Course Number: None
Location: Computer Sciences School, Quantico, VA.
Length: 123 hours
Exhibit Dates: 9/71-7/73
Objectives: To train enlisted personnel to write and debug COBOL programs.
Instruction: Lectures and practical exercises in file organization, common business-oriented language instructions, and standardized documentation.
Credit Recommendation: In the vocational certificate category, 3 semester hours in computer programming (2/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in computer programming (2/74), in the upper-division baccalaureate category, 3 semester hours in computer programming (2/74).

MC-1402-0008
SYSTEM 360 OPERATING SYSTEM—ASSEMBLER LANGUAGE PROGRAMMING PHASE
Course Number: None
Location: Computer Sciences School, Quantico, VA.
Length: 123 hours
Exhibit Dates: 9/71-7/73
Objectives: To train enlisted personnel as System 360 assembler language programmers.
Instruction: Lectures and practical exercises in data management facilities, file organization, access methods, service programs, assembler language coding instructions, and debugging methods.
Credit Recommendation: In the vocational certificate category, 3 semester hours in computer programming (2/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in computer programming (2/74), in the upper-division baccalaureate category, 3 semester hours in computer programming (2/74).

MC-1402-0009
SYSTEM 360 OPERATING SYSTEM—1401
Course Number: None
Location: Computer Sciences School, Quantico, VA.
Length: 152 hours
Exhibit Dates: 9/71-7/73
Objectives: To train enlisted personnel to program IBM 1401 computers, using assembler languages.
Instruction: Lectures and practical exercises in symbolic programming languages, autocoder programming languages, and standardized documentation.
Credit Recommendation: In the vocational certificate category, 3 semester hours in computer programming (2/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in computer programming (2/74); in the upper-division baccalaureate category, 3 semester hours in computer programming (2/74).

MC-1402-0010
SYSTEMS ANALYSIS AND DESIGN (FUNCTIONAL)
Course Number: None.
Location: Computer Sciences School, Quantico, VA.
Length: 4 weeks (109-117 hours).
Exhibit Dates: 9/70-7/75
Objectives: To train officers in the methodology of systems analysis and design.
Instruction: Lectures in systems theory, system modeling, and job control language.
Credit Recommendation: In the upper-division baccalaureate category, 3 semester hours in systems analysis (6/75).

MC-1402-0011
IBM SYSTEM 360 (DOS) COBOL PROGRAMMING
Course Number: None.
Location: Computer Sciences School, Quantico, VA.
Length: 9 weeks (258-310 hours)
Exhibit Dates: 8/73-Present
Objectives: To train enlisted personnel as COBOL application programmers on the IBM DOS COBOL system.
Instruction: Lectures on computer fundamentals, including a detailed examination of IBM operating systems and job control language. COBOL programming with American National Standard (ANS) for IBM System 360, including the sort verb, computer programming introduction, IBM 5/360 computer concepts, programming techniques, COBOL coding, documentation conventions, IBM Operating System (OS) programming, job control language, and testing and debugging techniques. Version I is self-paced and uses structural approach to COBOL programming. Also covers ISAM file organization and OS system utilities.
Credit Recommendation: Version I: In the upper-division baccalaureate category, 4 semester hours in computer programming, 1 in data processing (12/77). Version II: In the upper-division baccalaureate category, 4 semester hours in computer programming, 1 in data processing fundamentals (6/75).

MC-1402-0014
AUTOMATIC DATA PROCESSING (ADP) ORIENTATION
Course Number: None.
Location: Computer Sciences School, Quantico, VA.
Length: 2 weeks (53-63 hours)
Exhibit Dates: 9/70-7/75
Objectives: To train officers in systems analysis, automatic data processing equipment operation, and automated information system management.
Instruction: Lectures in computer fundamentals, information system development, interactive terminal facility usage, BASIC language and programming, software utilization, and introduction to computer architecture.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in data processing fundamentals (8/75).

MC-1402-0015
SYSTEMS PROGRAMMING
Course Number: None.
Location: Computer Sciences School, Quantico, VA.
Length: 7 weeks (141 hours)
Exhibit Dates: 9/70-7/75
Objectives: To train experienced assemblers, or COBOL programmers who have a...
firm understanding of operating systems to be IBM S/360 Operating System (OS) and HASP system programmers.

**Instruction:** Lectures and hands-on applications in computer operations (OS), utilities, job/task/data management, writing system routines, generating an IBM S/360 operating system, system routine programming, computer system performance measurement, maintenance manual maintenance, and IBM S/360 computer system briefings and instructions. Students generate both MFT and MVT environments and write routines to maintain system supervisor and other system performance.

**Credit Recommendation:** In the upper-division baccalaureate category, 6 semester hours in operating systems (6/75).

**MC-1402-0016**

**PROGRAMMING FOR OPTICAL CHARACTER RECOGNITION (OCR) SYSTEM**

**Course Number:** None

**Location:** Computer Sciences School, Quantico, VA

**Length:** 5 weeks (136 hours)

**Exhibit Dates:** 6/74-Present

**Objectives:** To train enlisted personnel as applications programmers in the Lundy/Farrington 3020 optical character recognition system.

**Instruction:** Lectures and practical exercises in optical character recognition system development, forms design, form specification, and system overview, L/F'3020 OCR system operating principles and peripheral devices, OCR instruction coding, octal numbering system, program maintenance, and 3030 reader control program standard, sequences and modification methods for the programmers application.

**Credit Recommendation:** In the vocational certificate category, 3 semester hours in computer programming (4/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in computer programming (4/74); in the upper-division baccalaureate category, 3 semester hours in computer programming (4/74).

**MC-1402-0017**

**DATA SYSTEMS (ENLISTED)**

**Course Number:** None

**Location:** Computer Sciences School, Quantico, VA

**Length:** 7 weeks (192 hours)

**Exhibit Dates:** 9/70-Present

**Objectives:** To provide operators and programmers with advanced technical training in data processing.

**Instruction:** Lectures and practical exercises in IBM S/360 hardware, S/360 operating system organization and functions, operating system job control language coding, program maintenance, COBOL, FORTRAN, and BASIC languages, performance evaluation and job-scheduling techniques, and analysts, design, and operation of a data communications-oriented computer system.

**Credit Recommendation:** In the vocational certificate category, 3 semester hours in computer programming, 1 in teleprocessing (4/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in computer programming, 1 in teleprocessing (4/74), in the upper-division baccalaureate category, 3 semester hours in computer programming, 1 in teleprocessing (4/74).

**MC-1402-0018**

**IBM SYSTEM 360 DISK OPERATING SYSTEM (DOS) FAMILIARIZATION**

**Course Number:** None

**Location:** Computer Sciences School, Quantico, VA

**Length:** 6 weeks (167-168 hours)

**Exhibit Dates:** 8/73-Present

**Objectives:** To train enlisted personnel to operate disks.

**Instruction:** Lectures and practical exercises in data processing fundamentals, central processing unit operation, and IBM/360 peripheral equipment operation, with emphasis on operator commands associated with the S/360 operating system under HASP and disk operating system.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 3 semester hours in computer operations, 1 in data processing fundamentals (6/75).

**MC-1402-0019**

**ELECTRICAL ACCOUNTING MACHINES**

**Course Number:** None

**Location:** Computer Sciences School, Quantico, VA

**Length:** 3 weeks (105 hours)

**Exhibit Dates:** 8/73-12/74

**Objectives:** To train enlisted personnel to operate unit record equipment.

**Instruction:** Lectures and practical exercises in data processing introduction, Hollerith card code, 029 card punch, 088 verifier, 039/088 sorters, 557 interpreter operation and wiring, 517 reproducer and 088 collator operation procedures, and data processing installation orientation and management responsibilities.

**Credit Recommendation:** In the vocational certificate category, 2 semester hours in unit record data processing (4/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in unit record data processing (4/74).

**MC-1402-0020**

**DATA PROCESSING INSTALLATION MANAGEMENT SEMINAR**

**1. DATA PROCESSING INSTALLATION MANAGEMENT**

**Course Number:** None

**Location:** Computer Sciences School, Quantico, VA

**Length:** Version 1: Self-paced 4 weeks (95-126 hours); Version 2: 4 weeks (95-126 hours)

**Exhibit Dates:** 9/70-6/74

**Objectives:** To educate data processing personnel in system supervision and management concepts and skills required to manage a data processing installation.

**Instruction:** Version 1: Lectures and practical exercises in a broad spectrum of fiscal, administrative, personnel and logistical management techniques as applied to data processing installation management. Zerobased budgeting is included. Version 2: Lectures and practical exercises in data processing equipment management, production management, installation security, standards and, installation planning, administrative procedures (including reporting requirements) and management control techniques.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 3 semester hours in computer operations (6/75), in the upper-division baccalaureate category, 2 semester hours in computer programming (6/75).

**MC-1402-0021**

**ADVANCED DATA SYSTEMS OFFICER**

**Course Number:** None

**Location:** Computer Sciences School, Quantico, VA

**Length:** 12 weeks (296 hours)

**Exhibit Dates:** 9/70-Present

**Objectives:** To train experienced systems analysts to manage data processing installations.

**Instruction:** Lectures and practical exercises in digital computer hardware and software requirements, real-time computer system characteristics, and information systems development, Mk IV language, and IBM/360 system operation.

**Credit Recommendation:** In the vocational certificate category, 4 semester hours in data processing management (4/74), in the lower-division baccalaureate/associate degree category, 4 semester hours in data processing management (4/74), in the upper-division baccalaureate category, 4 semester hours in data processing management (4/74).

**MC-1402-0022**

**ADVANCED OPERATIONS TECHNIQUES**

**IBM SYSTEM 360 (OS) Advanced Operations Techniques**

**Course Number:** None

**Location:** Computer Sciences School, Quantico, VA

**Length:** 6 weeks (196-201 hours)

**Exhibit Dates:** 5/74-Present

**Objectives:** To train data systems personnel who control and operate an IBM S/360 multiprogramming environment running under the OS-operating system and to provide an understanding of COBOL programming problems and techniques.

**Instruction:** Lectures and practical exercises in S/360 operating system with HASP and standard utility programs, system job control language detailed study, multisystems operation techniques and production scheduling, data processing resources management, and COBOL programming introduction, with emphasis on reading core dumps of abnormally terminated jobs.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 3 semester hours in computer operations (6/75), in the upper-division baccalaureate category, 2 semester hours in computer programming (6/75).

**MC-1402-0023**

**IBM SYSTEM 360 OPERATING SYSTEM (OS) OPERATIONS**

**Course Number:** None

**Location:**
COURSE EXHIBITS

LOCATION: Computer Sciences School, Quantico, VA
Length: 4-5 weeks (132-141 hours)
Exhibit Dates: 8/73-Present

Objectives: To train enlisted personnel to operate the IBM system 360 computer running under the Operating System (OS)

Instruction: Lectures and practical exercises in Hollerith punch card code, file characterization, basic concepts, IBM System 360 OS job control language (JCL), computer organization, channel concepts, control units, IBM System 360/2040 central processor, IBM 360 controller, IBM 1403 printer, IBM 2540 card reader/punch, Calcot IBM 2420 tape drive, IBM System 360 OS initial program load (IPL) procedures, operator commands, and statements for the Operating System (OS) and HASP.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in computer operations, 1 in data processing fundamentals (12/77)

IBM SYSTEM 360 (OS); ADVANCED PROGRAMMING TECHNIQUES
(Advanced Programming Techniques)

Course Number: None
Location: Computer Sciences School, Quantico, VA
Length: 8 weeks (219-229 hours)
Exhibit Dates: Version 1 1/76-Present, Version 2 6/73-12/75

Objectives: To train experienced COBOL programmers to write programs in IBM S/360 (OS) assembler language

Instruction: Version 1: Lectures and practical exercises in advanced systems of American National Standard (ANSI) COBOL, debugging utilizing system dumps. IBM 360 operating system (OS) utilities, job control language (JCL), structured approach to programming, and introduction to systems analysis and design. Version 2: Lectures and practical exercises in IBM S/360 Operating System (OS) assembler language, IBM S/360 Operating System (OS) and job control language, COBOL language, advanced COBOL IV file management system techniques, and data management facilities usage.

Credit Recommendation: Version 1: In the upper-division baccalaureate category, 3 semester hours in advanced computer programming, 2 in systems analysis and design (12/77) Version 2: In the upper-division baccalaureate category, 5 semester hours in computer programming (6/75).

IBM SYSTEM 360 OS PROGRAMMING
(Advanced Mark IV)

Course Number: None
Location: Computer Science School, Quantico, VA
Length: Self-paced 2 weeks (60-80 hours)
Exhibit Dates: 7/74-Present

Objectives: To train Mark IV programmers to utilize the advanced features of the Mark IV information retrieval and reporting language.

Instruction: Lectures and practical exercises involving table look-up techniques, file indexing, access methods, file management, and data retrieval and reporting. Self-paced study teaches the special features of Mark IV which include extended segment processing, extended reporting, file processing, coordinated files, test processing, transaction processing and hierarchial record structure processing.

Credit Recommendation: In the upper-division baccalaureate category, 1 semester hour in computer programming (12/77)

IBM SYSTEM 360 OS ASSEMBLER LANGUAGE

Course Number: 50ZX5144-1, 50ZX5144-3
Location: Computer Sciences School, Quantico, VA
Length: Self-paced 10 weeks (365 hours)
Exhibit Dates: 9/74-Present

Objectives: To provide technical education for personnel to prepare them for duties as an IBM System 360 OS assembler language programmer and entry-level systems programmer.

Instruction: Course consists of IBM System 360 (OS) Advanced Coding (SOZX5144-14) (see exhibit MC-1402-0037), IBM System 360 OS Assembler Language (SOZX5144-3) (see exhibit MC-1402-0031), IBM System 360 OS System Control (SOZX5144-5) (see exhibit MC-1402-0033) and IBM System 360 (OS) Data Management (SOZX5144-16) (see exhibit MC-1402-0034)

Credit Recommendation: In the upper-division baccalaureate category, 5 semester hours in computer programming, 2 in advanced computer programming, 1 in operating systems (12/77)

IBM SYSTEM 360 ASSEMBLER LANGUAGE

Course Number: 50ZX5144-1, 50ZX5144-3
Location: Computer Sciences School, Quantico, VA
Length: Self-paced 4 weeks (162 hours)
Exhibit Dates: 9/74-Present

Objectives: To train experienced students to code in Basic Assembler Language (BAL).

Instruction: The self-paced course includes practical exercises encompassing all phases of BAL coding, including fixed and floating point instructions, Subprogram linkage and macros are also discussed. A variety of problem applications are written, coded, and debugged.

Credit Recommendation: In the upper-division baccalaureate category, 4 semester hours in computer programming (12/77)
MC-1402-0032
IBM SYSTEM 360 OS SYSTEMS PROGRAMMING  
Course Number: 50ZX5144-4.  
Location: Computer Sciences School, Quantico, VA.  
Length: Self-paced 6 weeks (223 hours).  
Exhibit Dates: 9/74-Present.  
Objectives: To provide technical education to personnel trained in System 360 Assembler Language to prepare them for duties as an entry-level systems programmer.  
Instruction: Course consists of IBM System 360 (OS) Advanced Coding (50ZX5144-4) (see exhibit MC-1402-0037), IBM System 360 OS System Control (50ZX5144-5) (see exhibit MC-1402-0033), and IBM System 360 (OS) Data Management (50ZX5144-16) (see exhibit MC-1402-0039).  
Credit Recommendation: In the upper-division baccalaureate category, 3 semester hours in computer programming (12/77).

MC-1402-0033
IBM SYSTEM 360 OS SYSTEM CONTROL  
Course Number: 50ZX5144-5.  
Location: Computer Sciences School, Quantico, VA.  
Length: Self-paced 2 weeks (81 hours).  
Exhibit Dates: 9/74-Present.  
Objectives: To train programmers in the use of Job Control Language and selected utility programs for an IBM System 360 operating system (OS).  
Instruction: A self-paced course requiring practical exercises in the use of IBM System 360 Job Control Language and utility programs. Course includes load modules, creation, retrieval and concatenation of cataloged data sets, use of linkage editor, and overlay features.  
Credit Recommendation: In the upper-division baccalaureate category, 2 semester hours in advanced computer programming (12/77).

MC-1402-0034
IBM SYSTEM 360 OS FORTRAN PROGRAMMING  
Course Number: 50ZX5144-6.  
Location: Computer Sciences School, Quantico, VA.  
Length: Self-paced 2 weeks (90 hours).  
Exhibit Dates: 9/74-Present.  
Objectives: To train students with a programming background in the use of the FORTRAN programming language.  
Instruction: A self-paced course requiring practical exercises in coding, debugging and executing application programs using the FORTRAN programming language. Course includes the use of arrays, input-output operations, program linkage, and processing of sequential and direct-access data sets.  
Credit Recommendation: In the upper-division baccalaureate category, 2 semester hours in computer programming (12/77).

MC-1402-0035
IBM SYSTEM 360 OS PL/1 PROGRAMMING  
Course Number: 50ZX5144-7.  
Location: Computer Sciences School, Quantico, VA.  
Length: Self-paced 3 weeks (135 hours).  
Exhibit Dates: 9/74-Present.  
Objectives: To train students to program in PL/1 as a second language.  
Instruction: A self-paced course requiring practical exercises involving arithmetic expressions, constants, logical operations, arrays and DO loops, fixed-point expressions, structures, built-in functions, stream and record oriented I/O, and indexed sequential file handling.  
Credit Recommendation: In the upper-division baccalaureate category, 3 semester hours in computer programming (12/77).

MC-1402-0036
IBM SYSTEM 360 OS COBOL PROGRAMMING  
Course Number: 50ZX5144-8.  
Location: Computer Sciences School, Quantico, VA.  
Length: Self-paced 2 weeks (90 hours).  
Exhibit Dates: 9/74-Present.  
Objectives: To train students with a programming background to program in COBOL.  
Instruction: A self-paced course requiring practical exercises involving coding, debugging, and executing COBOL programs. Course includes sequential as well as indexed sequential file access methods, subprogram linkage, sequential file updating and edited report output.  
Credit Recommendation: In the upper-division baccalaureate category, 2 semester hours in computer programming (12/77).

MC-1402-0037
IBM SYSTEM 360 OS FORTRAN DATA MANAGEMENT  
Course Number: 50ZX5144-15.  
Location: Computer Sciences School, Quantico, VA.  
Length: Self-paced 2 weeks (72 hours).  
Exhibit Dates: 9/74-Present.  
Objectives: To train students to handle IBM System 360 operating system data management, task management, and system generation.  
Instruction: A self-paced course requiring practical exercises involving the handling of load modules, channel programming, task management, concurrent processing and system generation concepts and procedures.  
Credit Recommendation: In the upper-division baccalaureate category, 1 semester hour in operating systems (12/77).

MC-1402-0038
IBM SYSTEM 360 OS SYSTEM CONTROL AND DATA MANAGEMENT  
Course Number: 50ZX5144-16.  
Location: Computer Sciences School, Quantico, VA.  
Length: Self-paced 4 weeks (151 hours).  
Exhibit Dates: 9/74-Present.  
Objectives: To provide technical education in IBM System 360 OS system control and data management.  
Instruction: Course consists of IBM System 360 OS System Control (50ZX5144-5) (see exhibit MC-1402-0033) and IBM System 360 (OS) Data Management (50ZX5144-16) (see exhibit MC-1402-0039).  
Credit Recommendation: In the upper-division baccalaureate category, 6 semester hours in operating systems (12/77).

MC-1402-0041
IBM SYSTEM 360 OS SYSTEMS PROGRAMMER  
Course Number: 50ZX5144-19.  
Location: Computer Sciences School, Quantico, VA.  
Length: 9 weeks (130 hours).  
Exhibit Dates: 6/75-Present.  
Objectives: To train experienced programmers in the system programming, functions required to generate and maintain an IBM System 360 operating system with HASP.  
Instruction: Lectures, practical exercises, and hands-on applications in computer operating systems (OS), system generation, system programming, computer system performance evaluation and tuning, catalog and library management, and teleprocessing application.  
Credit Recommendation: In the upper-division baccalaureate category, 6 semester hours in computer programming (12/77).

MC-1402-0042
IBM SYSTEM 360 OS DATA CONTROL TECHNIQUES  
Course Number: None.  
Location: Computer Sciences School, Quantico, VA.  
Length: 6 weeks (180 hours).  
Exhibit Dates: 8/75-Present.  
Objectives: To train enlisted personnel in data control techniques to prepare them as data controllers for the IBM System 360 computer system utilizing HASP.  
Instruction: Lectures and practical exercises designed to provide operations personnel with working knowledge of IBM System 360 Job Control Language (JCL), utilities, and HASP capabilities. Included are cataloging in-stream procedures, update,
MC-1402-0043
IBM SYSTEM 360 GS FORTRAN IV LANGUAGE (ENTRY-LEVEL)

Course Number: None.
Location: Computer Sciences School, Quantico, VA.
Length: Self-paced 8 weeks (320 hours).
Exhibit Dates: 4/72-Present.
Objective: To train entry-level data processing students as FORTRAN programmers on the IBM System 360.
Instruction: A self-paced course requiring practical exercises in coding, debugging, and executing application programs using the FORTRAN programming language.

MC-1402-0044
AUTOMATIC DATA PROCESSING (ADP) ORIENTATION (I/E)

Course Number: None.
Location: Computer Sciences School, Quantico, VA.
Length: 2 weeks (51-57 hours).
Exhibit Dates: 1/75-Present.
Objective: To familiarize students with principles, methods, and techniques of data processing and to reinforce these principles through problem-solving programming assignments.
Instruction: Lectures and problem-solving exercises involving BASIC and MARK IV programming languages to introduce principles, methods, and techniques of data processing.

Credit Recommendation: Credit is not recommended because of the military nature of the course (3/74).

MC-1403-0001
UNIT DIARY CLERK

Course Number: None.
Length: 4-5 weeks (142-182 hours).
Exhibit Dates: 1/72-Present.
Objective: To train enlisted personnel to prepare unit diaries.
Instruction: Lectures and practical exercises in assembling source material, drafting, typing, auditing quality control systems, and certifying and distributing the unit diary.

Credit Recommendation: Credit is not recommended because of the military nature of the course (3/74).

MC-1403-0002
ADMINISTRATIVE CLERK

Course Number: None.
Location: Personnel Administration School, Cp. Pendleton, CA, Schools Battalion, Parris Island, SC.
Length: 3 weeks (112-119 hours).
Exhibit Dates: 7/73-Present.
Objective: To train selected personnel in the fundamentals of personnel administration.
Instruction: Practical exercises in typing, filing, and correspondence.

Credit Recommendation: Credit is not recommended because of the military nature of the course (3/74).

MC-1403-0003
PERSONAL FINANCIAL RECORDS CLERK

Course Number: None.
Location: Service Support School, Cp. Lejeune, NC.
Length: 6 weeks (177-234 hours).
Objective: To train selected personnel in the basic concepts, fundamentals, and principles of personal financial and clerical procedures.
Instruction: Practical experience in disbursing, military pay records, correspondence, and office machines.

Credit Recommendation: Credit is not recommended because of the military nature of the course (3/74).

MC-1403-0005
BASIC TRAVEL CLERK

Course Number: None.
Location: Service Support School, Cp. Lejeune, NC.
Length: 5-7 weeks (122-193 hours).
Exhibit Dates: 7/74-Present.
Objective: To provide enlisted personnel with instruction in basic travel procedures and to provide the clerical experiences necessary to insure conformance to travel regulations.
Instruction: Practical exercises and experiences in preparing travel vouchers and related data, including basic mathematical computations.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (3/74).

MC-1404-0001
TELETYPING OPERATOR

Course Number: None.
Location: Communication-Electronics School, San Diego, CA.
Length: 8 weeks (288 hours).
Exhibit Dates: 7/67-12/68.
Objective: To train sergeants and enlisted personnel to operate teletypewriter sets and associated equipment.
Instruction: Lectures and practical exercises in teletypewriter operation, including touch-typing, teletype procedures and operations, and communication center operations and procedures.

Credit Recommendation: In the vocational certificate category, credit in typing and teletype operation on the basis of institutional evaluation (7/74).

MC-1405-0001
AVIATION SUPPLY ENLISTED COURSE

Course Number: None.
Location: Supply Schools, Cp. Lejeune, NC.
Length: 5 weeks (147 hours).
Exhibit Dates: 7/67-12/68.
Objective: To provide supply specialists with intermediate-level training in aviation supply administration.
Instruction: Lectures on supply management, office machines, office procedures, procurement, storage, operations, and supply in marine aviation.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in supply management (2/74); in the upper-division baccalaureate category, 1 semester hour in supply management (2/74).

MC-1405-0002
WAREHOUSING NONCOMMISSIONED OFFICER (NCO) LEADERSHIP

Instructor: Warehousing NCO Leadership

Course Number: None.
Location: Service Support School, Cp. Lejeune, NC.
Length: 5 weeks (144 hours).
Exhibit Dates: 7/74-Present.
Objective: To provide formal training required for corporals and gunnery sergeants to effectively perform the duties of a warehouse chief within a garrison or field warehousing operation.
Instruction: Lectures, performances, and demonstrations to provide formal training in all aspects of warehousing operations. Fundamentals of shipping, packing, space utilization, materials handling, transportation, and inventory control are covered.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in supply management (7/77).

MC-1405-0003
PERSONNEL CLERK

Course Number: None.
Location: Schools Battalion, Cp. Pendleton, CA. Headquarters Battalion, Parris Island, SC.
Length: 4-5 weeks (136-180 hours).
Exhibit Dates: 7/72-Present.
Objective: To train enlisted personnel to maintain personnel records.
Instruction: Lectures and practical exercises in preparing and updating personnel records, gathering source documents, and preparing and typing individual pay forms.
Credit Recommendation: Credit is not recommended because of the military nature of the course (3/74).

MC-1405-0004

BASIC SUPPLY FUNDAMENTALS (MANUAL)
(Basic Supply Administration)
Course Number: None.
Location: Service Support School, Cp. Lejeune, NC.
Length: 4-6 weeks (105-195 hours).
Exhibit Dates: 5/65-Present.
Objectives: To train supply clerks in the basic and technical procedures of filing organic supply billets.
Instruction: Practical experience in operation and maintenance of office machines and in accounting procedures; lectures in naval correspondence.
Credit Recommendation: Credit is not recommended because of the military nature of the course (3/74).

MC-1405-0005

1. BASIC SUPPLY ADMINISTRATION
(MECHANIZED)
2. SUPPLY ADMINISTRATION
(Advanced Supply Administration)
Course Number: None.
Location: Supply School, Cp. Lejeune, NC.
Length: Version 1: 5-6 weeks (137-202 hours).
           Version 2: 12-16 weeks (341-550 hours).
Exhibit Dates: Version 1: 7/70-Present.
           Version 2: 12/59-6/70.
Objectives: To train enlisted personnel in supply administration.
Credit Recommendation: Version 1: No credit because of the military nature of the course (6/74). Version 2: In the vocational certificate category, 3 semester hours in management (6/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in materials management (6/74); in the upper-division baccalaureate category, 6 semester hours in supply management (12/68).

MC-1405-0006

SUPPLY NONCOMMISSIONED OFFICER
(NCO) LEADERSHIP
Course Number: None.
Location: Service Support Schools, Cp. Lejeune, NC.
Length: 9 weeks (294 hours).
Exhibit Dates: 9/73-Present.
Objectives: To train supply noncommissioned officers to perform as supply administration chiefs in manual and fleet stock accounts as they relate to Marine Corps applications.
Instruction: Lectures and practical exercises in the duties of supply administration chiefs, including NCO service support leadership, regulations and allowances, review of manual supply technical behaviors, manual supply NCO leadership and technical behaviors, supply leadership and technical behaviors incident to professional growth and development, mechanized supply technical behaviors within the FSA and SASSY operating procedures.

Credit Recommendation: Credit is not recommended because of the military nature of the course (6/74).

MC-1405-0007

COMMUNICATION OFFICER
Course Number: None.
Location: Version 1: Communications Officers School, Quantico, VA. Version 2: Development and Education Command, Quantico, VA. Version 3: Marine Corps Schools, Quantico, VA. Version 4: Marine Corps School, Quantico, VA.
Exhibit Dates: Version 1: 1/72-Present.
Objectives: To train officers to be communications officers.
Instruction: All Versions: Lectures and practical exercises in communications operations, including organizational, tactical, and amphibious operations. Version 1: Instruction includes electronics, management, mathematics, computer science, telecommunications, communications, and operational communications. Version 2: Instruction includes general communications, ground and aviation unit communication, effective language, communications center organization and operation, radio theory, and communication procedures and equipment. Version 3: Instruction includes general communications, ground and aviation unit communication, effective language, communications center organization and operation, radio theory, and communication procedures and equipment. Version 4: Instruction includes general communications, ground and aviation unit communication, message preparation, processing, and handling; cryptography; radio, radio relay wire, and teletype communications; theory of electricity; and visual, sound, and miscellaneous communications.
Credit Recommendation: Version 1: Credit is not recommended because of the limited specialized nature of the course (6/74). Version 2: In the upper-division baccalaureate category, 6 semester hours in communications center organization and management (12/68). Version 3: In the upper-division baccalaureate category, 6 semester hours in communications center organization and management, 3 in French or Spanish (12/68). Version 4: In the upper-division baccalaureate category, 6 semester hours in communications center organization and management (12/68).

MC-1405-0008

BASIC SUPPLY ADMINISTRATION
(MECHANIZED)
Course Number: None.
Location: Supply Schools, Cp. Lejeune, NC.
Length: 9 weeks (288 hours).
Exhibit Dates: 4/67-12/68.
Objectives: To provide enlisted personnel with the basic skills required for duty as administrative supply clerks.
Instruction: Lectures and practical exercises in the operation of typewriters and calculators, preparation of naval correspondence, use of supply publications, computation of allowances, organic property control procedures, and mechanized supply operations.
Credit Recommendation: In the upper-division baccalaureate category, credit in supply procedures on the basis of institutional evaluation (12/68).

MC-1405-0009

ORDNANCE CHIEF
Course Number: None.
Location: Ordnance School, Quantico, VA.
Length: 5 weeks (280 hours).
Exhibit Dates: 2/67-12/74.
Objectives: To train noncommissioned officers in the supervision, management, and administration of ordnance operations.
Instruction: Lectures and practical exercises in the supervision, management and administration of ordnance operations, including ordnance management, machine shops, tracked vehicles, artillery weapons, ordnance support, ammunition, optical equipment, ordnance staff functions, and management of a garrison.
Credit Recommendation: In the upper-division baccalaureate category, 3 semester hours in management principles of supply and maintenance (12/68).

MC-1405-0010

SPECIAL SUPPLY ORIENTATION
Course Number: None.
Location: Supply School, Cp. Lejeune, NC.
Length: 4 weeks (140 hours).
Exhibit Dates: 1/58-12/68.
Objectives: To train newly selected supply officers to manage supply functions and operations.
Instruction: Lectures and practical exercises in the management of supply operations. Course includes a review of the principle elements of the supply system: acquisition and distribution, cataloguing, planning and programming, budgeting and disbursement, inventory control, and direct support of military operations.
Credit Recommendation: In the vocational certificate category, 1 semester hour in supply management (7/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in supply management (7/74); in the upper-division baccalaureate category, 2 semester hours in supply management (12/68).

MC-1405-0011

SUPPLY CHIEF LEADERSHIP
Course Number: None.
Location: Supply Support School, Cp. Lejeune, NC.
Length: 10 weeks (362 hours).
Exhibit Dates: 7/75-Present.
Objectives: To provide senior staff noncommissioned officers with a broad base of understanding in all elements of supply, with emphasis on supply operations and the senior NCO in executing his leadership, supervisory, and management responsibilities.
Instruction: Lectures, discussions, and practical exercises with emphasis on leadership and supervisory practices; supply accounting procedures; data systems, including records design, flowcharting, input and output devices and media; programming techniques and coding in a symbolic language; introduction to and practice in the Supported Activities Supply System (SASSY).
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in principles of supervision, 3 in introduction to data processing (7/77).
17. TO TRAIN ENTRY-LEVEL MARINES TO PERFORM THE DUTIES OF A WAREHOUSE CHIEF WITHIN A GARRISON OR FIELD WAREHOUSE OPERATION.

**MC-1405-0012**

**BASIC SUPPLY STOCK CONTROL**

**Course Number:** None.

**Location:** Service Support School, C.P. Lejeune, NC.

**Length:** 7 weeks (218 hours).

**Exhibit Dates:** 7/75-Present.

**Objectives:** To train entry-level Marines to perform the duties of supply administration clerks.

**Instruction:** Lectures, demonstrations, and practical exercises in the basic skills of supply accounting.

**Credit Recommendation:** In the vocational certificate category, 1 semester hour in personal typing, 2 in records management (7/77).

**MC-1405-0013**

**WAREHOUSING STAFF NONCOMMISSIONED OFFICER (NCO) LEADERSHIP (Advanced Warehousing)**

**Course Number:** None.

**Location:** Service Support School, C.P. Lejeune, NC, Supply School, C.P. Lejeune, NC.

**Length:** 5-6 weeks (165-193 hours).

**Exhibit Dates:** 4/64-Present.

**Objectives:** To train noncommissioned officers to handle warehouse operations and perform the duties of a warehouse chief.

**Instruction:** Lectures and practical exercises in the duties of a warehouse chief.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 3 semester hours in supply management; in the upper-division baccalaureate/associate degree category, 3 semester hours in supply management (12/68).

**MC-1405-0016**

**OFFICERS WAREHOUSING**

**Course Number:** None.

**Location:** Service Support School, C.P. Lejeune, NC; Supply School, C.P. Lejeune, NC.

**Length:** 4-5 weeks (139-165 hours).

**Exhibit Dates:** 8/67-12/74.

**Objectives:** To train commissioned officers to perform the duties of a warehouse chief.

**Instruction:** Lectures and practical exercises in the duties of a warehouse officer.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 4 semester hours in supply management (7/74); in the lower-division baccalaureate/associate degree category, 4 semester hours in supply management (7/74); in the upper-division baccalaureate category, 4 semester hours in supply management (12/68).

**MC-1405-0017**

**UNIT SUPPLY OFFICER**

**Course Number:** None.

**Location:** Supply School, C.P. Lejeune, NC.

**Length:** 7-12 weeks (244–382 hours).

**Exhibit Dates:** 5/56-8/69.

**Objectives:** To train officers as supply officers.

**Instruction:** Lectures and practical exercises in supply procedures, including supply management, office management, property control, and financial management.

**Credit Recommendation:** In the vocational certificate category, 1 semester hour in supply management (7/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in supply management (7/74); in the lower-division baccalaureate category, 3 semester hours in supply management (12/68).

**MC-1405-0018**

**AVIATION SUPPLY OFFICER**

**Course Number:** None.

**Location:** Service Support School, C.P. Lejeune, NC; Supply School, C.P. Lejeune, NC.

**Length:** Version 1: 10 weeks (359 hours). Version 2: 8-10 weeks (277-326 hours).


**Objectives:** To train officers as supply officers.

**Instruction:** Lectures and practical exercises in supply procedures, including supply management, office management, property control, financial management, accounting, systems analysis, procurement, transportation, distribution, storage operations, and computerized supply operations.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 3 semester hours in supply management (7/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in supply management (7/74); in the upper-division baccalaureate category, 3 semester hours in supply management (12/68).

**MC-1405-0019**

**ACCOUNTABLE OFFICER**

**Course Number:** None.

**Location:** Supply School, C.P. Lejeune, NC.

**Length:** 12 weeks (420 hours).

**Exhibit Dates:** 2/83-12/68.

**Objectives:** To train commissioned officers to manage supply accounts.

**Instruction:** Lectures and practical exercises in supply procedures and operations, fiscal accounting, storage and materials handling, and transportation.

**Credit Recommendation:** In the vocational certificate category, 3 semester hours in supply management (7/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in supply management (7/74); in the upper-division baccalaureate category, 3 semester hours in supply management (7/74).

**MC-1406-0001**

**ENLISTED INSTRUCTOR ORIENTATION**

**Course Number:** None.

**Location:** Development and Education Command, Quantico, VA.

**Length:** 2 weeks (70 hours).

**Exhibit Dates:** 12/68-Present.

**Objectives:** To train instructors in the basic procedures and techniques of instruction, with emphasis on communication skills.

**Instruction:** Lectures and practical exercises in the professional foundations of learning and teaching, communication skills, procedures and techniques of instruction, objective examination techniques, and a series of practice presentations.

**Credit Recommendation:** In the vocational certificate category, 1 semester hour in instructional methods (1/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in instructional methods (1/74); in the upper-division baccalaureate category, 1 semester hour in instructional methods (1/74).
MC-1406-0002

WOMEN PHYSICAL TRAINING INSTRUCTOR (Physical Training Instructor (Women))

Course Number: None.

Location: Development and Education Command, Quantico, VA.

Length: 11 weeks (422-482 hours).

Exhibit Dates: 12/68-Present.

Objectives: To train military personnel as instructors of physical training.

Instruction: Structural and functional kinesiology; applied principles of physical training; personal grooming; sports skills; aquatic physical fitness training; methodology; techniques of instruction; individual conditioning.

Credit Recommendation: In the vocational certificate category, 8 semester hours in physical education (1/74); in the lower-division baccalaureate/associate degree category, 8 semester hours in physical education (1/74); in the upper-division baccalaureate category, 8 semester hours in physical education (1/74).

MC-1406-0003

INSTRUCTOR ORIENTATION

Course Number: None.

Location: Marine Corps School, Quantico, VA.

Length: 3 weeks (68-105 hours).


Objectives: To provide enlisted personnel with a knowledge of the principles and techniques of instruction.

Instruction: Lectures and practical experiences in planning methodology, educational psychology, and effective writing.

Credit Recommendation: In the vocational certificate category, 3 semester hours in instructional methods (1/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in instructional methods (1/74); in the upper-division baccalaureate category, 2 semester hours in instructional methods (12/68).

MC-1406-0004

SERGEANTS MAJOR PERSONNEL ADMINISTRATION

Course Number: None.

Location: Personnel Administration School, Parris Island, SC.

Length: 6 weeks (260 hours).

Exhibit Dates: 7/58-12/68.

Objectives: To prepare sergeants major in basic personnel management procedures.

Instruction: Lectures in personnel administrative procedures, including personnel records and classification systems; separations and pay procedures; office management; and personnel publications; and the use of military personnel accounting, classification, naval justice, personnel records, personnel management, and custodial duties.

Credit Recommendation: In the vocational certificate category, 3 semester hours in in-structional methods (1/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in instructional methods (1/74); in the upper-division baccalaureate category, 2 semester hours in instructional methods (12/68).

MC-1406-0005

FIRST SERGEANTS PERSONNEL ADMINISTRATION

Course Number: None.

Location: Personnel Administration School, Parris Island, SC.

Length: 6 weeks (197-241 hours).

Exhibit Dates: 4/63-Present.

Objectives: To train first sergeants in the procedures involved in military personnel administration.

Instruction: Lectures and practical exercises in enlisted and officer records, personnel classification and accounting, pay and benefits, naval justice, correspondence, combat and casualty reporting, and personnel actions and related reports.

Credit Recommendation: In the vocational certificate category, 3 semester hours in personal administration (2/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in personal administration (2/74); in the upper-division baccalaureate category, 3 semester hours in personal administration (12/68).

MC-1406-0006

WARRANT OFFICER PERSONNEL ADMINISTRATION

Course Number: None.

Location: Personnel Administration School, Parris Island, SC.

Length: 5 weeks (143-146 hours).

Exhibit Dates: 4/63-12/72.

Objectives: To train warrant officers in the duties of administrative officials.

Instruction: Lectures and practical exercises in public affairs, public relations, personnel management, and effective writing.

Credit Recommendation: In the vocational certificate category, 2 semester hours in personnel administration (2/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in personnel administration (2/74); in the upper-division baccalaureate category, 2 semester hours in personnel administration (12/68).

MC-1406-0007

BASIC PERSONNEL ADMINISTRATION

Course Number: None.

Location: Personnel Administration School, Parris Island, SC.

Length: 5 weeks (166 hours).

Exhibit Dates: 1/66-12/68.

Objectives: To train enlisted personnel in the fundamentals of personnel administration.

Instruction: Lectures and practical exercises in typing, utilization of regulatory publications, maintenance and disposition of files, Marine Corps directives system, correspondence, personnel accounting, military justice, maintenance of personnel records, and completion of allotment forms.

Credit Recommendation: In the vocational certificate category, 2 semester hours in office administration (2/74).

MC-1406-0008

ADMINISTRATIVE CHIEF'S PERSONNEL ADMINISTRATION

(Personnel Chief's Personnel Administration)

Course Number: None.

Location: Marine Corps Recruit Depot, Parris Island, SC; Personnel Administration School, Parris Island, SC.

Length: 5-10 weeks (213-440 hours).

Exhibit Dates: 1/75-Present.

Objectives: To train noncommissioned officers for supervisory duties in military personnel administration.

Instruction: Lectures and practical exercises in manpower management, enlisted records, pay and allowances, correspondence, naval justice, personnel classification and personnel actions, and office management.

Credit Recommendation: In the vocational certificate category, 6 semester hours in personnel administration (2/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in personal administration (2/74); in the upper-division baccalaureate category, 3 semester hours in personal administration (12/68).

MC-1406-0009

1. MARINE CORPS RECRUITER

2. RECRUITER

Course Number: None.

Location: Recruit Depot, Parris Island, SC; Recruit Depot, San Diego, CA.

Length: 6 weeks (227 hours).


Objectives: To train selected noncommissioned officers in personnel recruiting duties and responsibilities.

Instruction: Lectures and practical exercises in recruitment of personnel. Course includes screening and processing procedures, salesmanship and public speaking, operation of recruiting substations, officer selection, advertising and community relations, leadership training, and typing.

Credit Recommendation: In the vocational certificate category, 1 semester hour in typing, 1 in salesmanship (7/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in typing, 1 in salesmanship (7/74).

MC-1406-0010

OFFICER INSTRUCTOR ORIENTATION

Course Number: None.

Location: Instructor Training School, Quantico, VA.

Length: 2 weeks (105 hours).

Exhibit Dates: 10/69-Present.

Objectives: To train commissioned officers and instructors in founda-mental, academic procedures, and techniques of instruction.

Instruction: Lectures and practical exercises in instructional methods, including scientific fundamentals, methodology, academic procedures, and techniques of military instruction.

Credit Recommendation: In the vocational certificate category, 1 semester hour in educational technology (7/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in educational technology (7/74); in the upper-division baccalaureate category, 1 semester hour in educational technology (7/74).

MC-1406-0011

TECHNICAL INSTRUCTOR—BASIC

Course Number: None.

Location: Air/ground Combat Training Center, Twentynine Palms, CA; Communication-Electronics School, Twentynine Palms, CA.

Length: 2 weeks (67 hours).

Exhibit Dates: 7/75-11/78.

Objectives: To develop attitudes, knowledge, and skills necessary to instill mastery learning through systematic instruction.

Instruction: Lectures and student presentation to include and incorporate academic guidelines, comprehension, retention objec-
COURSE EXHIBITS

tives, test item construction, methods of instruction, and communication skills.

<table>
<thead>
<tr>
<th>COURSE NUMBER</th>
<th>CREDIT RECOMMENDATION</th>
<th>OBJECTIVES</th>
<th>LOCATION</th>
<th>EXHIBIT DATES</th>
<th>LENGTH</th>
<th>CREDIT RECOMMENDATION</th>
<th>OBJECTIVES</th>
<th>LOCATION</th>
<th>EXHIBIT DATES</th>
<th>LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC-1406-0012</td>
<td>Version 1: 7/72-5/74</td>
<td>To train selected personnel to perform as instructors at formal schools</td>
<td>Instruction includes lectures, discussion and programmed text in basic communication skills, instructional planning, preparation, strategies, presentation, evaluation, and revision.</td>
<td>Version 1: 7/72-5/74</td>
<td>44 weeks (177 hours)</td>
<td>Version 1: 7/72-5/74</td>
<td>To train selected personnel to perform as instructors at formal schools</td>
<td>Instruction includes lectures, discussion and programmed text in basic communication skills, instructional planning, preparation, strategies, presentation, evaluation, and revision.</td>
<td>Version 1: 7/72-5/74</td>
<td>44 weeks (177 hours)</td>
</tr>
<tr>
<td>MC-1407-0001</td>
<td>Version 1: 7/72-5/74</td>
<td>To provide enlisted women with the knowledge and skill required to perform in and supervise personnel administration</td>
<td>Instruction: Lectures and practical exercises in correspondence, personnel accounting, naval justice, pay and allowances, classification testing and interviews, casualty reporting, and personal affairs.</td>
<td>Version 1: 7/72-5/74</td>
<td>11 weeks (344-365 hours)</td>
<td>Version 1: 7/72-5/74</td>
<td>To train senior noncommissioned officers to supervise military communication centers.</td>
<td>Instruction: Lectures and practical exercises in effective reading, management principles and procedures, fundamentals of communications, and security, equipment, supply and maintenance procedures.</td>
<td>Version 1: 7/72-5/74</td>
<td>11 weeks (344-365 hours)</td>
</tr>
<tr>
<td>MC-1408-0003</td>
<td>Version 1: 7/72-5/74</td>
<td>To train enlisted personnel in the procedures of ordinance maintenance management.</td>
<td>Instruction: Lectures in the principles, concepts, and techniques of management; integrated resource control and allocation; and technical aspects of maintenance equipment and facilities.</td>
<td>Version 1: 7/72-5/74</td>
<td>8 weeks (326-356 hours)</td>
<td>Version 1: 7/72-5/74</td>
<td>To train enlisted personnel in the procedures of ordinance maintenance management.</td>
<td>Instruction: Lectures in the principles, concepts, and techniques of management; integrated resource control and allocation; and technical aspects of maintenance equipment and facilities.</td>
<td>Version 1: 7/72-5/74</td>
<td>8 weeks (326-356 hours)</td>
</tr>
<tr>
<td>MC-1408-0004</td>
<td>Version 1: 7/72-5/74</td>
<td>To provide enlisted women with the knowledge and skill required to perform in and supervise personnel administration</td>
<td>Instruction: Lectures and practical exercises in correspondence, personnel accounting, naval justice, pay and allowances, classification testing and interviews, casualty reporting, and personal affairs.</td>
<td>Version 1: 7/72-5/74</td>
<td>11 weeks (344-365 hours)</td>
<td>Version 1: 7/72-5/74</td>
<td>To train senior noncommissioned officers to supervise military communication centers.</td>
<td>Instruction: Lectures and practical exercises in effective reading, management principles and procedures, fundamentals of communications, and security, equipment, supply and maintenance procedures.</td>
<td>Version 1: 7/72-5/74</td>
<td>11 weeks (344-365 hours)</td>
</tr>
<tr>
<td>MC-1408-0005</td>
<td>Version 1: 7/72-5/74</td>
<td>To train enlisted personnel in the procedures of ordinance maintenance management.</td>
<td>Instruction: Lectures in the principles, concepts, and techniques of management; integrated resource control and allocation; and technical aspects of maintenance equipment and facilities.</td>
<td>Version 1: 7/72-5/74</td>
<td>8 weeks (326-356 hours)</td>
<td>Version 1: 7/72-5/74</td>
<td>To train enlisted personnel in the procedures of ordinance maintenance management.</td>
<td>Instruction: Lectures in the principles, concepts, and techniques of management; integrated resource control and allocation; and technical aspects of maintenance equipment and facilities.</td>
<td>Version 1: 7/72-5/74</td>
<td>8 weeks (326-356 hours)</td>
</tr>
<tr>
<td>MC-1408-0006</td>
<td>Version 1: 7/72-5/74</td>
<td>To train enlisted personnel in the procedures of ordinance maintenance management.</td>
<td>Instruction: Lectures in the principles, concepts, and techniques of management; integrated resource control and allocation; and technical aspects of maintenance equipment and facilities.</td>
<td>Version 1: 7/72-5/74</td>
<td>8 weeks (326-356 hours)</td>
<td>Version 1: 7/72-5/74</td>
<td>To train enlisted personnel in the procedures of ordinance maintenance management.</td>
<td>Instruction: Lectures in the principles, concepts, and techniques of management; integrated resource control and allocation; and technical aspects of maintenance equipment and facilities.</td>
<td>Version 1: 7/72-5/74</td>
<td>8 weeks (326-356 hours)</td>
</tr>
<tr>
<td>MC-1408-0007</td>
<td>Version 1: 7/72-5/74</td>
<td>To train enlisted personnel in the procedures of ordinance maintenance management.</td>
<td>Instruction: Lectures in the principles, concepts, and techniques of management; integrated resource control and allocation; and technical aspects of maintenance equipment and facilities.</td>
<td>Version 1: 7/72-5/74</td>
<td>8 weeks (326-356 hours)</td>
<td>Version 1: 7/72-5/74</td>
<td>To train enlisted personnel in the procedures of ordinance maintenance management.</td>
<td>Instruction: Lectures in the principles, concepts, and techniques of management; integrated resource control and allocation; and technical aspects of maintenance equipment and facilities.</td>
<td>Version 1: 7/72-5/74</td>
<td>8 weeks (326-356 hours)</td>
</tr>
</tbody>
</table>
MC-1408-0008
1. MARINE CORPS COMMAND AND STAFF COLLEGE
2. MARINE CORPS COMMAND AND STAFF COLLEGE
3. MARINE CORPS COMMAND AND STAFF COLLEGE
4. SENIOR COURSE
5. SENIOR COURSE
6. SENIOR COURSE

Course Number: None.
Location: Educational Center, Quantico, VA.

Objectives: To prepare Marine Corps officers and civilians in other services and foreign countries for command and staff duty at high levels.

Instruction: All Versions. Lectures and practical exercises on command and staff duty at high levels. Version 1. Topics include leadership, professional skills and fundamentals, staff functioning; management; doctrine and decision-making, amphibious operations, amphibious warfare, amphibious operations ashore; counterguerrilla activities, national policy, nation, organization, functioning, doctrine and decision-making within the DoD as a whole and the Marine Corps as a service. Version 2. Topics include amphibious operations; amph
tic operations; amphibious operations; amph
COURSE EXHIBITS

**MC-1409-0001**

**TYING AND GENERAL OFFICE PROCEDURES (WOMEN)**

**Course Number:** None.

**Location:** Training Center, Parris Island, SC.

**Length:** 4 weeks (155 hours).

**Objective:** To train inexperienced enlisted personnel in typing and office procedures.

**Instruction:** Practical exercises in business English, spelling, correspondence, typing, filing, and office procedures.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 3 semester hours in typing; in office practices (3/74); in the certificate category, 2 semester hours in typing, 3 in office practices (3/74).

**MC-1409-0002**

**FIELD RADIO OPERATOR**

**Course Number:** None.

**Location:** Air Ground Combat Training Center, Twentynine Palms, CA; Communications-Electronics School, San Diego, CA.

**Length:** Version 1: 7 weeks (279 hours). Version 2: 6 weeks (280-280 hours).

**Objective:** To train officers in basic engineering equipment and maintenance.

**Instruction:** Lectures and practical exercises in radio procedures and equipment operation, including a brief introduction to electrical fundamentals.

**Credit Recommendation:** Version 1: Credit not recommended due to the military-specific nature of the course (3/79). Version 2: In the lower-division baccalaureate/associate degree category, 3 semester hours in typing; in office practices (3/74); in the certificate category, 3 semester hours in typing, 3 in office practices (3/74).

**MC-1409-0003**

**CRYPTOGRAPHER**

**Course Number:** None.

**Location:** Communication-Electronics School, San Diego, CA; Basic Electronics School, San Diego, CA.

**Length:** 10 weeks (350 hours).

**Objective:** To train inexperienced enlisted personnel to operate communications systems and cryptographic aids, and to typewrite.

**Instruction:** Lectures and practical exercises in the operation of communications systems and cryptographic aids, and in typewriting, including communications system organization, message preparation, operation and installation of teletypewriting equipment, radio telegraph procedures, cryptographic techniques, classified messages handling, administrative procedures, code systems, security communications, and typing applications.

**Credit Recommendation:** In the vocational certificate category, 2 semester hours in typing (6/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in typing (6/74).

**MC-1409-0004**

**COMMUNICATION CENTER MAN**

**Course Number:** None.

**Location:** Air Ground Combat Training Center, Twentynine Palms, CA; Communications-Electronics School, Sub Unit 2, San Diego, CA.

**Length:** Version 1: 9 weeks (333 hours). Version 2: 8-9 weeks (309-333 hours).

**Objective:** To train officers in the operation of field communications equipment.

**Instruction:** Lectures and practical exercises in the operation of field communications equipment. Course includes training in telegraphy, preventive maintenance, publications, and general operations of field communication equipment.

**Credit Recommendation:** Version 1: In the vocational certificate category, 2 semester hours in typing on the basis of demonstrated skills (3/79). Version 2: Credit in typing, on the basis of institutional evaluation (2/76).

**MC-1601-0001**

**ENGINEER EQUIPMENT OFFICERS**

**Course Number:** None.

**Location:** Engineer School, Cpt. Lejeune, NC.

**Length:** 7-8 weeks (272-280 hours).

**Objective:** To train officers in engineering equipment operations and maintenance.

**Instruction:** Lectures and practical exercises in basic civil technology, such as moving equipment, field maintenance shops management, construction equipment limitations and capabilities, road design, and operator training.

**Credit Recommendation:** In the upper-division baccalaureate/associate degree category, 3 semester hours in maintenance management, 5 in civil technology (4/74); in the upper-division baccalaureate category, 2 semester hours in maintenance management (12/68).

**MC-1601-0002**

**ENGINEER OFFICER'S ORIENTATION**

**Course Number:** None.

**Location:** Engineer School Battalion, Cpt. Lejeune, NC.

**Length:** 4 weeks (160 hours).

**Objective:** To train officers in basic engineering.

**Instruction:** Lectures and practical exercises in basic engineering, including organization of engineer units, military construction, engine equipment, routes of communication, utilities, field electricity and plumbing, FM refrigeration, maintenance, motor transport, embarkation of engineer equipment, and demolition and mine warfare.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 3 semester hours in civil engineering (3/74); in the upper-division baccalaureate category, credit in engineering construction on the basis of institutional evaluation (12/68).

**MC-1601-0004**

**COMBAT ENGINEER OFFICER**

**Course Number:** None.

**Location:** Engineer School, Cpt. Lejeune, NC.


**Objective:** To train personnel as combat engineer officers.

**Instruction:** Lectures and practical exercises in civil engineering, construction, and demolition; field operations, routes of communication, and mine warfare.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 2 semester hours in civil engineering technology (3/74). In the lower-division baccalaureate/associate degree category, 2 semester hours in civil engineering technology (7/74); in the upper-division baccalaureate category, credit in engineering construction on the basis of institutional evaluation (12/68).

**MC-1601-0005**

**ARTILLERY WEAPONS REPAIRMAN**

**Course Number:** None.

**Location:** Ordnance School, Quantico, VA.

**Length:** 14 weeks (420 hours).

**Objective:** To train personnel to maintain and repair field and antiaircraft artillery.

**Instruction:** Lectures and practical exercises in artillery fundamentals; rigging, major components operation, characteristics, disassembly, and assembly, and inspection and maintenance of various artillery weapons.

**Credit Recommendation:** In the vocational certificate category, 2 semester hours in mechanical or industrial technology (8/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in mechanical or industrial technology (8/74).

**MC-1601-0006**

**INFANTRY WEAPONS ARMORER**

**Course Number:** None.

**Location:** Ordnance School, Quantico, VA.

**Length:** 10 weeks (420 hours).

**Objective:** To train infantry weapons armorers to maintain and repair infantry weapons at the advanced level.

**Instruction:** Lectures and practical exercises in small arms fundamentals; rigging, operation, and characteristics of infantry weapons; and disassembly, assembly, inspection, maintenance, and repair of weapons, including rifles, machine guns, pistols, and grenade launchers.

**Credit Recommendation:** In the vocational certificate category, 2 semester hours as elective in industrial or mechanical technol-
ogy (8/74); in the lower-division baccalaureate/associate degree category, 2 semester hours as an elective in industrial or mechanical technology (8/74).

**MC-1606-0001**
**AIR OBSERVATION**

**Course Number:** None.
**Location:** Educational Center, Quantico, VA.

**Length:** 13 weeks (445 hours).
**Exhibit Dates:** 2/26–12/68.

**Objectives:** To train enlisted personnel to perform as aerial observers.

**Instruction:** Lectures and flight exercises in basic air observation methods and techniques, communications, and tactical and gunnery aerial observation.

**Credit Recommendation:** Credit is not recommended because of the limited specialized nature of the course (12/68).

**MC-1606-0002**
**AERIAL NAVIGATION** (Air Navigation)

**Course Number:** None.
**Location:** Air Station, Cherry Point, NC.

**Length:** 15 weeks (535–557 hours).
**Exhibit Dates:** 7/58–12/68.

**Objectives:** To train enlisted personnel to be qualified aerial navigators.

**Instruction:** Lectures and practical exercises in basic aerial navigation, meteorology, and radar principles and operation.

**Credit Recommendation:** Credit is not recommended because of the limited specialized nature of the course (12/68).

**MC-1606-0003**
**5TH CLASS AIR OBSERVATION SCHOOL**

**Course Number:** None.
**Location:** Marine Corps School, Quantico, VA.

**Length:** 16 weeks (490 hours).
**Exhibit Dates:** 9/54–12/68.

**Objectives:** To train enlisted personnel as aerial observers.

**Instruction:** Lectures and practical exercises in aerial observation. Topics include tactical aerial observation, gunnery aerial observations, communications, and staff procedures and techniques.

**Credit Recommendation:** Credit is not recommended, because of the limited specialized nature of the course (12/68).

**MC-1701-0001**
**UTILITIES OFFICER**

**Course Number:** None.
**Location:** Engineer School, Cpl. Lejeune, NC.

**Length:** 13 weeks (486 hours).
**Exhibit Dates:** 1/72–Present.

**Objectives:** To train enlisted personnel as utilities inspectors.

**Instruction:** Lectures and practical exercises in the inspection of utility systems. Course includes blueprint reading, introduction to engines, applied electrical fundamentals, AC motors and controls, generators, water and electric distribution, water purification procedures, water supply equipment, plumbing procedures, refrigeration theory and systems, refrigeration equipment, air conditioning, and inspection.

**Credit Recommendation:** In the vocational certificate category, 5 semester hours in basic refrigeration (6/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in basic refrigeration (6/74).

**MC-1703-0001**
**1. TRACKED VEHICLE REPAIRMAN, TANK**
**2. TRACKED VEHICLE REPAIRMAN, TANK, BASIC** (Tank Vehicle Repairman)

**Course Number:** None.
**Location:** Headquarters, Schools Battalion, Cpl. Pendleton, CA.

**Length:** Version 1: 5 weeks (174 hours). Version 2: 10 weeks (356 hours).

**Exhibit Dates:** Version 1: 10/66–1/72.

**Objectives:** To train enlisted personnel to inspect, troubleshoot, and repair tank systems.

**Instruction:** Lectures and practical exercises in tank systems inspection, troubleshooting, and repair, including tracked-vehicle introduction, maintenance procedures, electrical systems, engines, power train, hull, track, and suspension systems; care and use of tools and equipment; and engine tune-up and preventive maintenance checks and services.

**Credit Recommendation:** Credit is not recommended because of the limited specialized nature of the course (12/68).

**MC-1703-0002**
**ADVANCED MOTOR TRANSPORT**

**Course Number:** None.
**Location:** Supply School, Cpl. Lejeune, NC.

**Length:** 16 weeks (511 hours).
**Exhibit Dates:** 7/58–12/68.

**Objectives:** To train noncommissioned officers to supervise, operate, and maintain motor transport equipment.

**Instruction:** Lectures and practical exercises in motor transport equipment operation and maintenance, including internal combustion engines, carburetion and ignition, power train, hydraulic transmission, and brakes; preventive maintenance and body repair; and supervisory procedures.

**Credit Recommendation:** Credit is not recommended because of the limited specialized nature of the course (12/68).

**MC-1703-0003**
**MOTOR TRANSPORT CHIEF**

**Course Number:** None.
**Location:** Supply School, Cpl. Lejeune, NC.

**Length:** 10–13 weeks (358–454 hours).
**Exhibit Dates:** 9/64–12/68.

**Objectives:** To train noncommissioned officers to supervise personnel in the servicing, testing, maintenance, and repair of automobiles.

**Credit Recommendation:** In the vocational certificate category, 3 semester hours in automotive mechanics (4/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in automotive mechanics (4/74).

**MC-1703-0004**
**ONTOS (M50/FOURTH AND FIFTH ECHelon) MAINTENANCE**

**Course Number:** None.
**Location:** Tracked Vehicle Repairman School, Cpl. Pendleton, CA.

**Length:** 3 weeks (126 hours).
**Exhibit Dates:** 7/58–12/68.

**Objectives:** To train enlisted personnel to inspect, troubleshoot, and repair tracked vehicle repairmen as specialists in combat tracked vehicle repair.

**Instruction:** Lectures and practical exercises in tracked vehicle repair, including repair and troubleshooting and inspection procedures.

**Credit Recommendation:** In the vocational certificate category, 3 semester hours in automotive mechanics or heavy equipment repair (4/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in automotive mechanics or heavy equipment repair (4/74).

**MC-1703-0005**
**TRACKED VEHICLE REPAIRMAN (ONTOS), BASIC**

**ONTOS Vehicle Repairman**

**Course Number:** None.
**Location:** Schools Battalion, Cpl. Pendleton, CA.

**Length:** 5 weeks (200 hours).
**Exhibit Dates:** 8/67–12/68.

**Objectives:** To train enlisted personnel to inspect, troubleshoot, and repair tracked vehicles.

**Instruction:** Lectures and practical exercises in the functions of tracked vehicle repairmen, including basic driving, inspection, troubleshooting, and repair of electrical systems, engines and power trains, basic electricity; troubleshooting and inspection procedures.

**Credit Recommendation:** In the vocational certificate category, 3 semester hours in automotive mechanics or heavy equipment repair (4/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in automotive mechanics or heavy equipment repair (4/74).

**MC-1703-0006**
**1. TRACKED VEHICLE REPAIRMAN SELF-PROPELLED ARTILLERY**
**2. TRACKED VEHICLE REPAIRMAN (SELF-PROPELLED ARTILLERY), BASIC** (Self-Propelled Vehicle Repairman)

**Course Number:** None.
**Location:** Headquarters, Schools Battalion, Cpl. Pendleton, CA.

**Length:** Version 1: 5 weeks (153 hours). Version 2: 10 weeks (356 hours).

**Credit Recommendation:** In the vocational certificate category, 3 semester hours in automotive mechanics or heavy equipment repair (4/74).
1-48

COURSE EXHIBITS

Objective: To train enlisted personnel to perform preventive maintenance and repair self-propelled, tracked, or artillery vehicles.

Instruction: Lectures and practical exercises in the inspection and maintenance of self-propelled, tracked, or artillery vehicles, including the use of information, lube and maintenance procedures, electrical systems, engines and power train systems, hydraulic systems, and troubleshooting techniques.

Credit Recommendation: Credit is not recommended because the course is not related to the special nature of the course.

MC-1703-0009

1. BASIC AUTOMOTIVE MECHANIC
2. AUTOMOTIVE MECHANICS
3. AUTOMOTIVE MECHANIC
4. AUTOMOTIVE MECHANIC

Course Number: None.
Location: Army Maintenance School, Columbia, SC.
Length: 8 weeks.
Exhibit Dates: 7/72-Present.

Objective: To train personnel to perform preventive maintenance and repair self-propelled, tracked, or artillery vehicles.

Instruction: Lectures and practical exercises in the inspection and maintenance of self-propelled, tracked, or artillery vehicles, including the use of information, lube and maintenance procedures, electrical systems, engines and power train systems, hydraulic systems, and troubleshooting techniques.

Credit Recommendation: Credit is not recommended because the course is not related to the special nature of the course.

MC-1703-0011

1. TRACKED VEHICLE REPAIRMAN
2. TRACKED VEHICLE REPAIRMAN

AMPHIBIAN VEHICLE (BASIC)

Course Number: None.
Location: Army Maintenance School, Columbia, SC.
Length: 8 weeks.
Exhibit Dates: 7/72-Present.

Objective: To train enlisted personnel to perform preventive maintenance and repair of tracked vehicles.

Instruction: Lectures and practical exercises in the inspection and maintenance of tracked vehicles, including the use of information, lube and maintenance procedures, electrical systems, engines and power train systems, hydraulic systems, and troubleshooting techniques.

Credit Recommendation: Credit is not recommended because the course is not related to the special nature of the course.
MC-1703-0014
AUTOMOBILE MAINTENANCE OFFICER
Course Number: None.
Location: Supply School, Cpt. Lejeune, NC.
Length: 12-14 weeks (395-490 hours).
Exhibit Dates: 5/64-Present.
Objectives: To train warrant officers to organize, administer, and manage motor transport equipment maintenance and repair facilities.
Instruction: Lectures and practical exercises in the management of motor transport equipment maintenance and repair facilities. Course includes tools, power plant (spark and compression ignition), electrical and fuel systems, power train, maintenance management, preventive maintenance, unit removal and replacement, body radiator and fuel tank repair, and supply systems.
Credit Recommendation: In the vocational certificate category, 6 semester hours in automotive technology, 2 in shop foremanship (7/74), in the lower-division baccalaureate/associate degree category, 6 semester hours in automotive technology, 2 in shop foremanship (7/74).

MC-1703-0016
MOTOR TRANSPORT STAFF NONCOMMISSIONED OFFICER (NCO) (Automotive Technicians)
Course Number: None.
Location: Service Support Schools, Cpt. Lejeune, NC.
Length: 13 weeks (467 hours).
Exhibit Dates: 7/73-Present.
Objectives: Upon successful completion of this course the student will be able to supervise personnel performing inspection, repair, and replacement of all automotive wheeled vehicle components. Student will also be able to supervise the operation of a motor vehicle in the workplace.
Instruction: Lectures-demonstrations and practical applications in the following areas: fuel and electrical systems, diesel engines, spark ignition engines, chassis and braking, body and fender repair, spark ignition engine tune-up, and motor transport supply, operation, and administration.
Credit Recommendation: In the vocational certificate category, 2 semester hours in automotive electrical systems, 5 in diesel engine diagnosis and repair, and 2 in automotive suspension and braking. 1 in spark ignition tune-up (4/76); in the lower-division baccalaureate/associate degree category, 5 semester hours in motor vehicle service and maintenance management (6/76).

MC-1704-0001
AIR CONTROL ELECTRONICS OPERATOR, AUTOMATED SYSTEM
Course Number: None.
Location: Communication-Electronics School, Twentynine Palms, CA.
Length: 4-5 weeks (140-176 hours).
Exhibit Dates: 7/58-12/68.
Objectives: To train officers to supervise, maintain, and repair tracked vehicles, including hull, track, and suspension construction; electricity fundamentals, engine systems, generation systems, wiring circuits; power train; tracked vehicle turrets, vehicle transmission; hydraulic operation of specific equipment; and troubleshooting procedures.
Credit Recommendation: In the vocational certificate category, 3 semester hours in introductory auto mechanics, 2 in automobile electrical systems (7/74); in the lower-division baccalaureate/associate degree category, 6 semester hours in introductory auto mechanics, 2 in automobile electrical systems (7/74).

MC-1704-0002
AIR CONTROL/Antiair Warfare ELECTRONICS Operator (Air Control/Antiair Warfare Electronics Operator)
Course Number: None.
Location: Communication-Electronics School, San Diego, CA.
Length: 5-7 weeks (175-245 hours).
Exhibit Dates: 7/58-12/68.
Objectives: To train enlisted personnel with some knowledge of air control and anti-air warfare fundamentals to perform as air control electronics operators and ground control equipment operators.
Instruction: Lectures and demonstrations in air control electronics fundamentals, including radar and communications operations, threat evaluation/weapon assignment, pattern intercepts, and system utilization.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (2/76).

MC-1704-0003
MARINE MECHANICAL-FUNDAMENTALS
Course Number: None.
Location: Observation School, Jacksonville, NC.
Length: 2-5 weeks (140-176 hours).
Exhibit Dates: 1/72-Present.
Objectives: To train mechanics in vehicle description, safety procedures, basic land and water driving procedures, basic radio communications, vehicle preventive maintenance of the weapons station and M85 machine gun, and vehicle preventive maintenance operations.
Instruction: Lectures and practical exercises in vehicle description, safety procedures, basic radio communications, vehicle recovery, before and after operational checks, basic land and water driving procedures, and operation and preventive maintenance of the weapons station and M85 machine gun, and vehicle preventive maintenance.
Credit Recommendation: In the vocational certificate category, 4 semester hours in air traffic management and control (6/75).

MC-1708-0001
ASSAULT AMPHIBIAN VEHICLE CREWMAN (Amphibian Vehicle Crewman)
Course Number: None.
Location: Tracked Vehicle School, Cp. Pendleton, CA.
Length: 4-5 weeks (113-168 hours).
Exhibit Dates: 9/68-12/73.
Objectives: To provide the student with the skills necessary to serve as an amphibian tractor crewman.
Instruction: Lectures and practical exercises in vehicle description, safety procedures, basic radio communications, vehicle recovery, before and after operational checks, basic land and water driving procedures, operation and preventive maintenance of the weapons station and M85 machine gun, and vehicle preventive maintenance.
Credit Recommendation: Credit is not recommended because of the military nature of the course (12/68).

MC-1710-0001
1 BASIC ENGINEER EQUIPMENT MECHANIC
   (Engineer Equipment Mechanic)
2 ENGINEER EQUIPMENT MECHANICS
3 ENGINEER EQUIPMENT MECHANIC (BASIC)
Course Number: None.
Location: Engineer School, Cpt. Lejeune, NC.
ARMORED AMPHIBIAN CREWMAN
TRAINING, LVTAs, LVTPs

Course Number: None
Location: None
Exhibit Dates: None

Credit Recommendation: Insufficient data for evaluation (4/74).

MC-1710-0005
AMPHIBIAN TRACTOR CREWMAN TRAINING LVTC, LVTPs

Course Number: None
Location: None
Exhibit Dates: None

Credit Recommendation: Insufficient data for evaluation (4/74).

MC-1710-0006
BASIC TANK CREWMAN

Course Number: None
Location: None
Exhibit Dates: None

Credit Recommendation: Insufficient data for evaluation (4/74).

MC-1710-0007
TRACKED VEHICLE REPAIRMAN

Course Number: None
Location: None
Exhibit Dates: None

Credit Recommendation: Credit is not recommended because of the military nature of the course (4/74).

MC-1710-0010
ASSAULT AMPHIBIOUS VEHICLE UNIT LEADER

(Advanced Tracked Vehicle Repairman)

Course Number: None
Location: None
Exhibit Dates: None

Credit Recommendation: Credit is not recommended because of the military nature of the course (4/74).

MC-1710-0008
TURRET REPAIRMAN

Course Number: None
Location: None
Exhibit Dates: None

Credit Recommendation: Insufficient data for evaluation (4/74).

MC-1710-0009
TANK UNIT LEADER (ENLISTED)

Course Number: None
Location: None
Exhibit Dates: None

Credit Recommendation: Insufficient data for evaluation (4/74).

MC-1710-0004
ARMORED AMPHIBIAN CREWMAN TRAINING, LVTAs, LVTPs

Course Number: None
Location: None
Exhibit Dates: None

Credit Recommendation: Insufficient data for evaluation (4/74).
MC-1710-0011

1. **ARMS WEAPONS REPAIRMAN**
   - **(BASIC)**
   - **2. ARMS WEAPONS REPAIRMAN**

   **Course Number:** None

   **Location:** Ordnance School, Quantico, VA

   **Length:** 12 weeks (417 hours)

   **Exhibit Dates:** 1/71-Present

   **Objectives:** To train noncommissioned officers to maintain and repair artillery weapons and related material and mounts

   **Instruction:** Lectures and practical exercises in the maintenance and repair of artillery weapons and related material and mounts, including use of measuring instruments and tools, inspection techniques, and repair of howitzers, mortars, and cannons.

   **Credit Recommendation:** Version 1: In the vocational certificate category, 1 semester hour in mechanical repair technology (5/74); in the vocational certificate category, 2 semester hours in mechanical repair technology (5/74).

   **Version 2:** In the vocational certificate category, 2 semester hours in mechanical repair technology (5/74).

   **MC-1710-0012

JOURNEYMAN PLUMBING AND WATER SUPPLY MAN**

(Putting and Water Supply Journeyman)

**Course Number:** None

**Location:** Engineer School, Cpl. Lejeune, NC

**Length:** 12 weeks (417 hours)

**Exhibit Dates:** 1/71-Present

**Objectives:** To train noncommissioned officers who have completed the basic plumbing and water supply man course as journeyman.

**Instruction:** Lectures and practical exercises in the skills of a journeyman plumbing and water supply man, including supply procedures and systems control, installation and repair of plumbing, heating, and sewage systems; water supply equipment and water purification equipment, development of water sources and points; and well drilling.

**Credit Recommendation:** In the vocational certificate category, 6 semester hours in plumbing and water supply, including plumbing and water supply, and maintenance, heating, environmental technology, water resources, or water treatment (5/74); in the lower-division baccalaureate/associate degree category, 8 semester hours in plumbing and water supply, and maintenance, heating, environmental technology, water resources, or water treatment (5/74); in the upper-division baccalaureate category, 4 semester hours in plumbing and water supply, plumbing and heating, environmental technology, water resources, or water treatment (5/74).

**MC-1710-0013

1. **BASIC PLUMBING AND WATER SUPPLY MAN**

2. **PLUMBING AND WATER SUPPLY MAN**

**Course Number:** None

**Location:** Engineer School, Cpl. Lejeune, NC

**Length:**
- **Version 1:** 4 weeks (176 hours)
- **Version 2:** 8 weeks (235-300 hours)
- **Version 2:** 11 weeks (344 hours)

**Exhibit Date:** 1/71-Present

**Objectives:** To train personnel to install, operate, and maintain water supply and plumbing equipment.

**Instruction:** All Versions: Lectures and practical exercises in the installation, operation, and maintenance of water supply and plumbing equipment, including plumbing, sewage, and heating systems; purification and distillation equipment, reconnaissance and development of water points and sources; water distribution equipment, quality control; and portable water supply equipment.

**Version 2:** Includes well drilling and jetting, and maintenance of water and deep-well pumps.

**Version 3:** Includes principles, characteristics, and maintenance of gas, and diesel engines, and mine warfare.

**Credit Recommendation:** Version 1: In the vocational certificate category, 4 semester hours in beginning plumbing and water supply or environmental technology (water) (5/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in beginning plumbing and water supply or environmental technology (water) (5/74); in the upper-division baccalaureate category, 1 semester hour in beginning plumbing and water supply or environmental technology (water) (5/74); in the upper-division associate degree category, 2 semester hours in beginning plumbing and water supply or environmental technology (water) (5/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in beginning plumbing and water supply or environmental technology (water) (5/74); in the upper-division baccalaureate category, 1 semester hour in beginning plumbing and water supply or environmental technology (water) (5/74).

**MC-1710-0015

UTILITIES OFFICER

**Course Number:** None

**Location:** Engineer School, Cpl. Lejeune, NC

**Length:** 12 weeks (420 hours)

**Exhibit Dates:** 6/62-12/68

**Objectives:** To familiarize warrant officers and Lieutenants with the technical aspects of Marine Corps utilities systems.

**Instruction:** Lectures and practical exercises in the technical aspects of the utilities field, including water supply and plumbing, electrical systems, refrigeration, field problems, internal-combustion engines, Marine Corps supply system, engineer supply, supply allowances publications, decontamination, and terminology, definitions and symbols.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 6 semester hours in building construction and supervision (5/74); in the upper-division baccalaureate category, 3 semester hours in building construction and supervision (5/74).

**MC-1710-0016

ENGINEER EQUIPMENT CHIEF

**Course Number:** None

**Location:** Engineer School, Cpl. Lejeune, NC

**Length:**
- **Version 1:** 11-12 weeks (397-403 hours)
- **Version 2:** 13 weeks (449 hours)
- **Version 3:** 14 weeks (490 hours)
- **Version 4:** 30 weeks (1050 hours)

**Exhibit Dates:** 1/71-Present

**Objectives:** To train noncommissioned officers to supervise the operation and repair of mechanical equipment.

**Instruction:** All Versions: Lectures and practical exercises in the supervision of mechanical equipment operation and repair, including maintenance procedures; production capabilities of graders, dozers, compactors and other equipment; road design and construction, excavation, basic internal-combustion theory and repair; automotive

**Credit Recommendation:** Version 1: In the vocational certificate category, 16 semester hours in refrigeration or electricity (5/74); in the lower-division baccalaureate/associate degree category, 8 semester hours in refrigeration or electricity (5/74); in the vocational certificate category, 6 semester hours in building construction and supervision (5/74); in the lower-division baccalaureate/associate degree category, 9 semester hours in building construction and supervision (5/74); in the upper-division baccalaureate category, 3 semester hours in building construction and supervision (5/74).
MC-1710-0014

COMBAT ENGINEER (ADVANCED)

Course Number: None.
Location: Engineer School, Cp. Lejeune, NC.


Objectives: To train enlisted personnel to supervise combat engineering projects.

Instruction: Lectures and practical exercises in combat engineering, including blueprint reading, construction surveying, route reconnaissance, soils engineering, building construction, bridges, utilities, hand and power woodworking tools operation, estimating procedures, and roads and airfield construction.

Credit Recommendation: In the vocational certificate category, 2 semester hours in engineering construction (12/68).

CM-1710-0022

TRACKED VEHICLE MAINTENANCE OFFICER/STAFF NONCOMMISSIONED OFFICER MANAGEMENT

Course Number: None.
Location: Schools Battalion, Cp. Pendleton, CA.
Length: 3-4 weeks (125-160 hours).
Exhibit Dates: 1/72-12/74.

Objectives: To train commissioned officers and senior staff NCOs to manage a tracked-vehicle maintenance group.

Instruction: Lectures and practical exercises in the management of a tracked-vehicle maintenance group. Course includes tracked-vehicle familiarization, supply maintenance, and maintenance management.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (7/74).

MC-1710-0023

WEAPONS REPAIR OFFICER

Course Number: None.
Location: Ordnance School, Quantico, VA.
Length: 9 weeks (360 hours).
Exhibit Dates: 7/58-12/73.

Objectives: To train company grade officers to maintain and repair infantry and artillery weapons, including guided missile and free-rocket launchers and related control equipment.

Instruction: Lectures and practical exercises in the maintenance and repair of infantry and artillery weapons. Course includes repair shop procedures, artillery fundamentals, artillery weapons repair, tank gun mount, guided missile launcher, and inspection and repair of infantry weapons.

Credit Recommendation: In the vocational certificate category, 2 semester hours as an elective in mechanical or industrial technology (7/74) in the lower-division baccalaureate/associate degree category, 2 semester hours as an elective in mechanical or industrial technology (7/74).

MC-1710-0024

ENGINEER EQUIPMENT MECHANIC FOREMAN

Course Number: None.
Location: Engineer School, Cp. Lejeune, NC.
Length: 19 weeks (537 hours).
Exhibit Dates: 7/55-12/68.

Objectives: To train enlisted personnel to supervise the repair of engineer equipment, diesel engines, and gasoline- and diesel-powered construction equipment.

Instruction: Lectures and practical exercises in the supervision of the repair of engineer equipment, diesel engines, and gaso-
line- and diesel-powered construction equipment, including maintenance and replacement of various components, such as engines, TD 18-A tractors, gasoline engines, M-R-S tractors, hystaway cranes, tandem rollers, air compressors, cranes, crawler crane shovels, graders, TD 24 tractors, well rigs, concrete mixers, and ditchers.

Credit Recommendation: In-the vocational certificate category, 10 semester hours in heavy equipment programs, 4 in automotive area, 4 in diesel mechanics area (7/74). In the lower-division baccalaureate/associate degree category, 10 semester hours in heavy equipment, 4 in automotive area, 4 in diesel mechanics area (7/74).

MC-1710-0025
JOURNEYMAN ENGINEER EQUIPMENT MECHANIC
Course Number: None
Location: Engineer School, Cp Lejeune, NC
Length: 23 weeks (872 hours)
Exhibit Dates: 7/70-7/74
Credit Recommendation: To upgrade training of engineers in the maintenance area of a military weapons repair facility.
Instruction: Lectures and practical exercises in the principles of operation, construction, and troubleshooting of specific weapons systems and components of internal combustion engines, operation and repair of the mechanical, air, and hydraulic systems of mobile material handling equipment, cranes, graders, air compressors, and rock crushers.

Credit Recommendation: In the vocational certificate category, 5 semester hours in internal combustion engines repair, 2 in mobile material handling equipment repair, 5 in tractors and tractor attachment repair, 5 in crawler and track mounted crane repair, 2 in grader repair, and 1 in stationary equipment repair (air compressors and rock crushers) (6/75), in the lower-division baccalaureate/associate degree category, 5 semester hours in internal combustion engines, 2 in material handling and 3 in engineering equipment (6/75)

MC-1710-0026
ENGINEER EQUIPMENT FOREMAN
Course Number: None
Location: Engineer School Battalion, Cp Pendleton, CA
Length: 2 weeks (91 hours)
Exhibit Dates: 7/72-Present
Objectives: To train noncommissioned officers to supervise and repair turret mounted artillery.
Instruction: Lectures and practical exercises in the operation and diagnosis of malfunctions of the turret mounted on turrets and the turret operating mechanisms to include procedures for correction of malfunctions.

Credit Recommendation: In the vocational certificate category, 1 semester hour as an elective in mechanical repair technology (5/74).

MC-1710-0028
TURRET REPAIRMAN
Course Number: None
Location: Schools Battalion, Cp Pendleton, CA
Length: 2 weeks (91 hours)
Exhibit Dates: 7/72-Present
Objectives: To train noncommissioned officers to diagnose and repair turret mounted artillery.
Instruction: Lectures and practical exercises in the operation and diagnosis of malfunctions of several types of artillery mounted on turrets and the turret operating mechanisms to include procedures for correction of malfunctions.

Credit Recommendation: In the vocational certificate category, 1 semester hour as an elective in mechanical repair technology (5/74).

MC-1710-0029
WEAPONS TECHNICIAN
Course Number: None
Location: Ordnance School, Quantico, VA
Length: 9 weeks (368 hours)
Exhibit Dates: 6/64-12/68
Objectives: To train personnel to supervise and manage weapons repair facilities.
Instruction: Lectures and practical exercises in basic machine shop practices, organization and administration of repair shops, disassembly, assembly, inspection, repair, and troubleshooting of specific weapons and ancillary equipment to include grenade launchers, rifles, machine guns, hand guns, mortars, rifle scopes, and howitzers.

Credit Recommendation: In the vocational certificate category, 4 semester hours in mechanical technology, 1 in introduction to machine shop (5/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in industrial management, 3 in mechanical technology, 1 in introduction to machine shop (5/74).

MC-1714-0001
JOURNEYMAN ELECTRICIAN
Course Number: None
Location: Engineer School, Cp Lejeune, NC
Length: 18 weeks (434 hours)
Exhibit Dates: 11/70-Present
Objectives: To provide selected enlisted personnel with the knowledge and skills required to perform as journeyman electricians.
Instruction: Lectures and laboratories in basic electrical theory, motor controls, generator operation, pole line construction, and interior wiring.

Credit Recommendation: In the vocational certificate category, 4 semester hours in electricity, 1 in electrical laboratory (12/77).

MC-1714-0002
ELECTRICAL EQUIPMENT REPAIRMAN
Course Number: None
Location: Engineer School, Cp Lejeune, NC
Length: 13 weeks (503 hours)
Exhibit Dates: 9/68-Present
Objectives: To train technicians in the repair of electrical equipment and control devices with particular emphasis upon the repair of field power-generating equipment.
Instruction: Lectures in electricity and simple electrical components; AC and DC current and circuit components; electronics and electronic devices, control devices and the circuits, DC and AC motors and generators; electrical power equipment, troubleshooting electrical systems; supply and maintenance procedures.

Credit Recommendation: In the vocational certificate category, 10 semester hours in electrical technology (11/73).

MC-1714-0003
1. BASIC ELECTRICIAN
2. ELECTRICIAN
3. ELECTRICIAN
Course Number: None
Location: Engineer School, Cp Lejeune, NC
Length: Version 1, 6 weeks (220 hours).
Exhibit Dates: Version 1: 7/71-Present
Version 2: 9/68-6/71
Version 3: 6/71-8/68
Objectives: To provide enlisted personnel with basic training in generator operation, pole line construction, and interior wiring.
Instruction: Lectures and laboratories in basic electrical theory, motor controls, generator operation, pole line construction, and interior wiring.

Credit Recommendation: Version 1 In the vocational certificate category, 4 semester hours in electricity, 1 in electrical laboratory (12/77).

Version 2: In the vocational certificate category, 3 semester hours in electricity, 1 in electrical laboratory (3/74).

Version 3. In the vocational certificate category, 6 semester hours in electricity, 2 in electrical laboratory (3/74).

Version 4: In the vocational certificate category, 3 semester hours in electricity, 2 in electrical laboratory (3/74).

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in electricity, 1 in electrical laboratory (3/74).

MC-1714-0004
TELEPHONE REPAIR
Course Number: None
Location: Communication-Electronics School, San Diego, CA
Length: 22 weeks (770 hours)
Exhibit Dates: 7/58-12/72
Objectives: To train enlisted personnel to install and maintain telephone equipment.
Instruction: Lectures and laboratories in DC and AC circuits; simple motors and generators; meters and tools, control office, switchboard, and customer telephone equipment; and teletype equipment.

Credit Recommendation: In the vocational certificate category, 6 semester hours in electricity, 2 in electrical laboratory (3/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in electricity, 1 in electrical laboratory (3/74).
MC-1714-0005
WIRE CHIEF
Course Number: None.
Location: Air Ground Combat Training Center, Twentynine Palms, CA; Communication-Electronics School, Sub Unit 2, San Diego, CA.
Length: 14-20 weeks (496-653 hours).
Exhibit Dates: 1/72-Present.
Objectives: To train personnel to supervise the installation of telephone lines and telecommunication equipment.
Instruction: Lectures and practical exercises in oral and written communications skills, personnel management concepts, map reading, radio procedure, electronic fundamentals and basic electricity, telephone line techniques, field wire equipment and related systems, station installation, and pole line maintenance.
Credit Recommendation: In the vocational certificate category, 6 semester hours in electrical installation (3/79).

MC-1714-0006
ELECTRICIANS
Course Number: Not available.
Location: Engineer School Battalion, Cp Lejeune, NC.
Length: 15 weeks (390 hours).
Exhibit Dates: 2/56-12/68.
Objectives: To train enlisted personnel to install, operate, maintain, and repair electrical systems and equipment of the Fleet Marine Force.
Instruction: Lectures and practical exercises in the installation, operation, maintenance and repair of electrical systems and equipment of the Fleet Marine Force, including electrical theory and principles, internal-combustion engines, engine motors and generators, electrical distribution and construction, and interior wiring methods and materials.
Credit Recommendation: In the vocational certificate category, 1 semester-hour in electricity, 6 in electrical construction and maintenance (4/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in electricity, and 6 in electrical construction and maintenance on the basis of institutional evaluation (4/74).

MC-1714-0007
FIELD WIREMAN (FWMC)
Course Number: None.
Location: Communication-Electronics School, Twentynine Palms, CA.
Length: 4 weeks (140 hours).
Exhibit Dates: 7/72-12/73.
Objectives: To train personnel and wiremen in the Fleet Marine force.
Instruction: Lectures and practical exercises on the responsibilities of field wiremen, including integrated multichannel communication means, switchboard operators per procedure, manual switchboards SB-2/PT and SB-86/P, telegraph-telephone terminal groups AN/TCC-29, field communications, pole climbing techniques, pole line construction, inside wire routing, raising and setting poles and stubs, and suspension strand installation.
Credit Recommendation: In the vocational certificate category, 4 semester hours in lineman occupation (6/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in electrical technology (6/74).

MC-1715-0001
TECHNICIAN ELECTRONIC COUNTER-COUNTERMEASURES
Course Number: None.
Location: Communication-Electronics School Battalion, San Diego, CA.
Length: 4 weeks (96 hours).
Exhibit Dates: 10/69-12/73.
Objectives: To qualify technicians in the techniques, and application of electronic counter-countermeasures.
Instruction: Lectures and practical experience in circuit theory, recognition, corrective and/or defensive action taken to combat various types, methods and characteristics of electronic countermeasures which may be encountered by a MACS in an electronic warfare environment.
Credit Recommendation: Credit is not recommended because of the military nature of the course (11/73).

MC-1715-0002
OFFICER ELECTRONIC WARFARE
Course Number: None.
Location: Communication-Electronics School, San Diego, CA.
Length: 2 weeks (98 hours).
Exhibit Dates: 8/69-Present.
Objectives: To provide instruction to qualify officers in the techniques and application of electronic warfare.
Instruction: History, concepts, terminology and application of past, present, and future techniques, specific circuit theory, recognition, corrective, and/or defensive action taken to combat various types of jamming, methods and characteristics of electronic countermeasures.
Credit Recommendation: Credit is not recommended because of the military nature of the course (11/73).

MC-1715-0003
1. ARTILLERY ELECTRONIC EQUIPMENT REPAIRMAN
2. ARTILLERY ELECTRONIC EQUIPMENT REPAIR
Course Number: None.
Location: Air Ground Combat Training Center, Twentynine Palms, CA; Communication-Electronics School, Twentynine Palms, CA.
Length: 9-11 weeks (318-407 hours).
Objectives: To train enlisted personnel to test, troubleshoot, and maintain specific military equipment.
Instruction: Introduction to field artillery equipment, including maintenance and repair of a radar chronograph, microwave distance-measuring equipment, field artillery digital computer, and associated equipment.
Credit Recommendation: Version 1: In the vocational certificate category, 3 semester hours in communications technology (2/76). Version 2: In the vocational certificate category, 3 semester hours in communications technology (2/76).

MC-1715-0004
1. BASIC ELECTRONICS
2. BASIC ELECTRONICS
3. ELECTRONIC FUNDAMENTALS
4. BASIC ELECTRONICS
5. BASIC ELECTRONICS
Course Number: None.
Objectives: To train enlisted personnel in the fundamental aspects of electronics.
Instruction: All Versions: Lectures and practical experience in electronic principles, vacuum tube and semiconductor fundamentals, electronic circuit analysis, and digital and circuit principles. Version 1: Includes 70 hours of lectures and practical exercises in the use of digital machines and devices; logic design. Boolean algebra, and block diagrams; logic circuitry, characteristics of hardware and operations of magnetic drum, tape, disc, magnetic core, and other storage devices; analog to digital conversion. Credit Recommendation: Version 1: In the vocational certificate category, 2 semester hours in electronics mathematics, 3 in basic electricity, 3 in basic electronics, 2 in digital circuit fundamentals, 1 in instrumentation and measurements, 2 in basic computer logic (3/79); in the lower-division baccalaureate/associate degree category, 3 semester hours in basic electricity, 3 in basic electronics, 2 in digital systems fundamentals, 2 in basic computer logic (2/79); in the upper-division baccalaureate category, 6 semester hours in industrial arts education for basic electronics (3/79). Version 2: In the lower-division baccalaureate/associate degree category, 9 semester hours in industrial electronics technology (2/76). Version 3: In the vocational certificate category, 18 semester hours in electricity and electronics (3/74); in the lower-division baccalaureate/associate degree category, 6 semester hours in electricity and electronics, 3 in computers (3/74); in the upper-division baccalaureate category, 15 semester hours in electricity and electronics, and additional credit in electronics laboratory on the basis of institutional evaluation (3/74). Version 4: In the vocational certificate category, 18 semester hours in electricity and electronics (3/74); in the lower-division baccalaureate/associate degree category, 6 semester hours in electricity and electronics, 3 in computers (3/74); in the upper-division baccalaureate category, 3 semester hours in electricity and electronics, and additional credit in electronics laboratory on the basis of institutional evaluation (3/74). Version 5: In the vocational certificate category, 18 semester hours in electricity and electronics (3/74); in the lower-division baccalaureate/associate degree category, 6 semester hours in electricity and electronics, 3 in computers (3/74); in the upper-division baccalaureate category, 3 semester hours in electricity and electronics, and additional credit in laboratory on the basis of institutional evaluation (12/68).

MC-1715-0005
TECHNICIAN THEORY
Course Number: None.
Location: Versio 1: Air Ground Combat Training Center, Twentynine Palms, CA


Objectives: To provide enlisted personnel with training in advanced electronic theory as a foundation for equipment-oriented instruction in radar, aviation, and radio technology.

Instruction: All Versions: Lectures and practical laboratory applications in DC and AC circuit analysis, mathematics and physics, electron tube and transistor theory, amplifier circuit analysis, oscillators, switching circuits, power supplies, principles of digital computers, microwave characteristics of electronic devices, including general theory, synchros and servos, modulation and detection, antennas and test instruments. Version 1: Emphasizes a thorough review of mathematics, general theoretical principles of electronics, AC/DC electricity, test instruments, soldering and repair techniques to NASA specs, and 73 hours of military management principles.

Credit Recommendation: Version 1: In the vocational certificate category, 3 semester hours in electronics systems and applications, 3 in mathematics, 6 in basic electronics, 3 in digital circuitry, 3 in communication skills (3/79); in the lower-division baccalaureate/associate degree category, 3 semester hours in electronics systems and applications, 3 in mathematics, 6 in basic electronics, 3 in digital circuitry, 3 in communication skills (3/79), in the upper-division baccalaureate/associate degree category, 6 semester hours in industrial arts education for basic electronics; 3 in management/communication skills (3/79).

Version 2: In the lower-division baccalaureate/associate degree category, 21 semester hours in electronics, engineering technology (2/76). Version 3: In the vocational certificate category, certificate in electricity or electronics on the basis of institutional evaluation (3/74); in the lower-division baccalaureate/associate degree category, 16 semester hours in electricity or electronics, 4 in mathematics, and, on the basis of institutional evaluation, credit in electrical laboratory (3/74); in the upper-division baccalaureate/associate degree category, 16 semester hours in electricity or electronics, 4 in mathematics, and, on the basis of institutional evaluation, credit in electrical laboratory (3/74); in the lower-division baccalaureate/associate degree category, 16 semester hours in electricity or electronics, 4 in mathematics, and, on the basis of institutional evaluation, credit in electrical laboratory (3/74); in the upper-division baccalaureate/associate degree category, 16 semester hours in electricity or electronics, 4 in mathematics, and, on the basis of institutional evaluation, credit in electrical laboratory (3/74).

Objectives: To train enlisted personnel in the operation, maintenance, and repair of specific types of telegraph systems.

Instruction: Practical experience in the maintenance, operation, repair and systems analysis of patch panels and switchboards, voice frequency telegraphs, and test equipment.

Credit Recommendation: Version 1: In the vocational certificate category, 3 semester hours in introduction to telephone and telegraph communication (3/79). Version 2: Credit is not recommended because of the limited specialized nature of the course (3/74).

MC-1715-0067

TERMINAL EQUIPMENT THEORY

Course Number: None.

Location: Air Ground Combat Training Center, Twentynine Palms, CA. Communication-Electronics School, Twentynine Palms, CA.


Objectives: To train enlisted personnel in the theory and principles of digital computer circuits and systems.

Instruction: Version 2: Lectures and lectures in the theory of operation and troubleshooting of a central purpose digital computer; basic logic circuits; repair of PC cards and digital circuits. Version 3: Lectures and laboratories in basic logic circuits, theory of operation and troubleshooting of a central purpose digital computer; repair of PC cards and digital circuits. Version 4: Lectures and laboratories in basic logic circuits, theory of operation and troubleshooting of the Bi-Tran 6 and TH-65, and use of dual-trace oscilloscopes and pace kits.


MC-1715-0008

RADIO RELAY REPAIR

Course Number: None.


Objectives: To train radio repairmen to repair and maintain telephone-telegraph terminal equipment.

Instruction: Lectures and laboratories in the principles of multiplexing and the theory, operation, and maintenance of telephone-telegraph equipment.

Credit Recommendation: Version 1: In the vocational certificate category, 2 semester hours in electrical laboratory, and credit in electrical laboratory on the basis of institutional evaluation (3/74); in the lower-division baccalaureate/associate degree category, credit in electrical laboratory on the basis of institutional evaluation (3/74). Version 2. In the vocational certificate category, 3 semester hours in electrical laboratory, and credit in electrical laboratory on the basis of institutional evaluation (3/74); in the lower-division baccalaureate/associate degree category, credit in electrical laboratory on the basis of institutional evaluation (3/74). Version 3: In the vocational certificate category, 2 semester hours in electrical laboratory, and credit in electrical laboratory on the basis of institutional evaluation (3/74); in the lower-division baccalaureate/associate degree category, credit in electrical laboratory on the basis of institutional evaluation (3/74). Version 4: In the vocational certificate category, 6 semester hours in electrical laboratory, and credit in electrical laboratory on the basis of institutional evaluation (3/74); in the lower-division baccalaureate/associate degree category, credit in electrical laboratory on the basis of institutional evaluation (3/74).
MC-1715-0010

**RADIO FUNDAMENTALS**

Course Number: None

Location: Air Ground Combat Training Center, Twentynine Palms, CA; Communication-Electronics School, Twentynine Palms, CA; Version 2: Communication-Electronics School, San Diego, CA

Credit Recommendation: In the vocational certificate category, 6 semester hours in communication technology (2/76).

Objectives: To prepare enlisted personnel who have completed a basic electronics course to repair telephone/teletype equipment.

Instruction: Lectures and laboratories in telephone/teletype equipment repair procedures, and testing, adjustment, modification, maintenance, and troubleshooting techniques.

Credit Recommendation: In the vocational certificate category, 3 semester hours in communication-electronics laboratory (3/74). 3

MC-1715-0011

**AVIATION RADIO REPAIR**

Course Number: None

Location: Air Ground Combat Training Center, Twentynine Palms, CA; Communication-Electronics School, San Diego, CA

Credit Recommendation: In the vocational certificate category, 6 semester hours in electronic communications laboratory (3/74).

Objectives: To train enlisted personnel to install, maintain, and repair audio and ground communication-electronics equipment.

Instruction: Lectures and practical exercises in operating characteristics, installation techniques, circuitry, ultrahigh frequency principles, single-sideband theory, and cryptographic maintenance concepts of the TSEC/KY-28 security system.


MC-1715-0012

**TELEPHONE TECHNICIAN**

Course Number: None

Location: Basic Electronics School, San Diego, CA

Credit Recommendation: In the maintenance of specific wire telephone systems.

Instruction: Lectures and practical exercises in basic mathematics and electricity, wire telephone techniques, teletype and terminal equipment maintenance.

Credit Recommendation: In the vocational certificate category, 3 semester hours in math and electricity, 1 in laboratory (3/74).

MC-1715-0013

**TELEPHONE-TELETYPYRE REPAIR**

Course Number: None

Location: Air Ground Combat Training Center, Twentynine Palms, CA; Communication-Electronics School, San Diego, CA

Length: 16-19 weeks (560-665 hours).

Exhibit Dates: 7/62-Present.

Objectives: To train enlisted personnel to install, adjust, and repair specific military radio sets.

Instruction: All Versions: Lectures and practical exercises in theory, circuitry, operation, and repair of tube and transistorized AM, SSB, and VHF transceivers. Version 2 includes emergency power generator.

Credit Recommendation: Version 1: In the vocational certificate category, 6 semester hours in electronic communications laboratory (2/76). Version 2: In the vocational certificate category, 6 semester hours in electronic communications laboratory (3/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in electronic communication, 1 in electronic communications laboratory (3/74). Version 2: In the vocational certificate category, 6 semester hours in electronic communications laboratory (3/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in electronic communications laboratory (3/74), in the lower-division baccalaureate/associate degree category, 3 semester hours as an elective in electronic communications (12/68).

MC-1715-0014

**SOUND EQUIPMENT REPAIR**

Course Number: None

Location: Communication-Electronics School, San Diego, CA

Credit Recommendation: In the vocational certificate category, 6 semester hours as an elective in electronics laboratory (3/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in electronic communications laboratory (3/74), in the lower-division baccalaureate/associate degree category, 3 semester hours as an elective in electronics (3/74).

MC-1715-0015

**TERMINAL EQUIPMENT REPAIR**

Course Number: None

Location: Basic Electronics School, San Diego, CA

Credit Recommendation: In the vocational certificate category, 3 semester hours as an elective in electronics laboratory (3/74).

Instruction: Lectures and practical exercises in operating characteristics, installation techniques, circuitry, ultrahigh frequency principles, single-sideband theory, and cryptographic maintenance concepts of the TSEC/KY-28 security system.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronic equipment maintenance. 1 in electronic equipment maintenance laboratory (3/79). Version 2: In the vocational certificate category, 3 semester hours in electronic communications laboratory (3/74), in the lower-division baccalaureate/associate degree category, 3 semester hours as an elective in electronic communications (3/74).

MC-1715-0016

**TELEPHONE SYSTEM, TRANSPORTABLE AN/TVQ**

Course Number: None

Location: Communication-Electronics School, Twentynine Palms, CA, Air

Ground Combat Training Center, Twentynine Palms, CA.

Length: 6 weeks (210 hours).

Exhibit Dates: 1/72-Present.

Objectives: To train central office repairmen to test, adjust, modify, and repair the AN/TTC-28 transportable telephone system in field maintenance support shops.

Instruction: Lectures and practical demonstrations in the telephone systems introduction, telephone schematic diagram familiarization, and system installation, troubleshooting, and repair procedures.

Credit Recommendation: In the vocational certificate category, 2 semester hours in telephony, 1 in telephony laboratory (3/74).
maintenance publications and peripheral equipment fundamentals.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (3/74).

MC-1715-0019

DATA HANDLING REPAIR
(Tactical Air Operations Central (TAOC) Data Handling Repair)

Course Number: None.
Location: Communication-Electronics School, San Diego, CA.
Length: 14 weeks (490 hours).
Exhibit Dates: 7/67-12/68.
Objectives: To train enlisted personnel to operate, install, adjust, and repair tactical data systems data-handling sections.

Instruction: Lectures and laboratories in circuitry and functioning of digital data programmers, digital data buffers, intercenter data terminals, tactical data communication central buffers, missile battery data terminals, teletype programmers, teletype buffers, intercommunication communication central groups, operation and maintenance, and power distribution.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (3/74).

MC-1715-0020

TACTICAL AIR COMMAND CENTRAL
TACC AN/TTYQ-1 REPAIR

Course Number: None.
Location: Air Ground Combat Training Center, Twenty-nine Palms, CA; Communication-Electronics School, Twentynine Palms, CA.
Length: Version 1: 17 weeks (699 hours).
Version 2: 15-18 weeks (557-623 hours).
Objectives: To train enlisted personnel to install, maintain, and repair the tactical air command central and its module and card subassemblies.

Instruction: Lectures and practical exercises in maintenance test procedures, use of tools and maintenance, interrogations, functional tests, diagnostic routines, and special failure-reporting procedures, and familiarization with marine, naval, and airborne radar equipment. Credit Recommendation: Version 1. In the vocational certificate category, 3 semester hours in use of electronic test equipment (3/79). Version 2. Credit is not recommended because of the limited specialized nature of the course (3/74).

MC-1715-0021

MARINE TACTICAL DATA SYSTEM
TACTICAL DATA SYSTEMS REPAIR

Course Number: None.
Location: Communication-Electronics School, San Diego, CA.
Length: 14 weeks (490 hours).
Exhibit Dates: 7/69-12/73.
Objectives: To train air controllers to operate and supervise AN/TTYA-9 operator shelters.

Instruction: Lectures and practical exercises in manual target detection, acquisition, and rate-centered tracking, automatic detection, identification of tracking of aircraft, and identification of air targets on the basis of flight plans, identification friend-or-foe (IFF) data, speed, communication checks, air-ground data, and prearranged maneuvers. Controllers also learn computer-aided track evaluation and weapon target pairing. Operators also learn automatic vectoring of data link-equipped aircraft and voice control of non-data-link-equipped aircraft.

Credit Recommendation: Credit is not recommended because of the military nature of the course (3/74).

MC-1715-0022

TACTICAL DATA SYSTEM HANDLING
REPAIR

Course Number: None.
Location: Communication-Electronics School, San Diego, CA.
Length: 14 weeks (483 hours).
Exhibit Dates: 6/69-12/73.
Objectives: To train enlisted personnel to maintain tactical data system equipment and associated subunits and circuits.

Instruction: Lectures and laboratories in external and internal digital data links, ground-air-ground data communication, tactical data communication teletype systems, data line programmers and buffers, data link terminals, intercoms, voice communication apparatus, display equipment, and data-handling equipment maintenance.

Credit Recommendation: In the vocational certificate category, credit in electrical laboratory or computer technology on the basis of institutional evaluation (3/74).

MC-1715-0023

TACTICAL DATA COMMUNICATIONS CENTRAL TECHNICIAN
Tactical Data Communications Central (TADCC AN/TRYQ-J Technician)

Course Number: None.
Location: Air Ground Combat Training Center, Twenty-nine Palms, CA; Communication-Electronics School, Twenty-nine Palms, CA.
Version 2: 44 weeks (1540 hours).
Exhibit Dates: Version 1: 11/76-Present.
Version 2: 12/71-10/76.
Objectives: To train enlisted personnel to install, operate, test, and maintain data communications systems.

Instruction: Version 1: Lectures and practical exercise in the operation and maintenance of a specific tactical data communications system. Topics include systems concepts, programming, data flow, and fault isolation. Version 2: Lectures and practical exercises in the operation and maintenance of tactical data communications central, including basic digital system theory and computer fundamentals, SSB transmission lines, MODEM, components of equipment, and maintenance and troubleshooting of specific functional digital circuits.

Credit Recommendation: Version 1: In the vocational certificate category, 6 semester hours in computer systems maintenance (3/79). Version 2: In the vocational certificate category, 6 semester hours in electrical systems or digital communications, 6 in electronic or digital communications laboratory (3/74); in the upper-division baccalaureate/associate degree category, 3 semester hours in electronic or digital communications. 2 in electronics or digital communications laboratory (3/74), in the upper-division baccalaureate category, 3 semester hours as an elective in electronics or digital communications (3/74).

MC-1715-0024

MICROWAVE EQUIPMENT OPERATOR
(MEOC)

Course Number: None.
Location: Air Ground Combat Training Center, Twenty-nine Palms, CA; Communication-Electronics School, Twenty-nine Palms, CA.
Length: 3-4 weeks (105-127 hours).
Exhibit Dates: 7/72-Present.
Objectives: To train enlisted personnel to operate microwave equipment.

Instruction: Lectures: Microwave propagation, technical manuals introduction, safety precautions, receiver and transmitter analysis, various radio sets analyses, multiplexer analysis and aileron procedures, profile graphs preparation, and preventive maintenance and troubleshooting procedures.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (3/74).

MC-1715-0025

RADIO OPERATOR

Course Number: None.
Location: Air Station, Cherry Point, NC.
Length: 16 weeks (640 hours).
Exhibit Dates: 7/58-12/68.
Objectives: To train officers and enlisted personnel as radio operators.

Instruction: Lectures and practical exercises in code reception and transmission, radar, radiotelephone communications, primary electronic theory, aviation electronics equipment, communications publications, general communications, and flight and flight procedures.

Credit Recommendation: Insufficient data for evaluation (3/74).

MC-1715-0026

TACTICAL DATA COMMUNICATIONS CENTRAL TECHNICIAN
(Tactical Data Communications Central (TADCC AN/TRYQ-J Technician)

Course Number: None.
Location: Air Ground Combat Training Center, Twenty-nine Palms, CA; Communication-Electronics School, Twenty-nine Palms, CA.
Version 2: 44 weeks (1540 hours).
Exhibit Dates: Version 1: 11/76-Present.
Version 2: 12/71-10/76.
Objectives: To train enlisted personnel to install, operate, test, and maintain data communications systems.

Instruction: Version 1: Lectures and practical exercise in the operation and maintenance of a specific tactical data communications system. Topics include systems concepts, programming, data flow, and fault isolation. Version 2: Lectures and practical exercises in the operation and maintenance of tactical data communications central, including basic digital system theory and computer fundamentals, SSB transmission lines, MODEM, components of equipment, and maintenance and troubleshooting of specific functional digital circuits.

Credit Recommendation: Version 1: In the vocational certificate category, 6 semester hours in computer systems maintenance (3/79). Version 2: In the vocational certificate category, 6 semester hours in electrical systems or digital communications, 6 in electronic or digital communications laboratory (3/74); in the upper-division baccalaureate/associate degree category, 3 semester hours in electronic or digital communications. 2 in electronics or digital communications laboratory (3/74), in the upper-division baccalaureate category, 3 semester hours as an elective in electronics or digital communications (3/74).

MC-1715-0027

TEST INSTRUMENT REPAIRMAN

Course Number: None.
Location: Supply Center, Albany, GA.
Length: 16-17 weeks (622-648 hours).
Exhibit Dates: 6/69-Present.
Objectives: To train enlisted personnel who have a prior training in basic electronics and radar fundamentals to maintain and repair electrical and electronic test and measuring instruments.

Instruction: Lectures and practical exercises in the maintenance of electrical and electronic test and measuring instruments, including general and specialized electronic theory, logical troubleshooting, circuit analysis, and basic measurement methods and techniques.
MC-1715-0028

TELEPHONE TELETYPE REPAIR (Special)

Course Number: None
Location: Communication-Electronics School, San Diego, CA
Length: 14 weeks (490 hours)
Exhibit Dates: 7/62-12/68

Objectives: To train enlisted personnel to maintain and repair teletype and telephone systems.

Instruction: Lectures and practical exercises in the maintenance and repair of tele-type and telephone systems, including electrical and mechanical fundamentals, basic electronic circuits, transistor operation, and troubleshooting and adjustment techniques.

Credit Recommendation: In the vocational certificate category, 5 semester hours in electronic equipment maintenance.

In the lower-division baccalaureate/associate degree category, 3 semester hours as an elective in electronics (3/74), Version 3.

In the vocational certificate category, 6 semester hours in electronics, 2 in electrical laboratory (3/74), in the lower-division baccalaureate/associate degree category, 3 semester hours as an elective in electronics (3/74), Version 4.

In the vocational certificate category, 9 semester hours in electronics, 3 in electronic laboratory (3/74), in the lower-division baccalaureate/associate degree category, 3 semester hours as an elective in electronics (3/74), Version 5.

MC-1715-0029

RADIO TECHNICIAN

Course Number: None
Location: Air Ground Combat Training Center, Twenty nine Palms, CA

Version 1:

Location: Communication-Electronics School, Twenty nine Palms, CA

Length: 13 weeks (455 hours)
Exhibit Dates: 6/72-12/73

Objectives: To train radio technicians to test, adjust, and repair specific communications terminal systems.

Instruction: Lectures and practical exercises in the maintenance and repair of the AN/TYA-11 technician group, including block diagram and module-by-module analysis of individual system components, theory of operation, and circuits, antennas, and power distribution information necessary for inspection and testing of equipment.

Credit Recommendation: In the vocational certificate category, 5 semester hours in electronics, 1 in electronics laboratory (3/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics laboratory (3/74).

MC-1715-0030

COMMUNICATIONS CENTRAL GROUP AN/TYA-11 TECHNICIAN

Course Number: None
Location: Communication-Electronics School, Twenty nine Palms, CA
Length: 4 weeks (160 hours)
Exhibit Dates: 6/72-12/73

Objectives: To train radio technicians to test, adjust, and repair specific communications terminal systems.

Instruction: Lectures and practical exercises in the maintenance and repair of the AN/TYA-11 technician group, including block diagram and module-by-module analysis of individual system components, theory of operation, and circuits, antennas, and power distribution information necessary for inspection and testing of equipment.

Credit Recommendation: In the vocational certificate category, 5 semester hours in electronics, 1 in electronics laboratory (3/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics laboratory (3/74).

MC-1715-0031

AIR SUPPORT OPERATIONS OPERATOR

Course Number: None
Location: Air Ground Combat Training Center, Twenty nine Palms, CA

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics, 1 in electronic laboratory (3/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in electronic laboratory (3/74).

Objectives: To provide instruction in the operations and tactical employment of a Direct Air Support Center, Radar Directing Center, and Airborne Mobile Direct Air Support Center.

Instruction: Lectures and practical exercises in net operator tasks, installation of power connections, air conditioners, antennas, telephone connections, and external transceiver connections, operation of plotters and other field equipment, and ARSCF radar operating procedures.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (3/79).

MC-1715-0032

AIRBORNE RADIO OPERATORS

Course Number: None
Location: Airborne Operator School, Cherry Point, NC


Objectives: To train enlisted personnel as airborne radio operators.

Instruction: Lectures and practical exercises in international Morse code, code typing, voice, telegraphy, radiotelephone messages, and airborne electronics and equipment.

Credit Recommendation: In the upper-division baccalaureate category, credit in typing on the basis of institutional evaluation (12/68).

MC-1715-0033

1 AVIATION FIRE CONTROL REPAIR
2 AVIATION FIRE CONTROL REPAIR
AN/TPQ-16 (AFC)
(AVATION FIRE CONTROL REPAIR
4 AVIATION FIRE CONTROL REPAIR

Course Number: None

Credit Recommendation: In the vocational certificate category, 3 semester hours as an elective in the vocational certificate category, 3 semester hours in electronic communications laboratory (3/74), in the upper-division baccalaureate/associate degree category, 3 semester hours as an elective in electrical laboratory (12/68), in the lower-division baccalaureate/associate degree category, 3 semester hours as an elective in electrical laboratory (3/74).

Objectives: To train enlisted personnel who have completed a basic electronics fundamentals course with the technical skills required of aviation fire control personnel.

Instruction: Version 1: Preparation of enlisted personnel in all concept of operation, installation, and adjustment of military aircraft course directing radar systems. Includes corrective and preventive maintenance procedures, use of test equipment and inherent testing procedures. Version 2: Lectures and laboratories in power and control circuits, radar circuits, automatic tracking circuits, computers, and ancillary equipment. Version 3: Lectures and laboratories in theory, maintenance, and troubleshooting of radar sets and computer-transmitter sets.

Credit Recommendation: Version 1: In the vocational certificate category, 3 semester hours in electronic equipment-maintenance (3/79), Version 2: In the vocational certificate category, 3 semester hours in electrical laboratory (3/74).

Objectives: To train enlisted personnel as airborne radio operators.

Instruction: Lectures and practical exercises in international Morse code, code typing, voice, telegraphy, radiotelephone messages, and airborne electronics and equipment.

Credit Recommendation: In the upper-division baccalaureate category, credit in typing on the basis of institutional evaluation (12/68).

MC-1715-0034

LIGHT ANTIAIRCRAFT ARTILLERY (AAA) FIRE CONTROL REPAIR

Course Number: None
Location: Communication-Electronics School, San Diego, CA.

Length: 16 weeks (265 hours)
Exhibit Dates: 7/58-12/68

Objectives: To train enlisted personnel as airborne radio operators.

Instruction: Lectures and practical exercises in international Morse code, code typing, voice, telegraphy, radiotelephone messages, and airborne electronics and equipment.

Credit Recommendation: In the upper-division baccalaureate category, credit in typing on the basis of institutional evaluation (12/68).
Objectives: To train enlisted personnel to operate and maintain lightweight aircraft air search radar, radio and fire control systems and systems of radar and IFF with emphasis on operational testing, procedures, and maintenance of specific sound equipment, with emphasis on troubleshooting and field repair techniques.

Credit Recommendation: Credit in not recommended because of the limited specialized nature of the course (4/74).

MC-1715-0043
MARINE TACTICAL DATA SYSTEM (MTDS) TECHNICIAN
Course Number: Not available
Location: Communication-Electronics School, San Diego, CA
Length: 34 weeks (813 hours)
Exhibit Dates: 7/67-12/68
Objectives: To train enlisted personnel to install, repair, test, and maintain a tactical data system.

Instruction: Lectures and demonstrations on the operation of special-purpose computers and peripheral equipment, radar data processing and track store data processing, installation, operation, and repair of geographic display units, weapons control systems, bookkeeping elements, internal and external digital data links, and voice communication elements; memory access and monitoring, power supply and distribution, and operation of maintenance and testing equipment.

Credit Recommendation: In the vocational certificate category, credit in electrical laboratory on the basis of institutional evaluation (4/74); in the lower-division baccalaureate/associate degree category, credit in electrical laboratory on the basis of institutional evaluation (4/74).

MC-1715-0044
ADVANCED ELECTRICIAN
Course Number: None
Location: Engineer School, Cp Lejeune, NC
Length: 3 weeks (344 hours)
Exhibit Dates: 1/68-12/73
Objectives: To provide enlisted personnel with advanced training in the servicing of electrical and electronic equipment.

Instruction: Lectures in basic mathematics, including graphs, logs, algebra, and trigonometry, electrical theory, including terminology, Batteries, Ohm's law, electromagnetics, elementary AC circuits, semiconductors, parallel circuits, RLC combinations, bridges, conductors, and wiring, power generating equipment, including AC and DC motors, generators, transformers, construction, and characteristics, triodes, amplifiers, and magnetic amplifiers, electrical drawings and symbols, elementary tube theory, power supplies, high and low voltage, introduction, diodes and transistors applications and testing procedures, solid state regulators, and engine, generator analyzer set operational testing and troubleshooting techniques.

Credit Recommendation: In the vocational certificate category, 12 semester hours in
MC-1715-0045

GROUND RADIO TECHNICIAN
Course Number: Not available
Location: Communication-Electronics School, San Diego, CA.
Length: 24 weeks (840 hours)
Exhibit Dates: 7/56-12/62
Objectives: To train enlisted personnel to install, inspect, maintain, and repair specific ground radio sets.
Instruction: Lectures and practical exercises in maintenance, high-frequency techniques, servicing procedures, and basic transistor theory as applied to radio receivers. Version 1. Lectures and practical exercises relating to operational, adjustment, alignment, and performance verification of systems. Techniques refer to specific military electronic equipment. Version 2. Includes mathematics through trigonometry, vector algebra, and complex numbers.
Credit Recommendation: Version 1: In the vocational certificate category, 3 semester hours in electronic equipment maintenance. 2 in electronic communication, systems (3/79). Version 2: In the vocational certificate category, 3 semester hours in radio and electronics (4/74), in the lower-division baccalaureate/associate degree category, 6 semester hours in mathematics, 8 in electronics (4/74), in the upper-division baccalaureate category, 3 semester hours in radio and electronics and credit in electrical laboratory on the basis of institutional evaluation (12/68).

MC-1715-0049
AVIATION ELECTRONICS OPERATOR
Course Number: None
Location: Communication-Electronics School, San Diego, CA.
Length: 5 weeks (175 hours)
Exhibit Dates: 7/58-12/68
Objectives: To train enlisted personnel to locate aircraft on radar plotting, radio, radar and air traffic control procedures. Version 1. Objectives: To train enlisted personnel to operate radio and radar used in tactical air control.
Instruction: Lectures and practical exercises in plotting techniques; basic radar theory, operation of radio and telephones, position indicators, height finders, direction finders, radio and radarjmning equipment, and aircraft position indicators. Version 1. Lectures and practical exercises relating to interfacing of analog systems with special failure-reporting procedures. Includes reviews of algebra and trigonometry, vector algebra, and complex numbers, system circuits, vacuum tubes, power supplies, antennas, and test equipment. Version 2. Includes mathematics through trigonometry, vector algebra, and complex numbers.
Credit Recommendation: Version 1: In the vocational certificate category, 3 semester hours in electronic equipment maintenance. 2 in electronic communication, systems (3/79). Version 2: In the vocational certificate category, 3 semester hours in radio and electronics (4/74), in the lower-division baccalaureate/associate degree category, 6 semester hours in mathematics, 8 in electronics (4/74), in the upper-division baccalaureate category, 3 semester hours in radio and electronics and credit in electrical laboratory on the basis of institutional evaluation (12/68).

MC-1715-0046
TACTICAL AIR COMMAND CENTRAL
TAC-COM TECHNICIAN
Course Number: None
Location: Air Ground Combat Training Center, Twentynine Palms, CA.
Length: 24 weeks (875 hours)
Exhibit Dates: 7/56-12/68
Objectives: To train enlisted personnel to install and maintain the CP-308/CP-1018 at the maintenance level.
Instruction: Lectures and practical exercises in maintenance test procedures, use of tools, digital and analog test equipment, integration of the analog and digital system, and additional credit in electrical laboratory on the basis of institutional evaluation (12/68).
Credit Recommendation: Credit is not recommended because of the military nature of the course (3/74).

MC-1715-0050
WEAPONS LOCATION EQUIPMENT REPAIR
Course Number: None
Location: Air Ground Combat Training Center, Twentynine Palms, CA.
Length: 4-5 weeks (140-173 hours)
Exhibit Dates: 1/72-7/72
Objectives: To train enlisted personnel to maintain and troubleshoot weapons location radar sets.
Instruction: Lectures and practical exercises in the maintenance and repair of weapons location radar sets. Includes fundamental concepts and technology of weapons location radars, planning, interpretation of radar schematics, circuit analyses, and alignment and troubleshooting. Credit Recommendation: In the vocational certificate category, 3 semester hours in communications technology (2/76).

MC-1715-0051
GROUND RADAR TECHNICIAN
Course Number: None
Location: Air Ground Combat Training Center, Twentynine Palms, CA.
Version 1: 2 Communication-Electronics School, Twentynine Palms, CA.
Version 2: Communication-Electronics School, Twentynine Palms, CA.
Objectives: To train personnel to install, inspect, maintain, and repair airborne radio equipment.
Instruction: All Versions. Lectures and practical exercises in tracing RF energy flows through the system, automatic frequency control, the power supplies, and system components. Version 3: Additional
Marine Corps

MC-1715-0056

MEDIUM ANTIAIRCRAFT ARTILLERY (AAA) FIRE CONTROL REPAIR

Course Number: None.

Location: Communication-Electronics School, San Diego, CA.

Length: 16 weeks (560 hours).

Exhibit Dates: 7/54-12/68.

Objectives: To train enlisted personnel who have backgrounds in electronics and basic radar principles to maintain and repair the M-33 fire control system.

Instruction: Lectures and practical exercises in the construction, repair, and maintenance of the M-33 fire control system, including detailed theoretical and practical subjects, and practical exercises in inspection and testing.

Credit Recommendation: In the vocational certification category, 4 semester hours in electricity and electronics (4/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics and communication systems; in the upper-division baccalaureate category, credit in electronics laboratory on the basis of institutional evaluation (4/74).
MC-1715-0059

RADIO REPAIR COURSE

COURSE EXHIBITS

MC-1715-0059

RADIO REPAIR COURSE

Course Number: None

Location: Air Ground Combat Training Center, Twenty-nine Palms, CA. Communication-Electronics School, San Diego, CA.

Length: Version 1: 12 weeks (443 hours) Version 2: 12 weeks (420-445 hours) Version 3: 12-17 weeks (455-607 hours)


Objectives: To train enlisted personnel who are graduates of basic electronics and radar fundamentals courses to repair aviation radar sets and associated equipment.

Instruction: Lectures and practical exercises in the installation, operation, adjustment, inspection, and maintenance of specific ground radar sets, including basic theory of radar sets and auxiliary test equipment, system circuit analysis, and operation of various subsystems of ground radar sets. Version 2 Includes introduction to digital computer principles and circuits, number systems and symbolic notation, and operation of a specific computer within a radar set.

Credit Recommendation: Version 1: In the vocational certificate category, 2 semester hours in communications technology (2/76). Version 2: In the vocational certificate category, credit in electricity or electronics on the basis of institutional evaluation (4/74), in the lower-division baccalaureate/associate degree category, credit in electricity or electronics on the basis of institutional evaluation (4/74). Version 3: In the vocational certificate category, 2 semester hours in electricity or electronics (4/74), in the lower-division baccalaureate/associate degree category, credit in electricity or electronics on the basis of institutional evaluation (4/74). Version 4: Insufficient data for evaluation (4/74)

MC-1715-0064

BASIC RADAR COURSE

Course Number: None

Location: Communication-Electronics School, San Diego, CA. Basic Electronics School, San Diego, CA.

Length: 13-14 weeks (455-525 hours)

Exhibit Dates: 7/56-3/79

Objectives: To train electronics technicians to test, align, troubleshoot, and maintain a basic radar set.

Instruction: Lectures and practical exercises in the testing, alignment, troubleshooting, and repair of a basic radar set, including basic radar theory, IFF and indicator group equipment, and alignment and troubleshooting procedures for specific equipment.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 4 semester hours in electronics (12/68).

MC-1715-0065

GROUND RADAR REPAIR COURSE

Course Number: None


Objectives: To train enlisted personnel in the fundamental concepts of radar principles.

Instruction: All Versions: Lectures and practical exercises in the theory of radar, pulse circuit components and equipment, digital computer fundamentals, and application to telephone or teletype systems.

Credit Recommendation: In the vocational certificate category, 6 semester hours in electrical laboratory, 6 in teletype and telephone repair (4/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in electrical laboratory, 3 in electromechanical technology (4/74), in the upper-division baccalaureate category, credit in electrical laboratory on the basis of institutional evaluation (4/74)

MC-1715-0066

CRYPTOGRAPHIC EQUIPMENT MAINTENANCE PREPARATORY COURSE

Course Number: None

Location: Communication-Electronics School Battalion, San Diego, CA.

Length: 6 weeks (210-240 hours)

Exhibit Dates: 7/62-12/68

Objectives: To train enlisted personnel to maintain AN/GSC-14(V) teletype equipment.

Instruction: Lectures and practical exercises in the construction and repair of cryptographic equipment, including basic electronics test equipment, circuit fundamentals, solid-state components, digital computer fundamentals, and circuit analysis, and teletypewriter repair and maintenance, including disassembly, inspection, reassembly, and testing.

Credit Recommendation: In the vocational certificate category, basic electronics, 3 in electromechanical technology (5/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in basic electronics, 2 in electromechanical technology (5/74)

MC-1715-0067

BASIC RADIO COURSE

Course Number: None

Location: Basic Electronics School, San Diego, CA. Communication-Electronics School Battalion, San Diego, CA.

Length: Version 1: 7 weeks (245 hours) Version 2: 10 weeks (350 hours)


Objectives: To train enlisted personnel with electronics backgrounds to install, operate, adjust, inspect and maintain specific ground radar sets.

Instruction: All Versions: Lectures and practical exercises in the installation, operation, adjustment, inspection, and maintenance of specific ground radar sets, including basic theory of radar sets and auxiliary test equipment, system circuit analysis, and operation of various subsystems of ground radar sets. Version 2 Includes introduction to digital computer principles and circuits, number systems and symbolic notation, and operation of a specific computer within a radar set.

Credit Recommendation: Version 1: In the vocational certificate category, 2 semester hours in electronics (4/74), in the lower-division baccalaureate/associate degree category, credit in electronics laboratory on the basis of institutional evaluation (4/74), in the upper-division baccalaureate category, 2 semester hours in electronics, and credit in electronic laboratory on the basis of institutional evaluation (4/74)

MC-1715-0064

RADIO FUNDAMENTALS COURSE

Course Number: None


Length: Version 1: 9-10 weeks (315-440 hours) Version 2: 5 weeks (175 hours)


Objectives: To train enlisted personnel with electronics backgrounds to install, operate, adjust, inspect and maintain specific ground radar sets.

Instruction: All Versions: Lectures and practical exercises in the installation, operation, adjustment, inspection, and maintenance of specific ground radar sets, including basic theory of radar sets and auxiliary test equipment, system circuit analysis, and operation of various subsystems of ground radar sets. Version 2 Includes introduction to digital computer principles and circuits, number systems and symbolic notation, and operation of a specific computer within a radar set.

Credit Recommendation: Version 1: In the vocational certificate category, 2 semester hours in electronics (4/74), in the lower-division baccalaureate/associate degree category, credit in electronics laboratory on the basis of institutional evaluation (4/74), in the upper-division baccalaureate category, 2 semester hours in electronics, and credit in electronic laboratory on the basis of institutional evaluation (4/74)
Objectives: To train enlisted personnel to inspect, test, and maintain basic radio equipment.

Instruction: Lectures and practical exercises in basic radio, including shop practices, radio instruments, and test equipment, circuit analysis, antennas, frequency modulation, servicing methods, soldiering techniques, types of bursts, preventive maintenance of radio equipment, resonators and electrical circuits, series, combination and parallel circuits, magnets, inductance, frequency modulation transmitters, noise and interference in FM Trans/Rec, theory and use of TS-297 and ME-25A/0, and troubleshooting.

Credit Recommendation: Version 1: In the vocational certificate category, 2 semester hours in electricity and radio (6/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in electricity and radio (12/68), in the upper-division baccalaureate category, 2 semester hours in electricity and radio, 2 in electrical engineering, and 2 in electrical and electronic parts, with tube tester and meters, and the function of hydraulic components and synchros.

MC-1715-0067
OPERATIONS OFFICER ELECTRONIC COUNTER-COUNTERMEASURES (ECCM)

Course Number: None
Location: Communication-Electronics School, San Diego, CA
Length: 3 weeks (105 hours)
Exhibit Dates: 5/66-12/68

Objectives: To train personnel in basic concepts of electronic countermeasures and counter-countermeasures.

Instruction: Lectures and practical exercises in electronic countermeasures and counter-countermeasures, including electronic warfare, operational countermeasures, active countermeasures recognition, advanced ECM techniques and developments, ECM transmitter techniques and devices, transmitter avoidance fixes, receiver techniques or nonsynchronous pulses, CFAR principles, transmitter fixes to increase signal-to-noise ratio and for synchronous pulse generation, and gain control.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (6/74)

MC-1715-0068
SPECIAL GROUND RADIO REPAIR

Course Number: None
Location: Communications-Electronics School, Battalion, San Diego, CA
Length: 20 weeks (700 hours)
Exhibit Dates: 7/58-12/68

Objectives: To train personnel in special ground radio repair.

Instruction: Lectures and practical exercises in special ground radio repair, including radarc instrument test equipment and servicing methods, circuit analysis of specific radio sets, theory of frequency modulation, antenna principles, maintenance and construction of antennas, shop practices, and electronic supply and shop management.

Credit Recommendation: Insufficient data for evaluation (6/74)

MC-1715-0069
SPECIAL ANTI-AIR WARFARE (AAW) BATTERMAN

Course Number: None
Location: Reserve Missile Training Detachment, Twentyonne Palms, CA
Length: 7 weeks (210 hours)
Exhibit Dates: 11/66-12/68

Objectives: To train enlisted personnel in the equipment and operation of the Hawk guided missile system.

Instruction: Lectures and practical exercises in the equipment and operation of the Hawk guided missile system.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (6/74)

MC-1715-0070
RADIO TELEGRAPH OPERATOR

Course Number: None
Location: Basic Electronics School, San Diego, CA, Communication-Electronics School, San Diego, CA
Length: 18 weeks (630 hours)
Exhibit Dates: 7/56-12/72

Objectives: To train enlisted personnel as radiotelegraph operators.

Instruction: Lectures and field exercises in the operation of and preventive maintenance on radio communications equipment. Topics include receive, sending, typing, communication procedure and security, radio fundamentals, and map reading.

Credit Recommendation: In the vocational certificate category, 3 semester hours in communications technology, 2 in the lower-division baccalaureate/associate degree category, 1 semester hour in typing (3/74), in the upper-division baccalaureate category, credit in typing on the basis of institutional evaluation (12/68)

MC-1715-0071
CH-46A AN. ALQ-52, V. NAVIGATIONAL TACAN MAINTENANCE

Course Number: Not available
Location: Air Maintenance Training Detachment, Jacksonville, NC, Air Maintenance Training Detachment, Santa Ana, CA
Length: 3 weeks (120 hours)
Exhibit Dates: 1/68-12/71

Objectives: To train enlisted personnel to maintain, modify, service, and operate a specific navigational system.

Instruction: Lectures and practical exercises in the operation and maintenance of a TACAN navigational system. Course includes primary power distribution, block-diagram analysis, channel servo error operation, TR RE theory, operation, video decoder, circuit analysis and theory, and troubleshooting procedures. Course is primarily directed to a specific navigational system and has limited general application.

Credit Recommendation: Insufficient data for evaluation (6/74)

MC-1715-0072
REMOTE CONTROL SYSTEM REPAIRMAN

Course Number: None
Location: Ordnance School, Quantico, VA
Length: 12 weeks (360 hours)
Exhibit Dates: 10/56-12/68

Objectives: To train enlisted personnel in remote control and fire control equipment maintenance.

Instruction: Lectures and practical exercises in the repair and maintenance of remote and fire control equipment. Topics include elementary trigonometry, a brief overview of Ohm's law, troubleshooting of electrical and electronic parts, with tube tester and meters, and the function of hydraulic components and synchros.

Credit Recommendation: In the vocational certificate category, 4 semester hours in electronics or electricity (6/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics or electricity (6/74)

MC-1715-0073
TELEPHONE SWITCHBOARD REPAIR

Course Number: None
Location: Air Ground Combat Training Center, Twentyonne Palms, CA, Communication-Electronics School, Twentyonne Palms, CA
Length: 1 semester hour (14 weeks, 420 hours)
Exhibit Dates: Version 1 9-11 weeks (334-416 hours)
Exhibit Dates: Version 2 8 weeks (280 hours)

Objectives: To train enlisted personnel to diagnose and repair service effects and perform routine maintenance on telephone subsets and switchboards.

Instruction: Lectures and practical exercises in the repair and maintenance of telephone subsets and switchboards. Course includes battery-powered subsets, sound and telephone theory, switchboard construction and operation, and basic electricity.

Credit Recommendation: Version 1: In the vocational certificate category, 3 semester hours in basic electricity, 3 in introduction to telephone communications (3/79); Version 2: In the vocational certificate category, 6 semester hours in communications technology, 4 in electronics laboratory (7/74), in the upper-division baccalaureate/associate degree category, 6 semester hours in communications technology, 4 in electronics laboratory (7/74); in the lower-division baccalaureate category, 3 semester hours in communications technology (7/74)

MC-1715-0075
TOW MISSLE MAINTENANCE

Course Number: None
Location: Schools Division, Albany, GA
Length: 5 weeks (196 hours)
Exhibit Dates: 3/72-Present

Objectives: To train enlisted personnel to maintain and repair the TOW missile launch system and ancillary equipment.

Instruction: Lectures and practical exercises in the launcher system, field test set, trainer set, and battery charger.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics laboratory (6/75)

MC-1715-0076
TELETYPEWRITER REPAIR (Teletype Repair)

Course Number: None
Location: Schools Division, Albany, GA
Length: 7 weeks (245 hours)
Exhibit Dates: 7/56-12/68

Objectives: To train enlisted personnel to maintain and repair the Teletype repair system.

Instruction: Lectures and practical exercises in the repair of the Teletype repair system, field test set, trainer set, and battery charger.

Credit Recommendation: Insufficient data for evaluation (6/74)

Marine Corps

MC-1715-0072
REMOTE CONTROL SYSTEM REPAIRMAN

Course Number: None
Location: Ordnance School, Quantico, VA
Length: 12 weeks (360 hours)
Exhibit Dates: 10/56-12/68

Objectives: To train enlisted personnel in remote control and fire control equipment maintenance.

Instruction: Lectures and practical exercises in the repair and maintenance of remote and fire control equipment. Topics include elementary trigonometry, a brief overview of Ohm's law, troubleshooting of electrical and electronic parts, with tube tester and meters, and the function of hydraulic components and synchros.

Credit Recommendation: In the vocational certificate category, 4 semester hours in electronics or electricity (6/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics or electricity (6/74)
1-64 COURSE EXHIBITS

Location: Air Ground Combat Training Center, Twentynine Palms, CA, Communication-Electronics School, Twentynine Palms, CA.

Length: Version 1: 14 weeks (543 hours) Version 2: 11 weeks (407 hours) Version 3: 19 weeks (658 hours)


Objectives: To train personnel to repair, operate, and maintain satellite teletype terminals.

Instruction: All Versions: Lectures and practical exercises in the repair, maintenance, and operation of several teletype terminals. Includes cover of basic electromechanical devices: Version 1: Includes basic electronics with Thomin's Law, series and parallel circuits, A.C. and D.C. theory, semiconductor fundamentals, and RLC circuits.

Credit Recommendation: Version 1: In the vocational certificate category, 3 semester hours in electromechanical maintenance and repair, 1 in electromechanical maintenance laboratory (3/79) Version 2: In the vocational certificate category, 8 semester hours in electromechanical technology (2/76) Version 3: In the vocational certificate category, 6 semester hours in basic electronics and 3 in teletype maintenance (6/75). In the lower-division baccalaureate/associate degree category, 3 semester hours in basic electronics (6/75)

MC-1715-0077 TACTICAL DATA COMMUNICATIONS CENTRAL REPAIRMAN

Course Number: None

Location: Communication-Electronics School, Twentynine Palms, CA, Air Ground Combat Training Center, Twentynine Palms, CA.

Length: Version 1: 16-18 weeks (606 hours) Version 2: 16 weeks (580 hours)


Objectives: To train enlisted personnel in the installation, maintenance, operation, testing and repair of specific military data communications equipment.

Instruction: Provides instruction at the repairman level on the Tactical Data Communications Central AN/TYQ-3 includes basic operated on a waveband, theory, analysis and transmission line theory, data flow, and systems-oriented tasks: Malfunction isolation is taught at the module or card level.

Credit Recommendation: Version 1: In the vocational certificate category, 2 semester hours in electrical laboratory (3/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in electrical operation, power units, system integration, and adjustment and trouble analysis (12/68)

MC-1715-0080 TERRIER MISSILE LAUNCHER SYSTEM REPAIRMAN

(Terrier Missile Launcher System Repair)

Course Number: None

Location: Ordnance School, Quantico, VA.

Length: 21 weeks (845-887 hours)

Exhibit Dates: 6/58-12/68

Objectives: To train enlisted personnel to repair and maintain the Terrier missile launcher, control system, and associated ordnance equipment.

Instruction: Lectures and practical exercises in components, maintenance, and repair of the Terrier missile launcher, including mechanical and hydraulic systems, electrical operation, power units, system integration, and adjustment and trouble analysis.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electrical laboratory (3/74), in the upper-division baccalaureate category, 2 semester hours in electrical laboratory on the basis of institutional evaluation (12/68)

MC-1715-0081 MOBILE DATA COMMUNICATIONS TERMINAL TECHNICIAN

Course Number: None

Location: Air Ground Combat Training Center, Twentynine Palms, CA, Communication-Electronics School, Twentynine Palms, CA.

Length: 11-14 weeks (418-532 hours)

Exhibit Dates: 7/75-Present

Objectives: To train enlisted personnel in the operation and maintenance of specific communications equipment.

Instruction: Provides in-depth instruction on the AN/TYQ-9 mobile data communications terminal with emphasis on performance testing and troubleshooting of the complete system.

Credit Recommendation: In the vocational certificate category, 12 semester hours in electronic/mechanical technology (3/76)

MC-1715-0082 TACTICAL AIR OPERATIONS CENTRAL TECHNICIAN (TAOC (AN/TYQ-2) Technician)

Course Number: None

Location: Air Ground Combat Training Center, Twentynine Palms, CA, Communication-Electronics School, Twentynine Palms, CA.

Length: Version 1: 35 weeks (1342 hours) Version 2: 30 weeks (1127 hours)


Objectives: To train enlisted personnel to install, operate, maintain, and repair specific military electronic equipment.

Instruction: Version 1: Lectures and practical exercises covering a specific digital analog data processing and control system. Practical experience is gained by performing system maintenance test procedures and analyzing and correcting instructor-inserted equipment malfunctions. Version 2: Lectures and practical exercises covering a comprehensive digital and analog data processing and control system, including a study of digital computers, radar, language processing, detection and video signals, data link communications, voice communications, and program processing and control associated with operational systems.

Credit Recommendation: Version 1: In the vocational certificate category, 3 semester hours in the use of electronic test equipment, 6 in electronic equipment maintenance (3/79) Version 2: In the vocational certificate category, 24 semester hours in electronics technology (2/76)

MC-1715-0083 HIGH FREQUENCY COMMUNICATION CENTRAL OPERATOR

Course Number: None

Location: Air Ground Combat Training Center, Twentynine Palms, CA, Communication-Electronics School, Twentynine Palms, CA.

Length: 4 weeks (146 hours)

Exhibit Dates: 7/75-Present

Objective: To train enlisted personnel in the operation of specific military electronic equipment.

Instruction: Provides instruction in the operation, installation, maintenance, and adjustment of communication equipment (AN/TSC-15).

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (3/79)

MC-1715-0084 RD-358 MAGNETIC TAPE SUBSYSTEM ACCELERATED

Course Number: None

Location: Air Ground Combat Training Center, Twentynine Palms, CA, Communication-Electronics School, Twentynine Palms, CA.

Length: 4 weeks (133 hours)

Exhibit Dates: 7/75-3/79

Objectives: To train enlisted personnel in the operation and maintenance of specific military communication equipment.

Instruction: Lectures and practical exercises in overall operation and microprogramming concepts, installation and operation of third generation digital tape processing equipment: corrective and preventive maintenance procedures: logic diagrams; and microprogram listings.

Credit Recommendation: In the upper-division baccalaureate category, 6 semester
Objectives: To train enlisted personnel as radio chiefs.

Instruction: All versions: Lectures and practical exercises in the duties of radio chiefs, including map reading, radio procedures, communications equipment, electronic fundamentals, supply, and maintenance

**Version 1:** Topics include effective reading, typing, organization and management, and employment

**Version 2:** Topics include effective reading, typing, management, and organization of personnel and employment

**Version 3:** Topics include communication and transmission security, basic message front, forms, classes and types of messages, generation of addresses, designation of address, generation of address, designation of address, publications, and adding address designators from publications, principles of preparing message texts and all forms of readings, preparation of frequency/usage reports, preparation of movement reports, numerical encryption, authentication, sending and receiving, communication procedures, communication center functions and technology, procedure, radios and associated equipment, aerial photograph reading, organization, employment and communications of the fleet Marine Force, staff functions, basic wire techniques for remote installations, and visual communication.

Credit Recommendation: In the vocational certificate category, 3 semester hours in telecommunication technology (2/76).

**MC-1717-0001**

**OPERATIONAL COMMUNICATIONS CHIEF**

Course Number: None.

Location: Communication-Electronics School, San Diego, CA.

Length: **Version 1:** 18 weeks (631 hours)

**Version 2:** 21 weeks (735 hours)

**Version 3:** 24 weeks (840 hours)

Exhibit Dates: **Version 1:** 7/62-12/71

**Version 2:** 7/62-12/71

**Version 3:** 7/58-6/62

Objectives: To train junior officers to perform the duties of a specialist in the supply, storage and transportation of all types of ammunition other than air-droppable types.

Instruction: Lectures and practical exercises on the classification of specific types of munitions, principles of supply, renovation, storage, transportation, and destruction of small arms and artillery ammunition, hand grenades, mortars, land mines, chemical and nuclear munitions.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in industrial management (5/74)

**MC-1717-0002**

**RADIO CHIEF**

Course Number: None.

Location: Air Ground Combat Training Center, Twentynine Palms, CA, Communication-Electronics School, San Diego, CA.

Length: **Version 1:** 12 weeks (451 hours)

**Version 2:** 17 weeks (600 hours)

**Version 3:** 20-22 weeks (700-770 hours)

Exhibit Dates: **Version 1:** 7/76-7/75

**Version 2:** 7/76-6/75

**Version 3:** 7/76-12/71

Objectives: To train enlisted personnel as radio chiefs.

Instruction: All versions: Lectures and practical exercises in the duties of radio chiefs, including map reading, radio procedures, communications equipment, electronic fundamentals, supply, and maintenance

**Version 1:** Topics include effective reading, typing, organization and management, and employment

**Version 2:** Topics include effective reading, typing, management, and organization of personnel and employment

**Version 3:** Topics include communication and transmission security, basic message front, forms, classes and types of messages, generation of addresses, designation of address, publications, and adding address designators from publications, principles of preparing message texts and all forms of readings, preparation of frequency/usage reports, preparation of movement reports, numerical encryption, authentication, sending and receiving, communication procedures, communication center functions and technology, procedure, radios and associated equipment, aerial photograph reading, organization, employment and communications of the fleet Marine Force, staff functions, basic wire techniques for remote installations, and visual communication.

Credit Recommendation: In the vocational certificate category, 3 semester hours in telecommunication technology (2/76).

**MC-1721-0002**

**OPTICAL INSTRUMENT REPAIRMAN (BASIC)**

Course Number: None.

Location: Ordnance School, Quantico, VA.

Length: 7-11 weeks (268-440 hours)

Exhibit Dates: 7/57-12/74

Objectives: To train enlisted personnel to repair optical instruments.

Instruction: Lectures and practical exercises in basic optics theory, ordnance materials usage for optics, cleaning and lubricating materials in instrument and timepiece repair, levels and level vials use and care, and the cleaning and adjustment of collimating telescopes, quadrants, mounts, binoculars, wrist watches, and fire control instruments.

Credit Recommendation: In the vocational certificate category, 4 semester hours in medical technology (optical option), 1 in watch repair (5/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in medical technology (optical option) (5/74)

**MC-1721-0003**

**INSTRUMENT REPAIR OFFICER**

Course Number: None.

Location: Ordnance School, Quantico, VA.

Length: **Version 1:** 5 weeks (195 hours)

**Version 2:** 7 weeks (300 hours)

Exhibit Dates: **Version 1:** 7/60-12/72. **Version 2:** 7/57-6/60

Objectives: To train lieutenants and war officers to supervise and control the maintenance and repair of optical sighting and nonelectronic fire control material.

Instruction: Lectures and practical exercises in the supervision and control of maintenance and repair of optical sighting and nonelectronic fire control material.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (8/74)

**MC-1721-0004**

**OPTICAL INSTRUMENT REPAIRMAN (ADVANCED)**

Course Number: None.

Location: Ordnance School, Quantico, VA.

Length: 4 weeks (180 hours)

Exhibit Dates: 7/58-12/72
COURSE EXHIBITS

Objectives: To train noncommissioned officers to inspect, maintain, and repair optical sighting and nonelectrical fire control equipment and repair of optical sighting and fire control instruments.

Instruction: Lectures and practical exercises in electro-optical sighting and nonelectrical fire control techniques on the basis of institutional evaluation.

Length: 12-14 weeks (480-520 hours)
Exhibit Dates: 7/37-12/72

Objectives: To train enlisted personnel in the repair of optical sighting and fire control equipment.

Instruction: Lectures and practical exercises in repair shop procedures and the repair of optical instruments, mountings for optical instruments, and auxiliary sighting and fire control equipment.

Length: 14 weeks (420 hours)
Exhibit Dates: 6/54-12/72

Objectives: To train shop machinists in advanced machine shop techniques, and to qualify them for higher supervisory, mechanical, or instructional assignments.

Instruction: Lectures and practical exercises in advanced machine shop techniques, including shop instruments, and practical exercises in blueprints reading and metalworking, blueprint reading, machine tools, machine shop practice, heat treatment of metals, and welding.

Length: 6 weeks (208 hours)
Exhibit Dates: 7/67-12/72

Objectives: To train enlisted personnel in basic welding and sheet metal welding tasks of the fleet marine force.

Instruction: Lectures and practical exercises in basic welding and sheet metal welding, including welding equipment and tools, fundamentals of welding technology, theory and technique of oxy-acetylene, electric arc and inert-gas welding, basic safety practices, hazards, tools and machinery, lines and line construction; shop machining; punching, drilling and riveting; sheet metal layout; notching, edges and seams; and sheet metal projects.

Credit Recommendation: In the vocational certificate category, 8 semester hours in machine trades technology (5/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in machine trades or machine technology (5/74), in the advanced metalworking and supervisory category, 2 semester hours in machine trades or machine technology (5/74).

Objectives: To train enlisted personnel as repair shop machinists.

Instruction: Lectures and practical exercises in applied mathematics, drawing interpretation, and use of technical manuals; simple measuring instruments theory and operation, hand tools, operation, lathe, shaper, and milling machine operation, heat treatment of metals, oxy-acetylene, electric arc, and inert-gas welding equipment set up and operation, ordnance, automotive, and aviation equipment maintenance.

Credit Recommendation: In the vocational certificate category, 8 semester hours in machine trades technology (5/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in machine trades technology (5/74), in the upper-division baccalaureate category, 2 semester hours in machine trades technology (5/74).

MC-1728-0001

MARINE SECURITY GUARD

Course Number: None
Location: Marine Security Guard Battalion, Henderson Hall, Arlington, VA.
Length: 5 weeks (150 hours)
Exhibit Dates: 6/67-Present

Objectives: To screen, train, and motivate selected personnel for assignment as Marine security guards with the Department of State.

Instruction: Security procedures; protection of lives and property; personal conduct living abroad; training and administration.

Credit Recommendation: In the upper-division baccalaureate category, credit in protective services on the basis of demonstrated skills and/or institutional evaluation (12/68).

MC-1728-0002

INTERROGATION OF PRISONERS OF WAR

Course Number: None
Location: Training School, Cp Lejeune, NC.
Length: 3-4 weeks (107 hours)
Exhibit Dates: 4/63-12/68

Objectives: To train selected personnel in interrogation methods.

Instruction: Combat intelligence operations, interrogations principles of interrogation, documents and reports, foreign language interrogations.

Credit Recommendation: Insufficient data for evaluation (11/73).

MC-1728-0003

ADVANCED LEGAL SERVICES

Course Number: None
Location: Schools Battalion, Marine Corps Base, Cp Pendleton, SC, Schools Battalion, Marine Corps Base, Cp Lejeune, NC.
Length: 3 weeks (70 hours)
Exhibit Dates: 5/74-Present

Objectives: To provide senior enlisted personnel with an overview of the administration of legal assistant programs.

Instruction: Lectures and practical exercises in legal administration of investigations, appellate petitions, actions and reviews, administrative discovery procedures, civil processes and law library.

Credit Recommendation: In the vocational certificate category, 1 semester hour as an elective in paralegal training (11/73).

MC-1728-0004
LEGAL SERVICES MAN / REPORTER, PHASE I AND PHASE II
(Basic Legal Administration) (Legal Services Man)

Operational Numbers None.
Location: Schools Battalion, Cp Pendleton, CA.
Length: 5 weeks (220 hours).
Exhibit Dates: 6/76-Present.

Objectives: To provide enlisted personnel with an introduction to court martial investigations, processing, and transcription of proceedings.

Instruction: Phase I consists of lectures and practical exercises in administrative duties, including legal correspondence; utilization of appropriate reference material; maintenance of files and directives; preparation of charges for administrative discharges, legal assistance; overview of civil processes, including proper use of recording and transcribing equipment.

Credit Recommendation: In the vocational certificate category, 2 semester hours in paralegal elective (11/75).

Version 2: 1/59-12/68.

Exhibit Dates: 4/73-Present.
Length: 10-11 weeks (334 hours).

Location: Service Support Schools, Cp Lejeune, NC.

Objectives: To provide train personnel in leadership behavior essential to effective management and training techniques for a large baking operation.

Instruction: Leadership training for chief cooks, mess personnel, and bakers, with emphasis on menu planning and mdft production; good sections on supervisory training.

Credit Recommendation: In the vocational certificate category, 3 semester hours in hotel, restaurant, and institutional management (12/73); in the lower-division baccalaureate/associate degree category, 3 semester hours in hotel, restaurant, and institutional management (12/73); in the upper-division baccalaureate category, 3 semester hours in institutional management (12/68).

MC-1729-0003
ADVANCED COOK
Course Number: None.
Location: Supply Schools, Cp Lejeune, NC.
Length: 14 weeks (434 hours).
Exhibit Dates: 1/59-12/68.

Objectives: To provide cooks with advanced technical and management skills, and to provide them with refresher training in cooking and baking.

Instruction: Basic instruction in all phases of hotel, restaurant, and institutional management and training techniques for a quantity food service operation.

Credit Recommendation: In the vocational certificate category, 4 semester hours in hotel, restaurant, and institutional management (12/73); in the lower-division baccalaureate/associate degree category, 4 semester hours in hotel, restaurant, and institutional management (12/73); in the upper-division baccalaureate category, 4 semester hours in institutional management (12/73).

MC-1729-0004
FOOD SERVICE STAFF NONCOMMISSIONED OFFICER (NCO) LEADERSHIP
Course Number: None.
Location: Service Support Schools, Cp Lejeune, NC.
Length: 8 weeks (263-271 hours).
Exhibit Dates: 8/67-12/68.

Objectives: To train personnel to plan, prepare, and serve gourmet meals, with emphasis on management and training techniques for a large baking operation.

Instruction: Menu planning; preparation and service of gourmet meals, seating arrangements and military protocol; table setting, appetizers.

Credit Recommendation: In the vocational certificate category, 2 semester hours in gourmet cookery (12/73), in the lower-division baccalaureate/associate degree category, 3 semester hours in quantity food production management (12/68).

MC-1729-0007
ADVANCED SPECIAL MEALS TRAINING
Course Number: None.
Location: Supply Schools, Cp Lejeune, NC.
Length: 8 weeks (263-271 hours).
Exhibit Dates: 8/67-12/68.

Objectives: To train personnel to plan, prepare, and serve gourmet meals, with emphasis on management and training techniques for a large baking operation.

Instruction: Menu planning; preparation and service of gourmet meals, seating arrangements and military protocol; table setting, appetizers.

Credit Recommendation: In the vocational certificate category, 2 semester hours in gourmet cookery (12/73), in the lower-division baccalaureate/associate degree category, 3 semester hours in quantity food production management (12/68).

MC-1729-0005
LEGAL SERVICES MAN / REPORTER, PHASE 1
(Legal Services Reporter SPSCM (Closed Microphone))

Course Number: None.
Location: Schools Battalion, Cp Pendleton, CA.
Length: 4 weeks (153 hours).
Exhibit Dates: 6/76-Present.

Objectives: To provide advanced personnel with introductory concepts in transcription of court martial proceedings.

Instruction: Phase I consists of lectures and practical exercises in the proper use of legal-service-reporting procedures and processes, including proper use of recording and transcribing equipment.

Credit Recommendation: In the vocational certificate category, 2 semester hours in paralegal elective (11/75).

MC-1729-0002
ADVANCED STEWARDS
Course Number: None.
Location: Supply Schools, Cp Lejeune, NC.
Length: 12 weeks (378 hours).
Exhibit Dates: 1/59-12/68.

Objectives: To train stewards in advanced technical and management skills, and to provide them with refresher training in cooking and baking.

Instruction: Basic instruction in all phases of hotel, restaurant, and institutional management and training techniques for a quantity food service operation.

Credit Recommendation: In the vocational certificate category, 3 semester hours in hotel, restaurant, and institutional management (12/73); in the lower-division baccalaureate/associate degree category, 3 semester hours in hotel, restaurant, and institutional management (12/73); in the upper-division baccalaureate category, 3 semester hours in institutional management (12/68).

MC-1729-0003
ADVANCED COOK
Course Number: None.
Location: Supply Schools, Cp Lejeune, NC.
Length: 14 weeks (434 hours).
Exhibit Dates: 1/59-12/68.

Objectives: To provide cooks with advanced technical and management skills required to perform duties as chief cooks.

Instruction: Comparable to a volume food service course at the college level, with equal emphasis on food production and management of a food service operation.

Credit Recommendation: In the vocational certificate category, 4 semester hours in hotel, restaurant, and institutional management (12/73); in the lower-division baccalaureate/associate degree category, 4 semester hours in hotel, restaurant, and institutional management (12/73); in the upper-division baccalaureate category, 4 semester hours in hotel, restaurant, and institutional management (12/73).

MC-1729-0004
FOOD SERVICE STAFF NONCOMMISSIONED OFFICER (NCO) LEADERSHIP
Course Number: None.
Location: Service Support Schools, Cp Lejeune, NC.
Length: 8 weeks (256 hours).
Exhibit Dates: 4/73-Present.

Objectives: To train advanced food service personnel in the principles and techniques utilizing lecture, demonstration, and operational settings. Specific instruction in food sanitation, bakery principles and techniques and practices as applied to the production of bread, sweet dough, cakes, pies, and cookies, care and operation of equipment and operational procedures specific to bakery conditions.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in basic bakery production (4/76).

Version 2: In the vocational certificate category, 3 semester hours in baking (12/73); in the lower-division baccalaureate/associate degree category, 3 semester hours in baking (12/73); in the upper-division baccalaureate category, 3 semester hours in baking (12/73).

Marine Corps

1-67

In the lower-division baccalaureate/associate degree category, 3 semester hours in operational management (4/76).

MC-1729-0005
FOOD SERVICE NONCOMMISSIONED OFFICER (NCO) LEADERSHIP
Course Number: None.
Location: Service Support Schools, Cp Lejeune, NC.
Length: 11 weeks (372 hours).
Exhibit Dates: 7/72-Present.

Objectives: To train food service personnel in leadership behavior essential to effective management and training techniques for a volume food service operation.

Instruction: Leadership training for chief cooks, mess personnel, and bakers, with emphasis on menu planning and mdft production; good sections on supervisory training.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 4 semester hours in quantity food production management (4/76).

MC-1729-0006
BAKERY NONCOMMISSIONED OFFICER (NCO) LEADERSHIP
Course Number: None.
Location: Service Support Schools, Cp Lejeune, NC.
Length: 10-11 weeks (334 hours).
Exhibit Dates: 4/73-Present.

Objectives: To train food service personnel in leadership behavior essential to effective management and training techniques for a large baking operation.

Instruction: Leadership training for bakery personnel at mid-management levels to include communication and supervisory skills, and training and skills and supervisory techniques. Also includes laboratory and operational exercises under supervision in the application of techniques taught.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 4 semester hours in quantity food production management (4/76).

MC-1729-0007
ADVANCED SPECIAL MEALS TRAINING
Course Number: None.
Location: Service Support Schools, Cp Lejeune, NC.
Length: 8 weeks (263-271 hours).
Exhibit Dates: 8/67-12/68.

Objectives: To train personnel to plan, prepare, and serve gourmet meals, with emphasis on management and training techniques for a large baking operation.

Instruction: Menu planning; preparation and service of gourmet meals, seating arrangements and military protocol; table setting, appetizers.

Credit Recommendation: In the vocational certificate category, 2 semester hours in gourmet cookery (12/73), in the lower-division baccalaureate/associate degree category, 3 semester hours in quantity food production management (4/76).
MC-1729-0008
FOOD SERVICE MANAGEMENT
Course Number: None.
Location: Supply Schools, Cpl. Lejeune, NC.
Length: 7 weeks (245 hours).
Exhibit Dates: 7/66-12/68
Objectives: To train personnel in the management, organization, and administration of mess facilities.
Instruction: Food service and subsistence management; accounting; supervision of mess facilities; nutrition and menu planning; field mess operations; disaster feeding.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 4 semester hours in food service management (12/73); in the upper-division baccalaureate category, 4 semester hours in food service management (12/68).

MC-1729-0009
BASIC FOOD SERVICE
Course Number: None.
Location: Service Support Schools, Cpl. Lejeune, NC.
Length: 9-11 weeks (305-365 hours).
Exhibit Dates: 5/66-Present
Objectives: Using realistic environmental and definitive performance objectives based on task analysis, to teach the basic cooking skills with the fundamental technical behavior essential to the performance of a cook in a garrison or field mess facility.
Instruction: The introduction and development of basic motor skills as related to food preparation training of personnel in the preparation and organization of food, with emphasis on skills in the preparation and serving of food.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 4 semester hours in food service management (12/73); in the upper-division baccalaureate category, 4 semester hours in food service management (12/68).

MC-1729-0010
ADVANCED FOOD SERVICE
Course Number: None.
Location: Service Support Schools, Cpl. Lejeune, NC.
Length: 8 weeks (280 hours).
Exhibit Dates: 7/66-12/68
Objectives: To train personnel in mess administration and management principles, and to provide them with a working knowledge of the latest techniques of food preparation and service.
Instruction: Operation of equipment, menu planning, formula conversion, portion control, cost accounting, sanitation, emphasis on supervision of mess facilities, nutrition and meal planning, field operation, and cooking techniques.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in food preparation (4/76).

MC-1729-0011
BAKERY MANAGEMENT
Course Number: None.
Location: Supply Schools, Cpl. Lejeune, NC.
Length: 4 weeks (140 hours).
Exhibit Dates: 7/66-12/68.
Objectives: To train commissioned officers to manage post or field bakeries.
Instruction: The course develops a knowledge of management skills with direct application to bakery operations. Included in the course is sanitation, preparation, cost accounting, and techniques used to judge the quality of food production.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in bakery management (12/73), in the upper-division baccalaureate category, 2 semester hours in bakery management (12/68).

MC-1729-0012
ADVANCED BAKER
Course Number: None.
Location: Supply Schools, Cpl. Lejeune, NC.
Length: 8 weeks (280 hours).
Exhibit Dates: 7/66-12/68.
Objectives: To train sergeants to manage Post and Field Bakeries.
Instruction: The course develops a knowledge of management skills with direct application to bakery operations. Included in the course are sanitation, preparation, cost accounting, and subjects used to enhance the ability to judge the quality of food production.
Credit Recommendation: In the vocational certificate category, 2 semester hours in bakery management (12/73), in the lower-division baccalaureate/associate degree category, 2 semester hours in bakery organization and management (12/73), in the lower-division baccalaureate/associate degree category, 2 semester hours in bakery organization and management (12/68), in the upper-division baccalaureate category, 2 semester hours in bakery organization and management (12/68).

MC-1729-0013
FOOD SERVICE
Course Number: None.
Location: Supply Schools, Cpl. Lejeune, NC.
Length: 12 weeks (415 hours).
Exhibit Dates: 7/66-12/68.
Objectives: To provide advanced, formal training in food service operations to personnel with basic on-the-job experience in food services.
Instruction: Fundamentals of mess administration and operation, cooking, meat cutting, baking, nutrition and menu planning, military leadership emphasizing supervisory abilities.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 6 semester hours in organizational management (12/73), in the upper-division baccalaureate category, 6 semester hours in institutional management (12/68).

MC-1729-0014
STEWARD
Course Number: None.
Location: Supply School, Cpl. Lejeune, NC.
Length: 14-16 weeks (488-496 hours).
Exhibit Dates: 1/59-12/68.
Objectives: To provide basic instruction in food services, with emphasis on skills in preparing and serving food in garrison and mess.
Instruction: Basic food preparation and service, practical skill development in mess operations and dining room service for formal and informal meals.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in institutional management (12/73); in the upper-division baccalaureate category, 3 semester hours in institutional management (12/68).

MC-1729-0015
FOOD SERVICE OFFICER
Course Number: None.
Location: Supply School, Cpl. Lejeune, NC.
Length: 5 weeks (192 hours).
Exhibit Dates: 7/66-12/68.
Objectives: To train food service officers in subsistence management.
Instruction: Lectures and practical exercises in the duties of food service officers and in subsistence management, including organization and administration of individual and consolidated mess systems; management of food, with emphasis on meat cutting, baking, food preparation, and serving; field mess operations, including rationing; and mobilization meals, including flight, troop, train, and disaster feeding.
Credit Recommendation: In the vocational certificate category, 3 semester hours in food preparation, 3 in food service management or human relationships, 3 in food and beverage cost control (7/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in food preparation, 3 in food service management or human relationships, 3 in food and beverage cost control (7/74), in the upper-division baccalaureate category, 3 semester hours in food service management (12/68).

MC-1729-0016
SPECIAL MESS TRAINING LEADERSHIP
Course Number: None.
Location: Service Support Schools, Cpl. Lejeune, NC.
Length: 10 weeks (344 hours).
Exhibit Dates: 4/73-Present.
Objectives: To train cooks as senior cooks.
Instruction: Lectures and practical exercises in the duties of senior cook specialists, including management and leadership, menu planning, preparation, cooking, and operation of food and mess facilities and functions.
Credit Recommendation: In the vocational certificate category, 6 semester hours in food preparation (3 in food preparation and 3 in baking) or in catering, 3 in food service management, in personnel management, in food and beverage purchasing (7/74); in the lower-division baccalaureate/associate degree category, 6 semester hours in food preparation (3 in food preparation and 3 in catering) or in catering, 3 in food service management, 3 in personnel management, 3 in food and beverage purchasing (7/74), in the upper-division baccalaureate category, 3 se-
MC-1729-0017

**BASIC SPECIALIST TRAINING COOK** (C-2, Specialist Training)

Course Number: None

Location: Service Support School, Cpt Lejeune, NC

Length: 9-10 weeks (280-318 hours)

Exhibit Dates: 5/72-6/73

Objectives: To train enlisted personnel to prepare and serve food and to operate organizational mess facilities.

Instruction: Lectures and practical exercises in the preparation and service of food and the operation of organizational mess facilities. Includes: sanitation and storage; kitchen equipment, stock control; principles of baking; function of ingredients, mixing procedures, preparation of breads, cakes, cookies and pies; relationships of foods, use of seasonings, meat, poultry, seafood, vegetable, soup and salad cookery, and field mess operations and equipment, including maintenance and troubleshooting procedures.

Credit Recommendation: In the vocational certificate category, 6 semester hours in food preparation (or 3 in introduction to food service or baking and 3 in food preparation), 3 in food management (7/74); in the lower-division baccalaureate/associate degree category, 6 semester hours in food preparation (or 3 in introduction to food service or baking and 3 in food preparation), 3 in food management (7/74), in the upper-division baccalaureate category, 3 semester hours in food preparation, 3 in food management (7/74).

---

MC-1729-0018

**SPECIAL MESS TRAINING**

Course Number: None

Location: Service Support School, Cpt Lejeune, NC

Length: 8-10 weeks (280-318 hours)

Exhibit Dates: 5/71-6/73

Objectives: To provide advanced food service personnel with supervised operational training designed to perfect their skills and techniques as mid-level managers.

Instruction: Lectures and practical exercises in special mess training. Course includes dining room procedure, preparation of meals, and general officers' field mess.

Credit Recommendation: In the upper-division baccalaureate category, 3 semester hours in food service management or 10 full-time work-study requirement (4/76).

---

MC-1729-0019

**SPECIAL MESS LEADERSHIP TRAINING**

Course Number: None

Location: Service Support School, Cpt Lejeune, NC

Length: 8-10 weeks

Exhibit Dates: 8/67-6/73

Objectives: To provide advanced food service personnel with a supervised practical experience designed to perfect their techniques and skills as upper-level managers.

Instruction: Rotation of training through various portions in management under supervision in operational installations. Similar to management training or work-study college courses.

Credit Recommendation: In the upper-division baccalaureate category, 4 semester hours in food service management or to fulfill work-study requirement (4/76).

---

MC-1730-0001

**REFRIGERATION SPECIALIST**

Course Number: None

Location: Engineer School Battalion, Cpt Lejeune, NC

Length: 71/2 weeks (430 hours)

Exhibit Dates: 7/55-12/68

Objectives: To train enlisted personnel to install, maintain, and make minor repairs on refrigeration and accessory equipment.

Instruction: Lectures and practical exercises in the installation and repair of refrigeration equipment. Course includes the theory of refrigeration and elements of electricity and the application to actual equipment; and the use of filters and refrigerant piping.

Credit Recommendation: In the vocational certificate category, 15 semester hours in refrigeration theory—fundamentals of electricity, refrigeration controls repair, and troubleshooting (5/74), in the lower-division baccalaureate/associate degree category, 6 semester hours in refrigeration theory—fundamentals of electricity, refrigeration controls repair and troubleshooting (5/74).

---

MC-1730-0002

1. **BASIC REFRIGERATION MECHANIC**

2. **REFRIGERATION MECHANIC**

Course Number: None

Location: Engineer School, Cpt Lejeune, NC

Length: Version 1: 1-4 weeks (160 hours)

Version 2: 11-12 weeks (330-334 hours)


Version 2: 7/58-8/68

Objectives: To train enlisted personnel as refrigeration mechanics.

Instruction: All Versions: Lectures and practical exercises in refrigeration equipment maintenance and operation, including electrical theory and circuitry, principles of refrigeration, refrigeration systems and components, and assembly and troubleshooting of specific refrigeration equipment.

Version 1: Includes mathematics; internal-combustion engine principles as applied to refrigeration, air-conditioning and ventilation systems, and decontamination materials and procedures.

Credit Recommendation: Version 1. In the vocational certificate category, 8 semester hours in refrigeration (5/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in automotive mechanics (4/74); in the vocational certificate category, 2 semester hours in driver education programs (4/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in driver education programs (4/74).

---

MC-2204-0001

**DRILL INSTRUCTOR**

Course Number: None

Location: Recruit Training Regiment, San Diego, CA

Length: 5-9 weeks (195-381 hours)

Exhibit Dates: 1/73-9/69

Objectives: To prepare selected noncommissioned officers for duty as drill instructors.

Instruction: Instructional methods, marksmanship, close-order drill, physical training, leadership development; rules, regulations, and procedures of recruit training.

Credit Recommendation: Credit is not recommended because of the military nature of the course (1/74).

---

MC-2204-0002

**AMPHIBIAN VEHICLE OFFICER**

Course Number: None

Location: Recruiting Battalion, Cpt Pendleton, CA

Length: 4-5 weeks (148-203 hours)

Exhibit Dates: 7/74-Present

Objectives: To familiarize students with amphibian tracked vehicles and provide a working knowledge of the duties and responsibilities of an amphibian tracked vehicle platoon commander.

Instruction: Topics include communications, introduction to amphibian vehicles; vehicle operation, maintenance, inspection.
and safety, armament stations, and field subjects and tactics.

**Credit Recommendation:** Credit is not recommended because of the military-specific nature of the course (8/77).

**MC-2204-0003**

**WOMEN OFFICERS TRAINING (SENIOR)**

**Course Number:** None

**Location:** Basic School, Quantico, VA

**Length:** 5-6 weeks (264 hours)

**Exhibit Dates:** 8/55-12/68

**Objectives:** To provide students with theoretical and practical military instruction necessary to prepare them for appointment as commissioned officers.

**Instruction:** Lectures on leadership, communications, combat intelligence, military operations, drills, inspections, and ceremonies, and physical training and conditioning.

**Credit Recommendation:** In the upper-division baccalaureate category, 2 semester hours in business organization and management, 2 in leadership or group organization (12/68).

**MC-2204-0004**

**MARINE WARRANT OFFICER, BASIC**

**Course Number:** None

**Location:** The Basic School, Quantico, VA

**Length:** 10-11 weeks (340-410 hours)

**Exhibit Dates:** 1/56-Present

**Objectives:** To broaden the general military proficiency of newly appointed warrant officers.

**Instruction:** Lectures and practical exercises in leadership, techniques, physical training, map reading, communication, infantry tactics and intelligence weapons, military law, and organization and staff functioning.

**Credit Recommendation:** In the upper-division baccalaureate category, 3 semester hours in advanced military science (12/68).

**MC-2204-0005**

**WOMEN OFFICER TRAINING (JUNIOR)**

**Course Number:** None

**Location:** Marine Corps Schools, Quantico, VA; Basic School, Quantico, VA

**Length:** 2-3.5 weeks (264 hours)

**Exhibit Dates:** 6/55-12/68

**Objectives:** To provide students with a basic theoretical and practical understanding of military service in the Marine Corps.

**Instruction:** Lectures on leadership, drill, command, inspections, and ceremonies, military operations, military customs, courtesies, traditions, and justice, communications, organization, mission, and history of armed services.

**Credit Recommendation:** In the upper-division baccalaureate category, 2 semester hours in business organization and management, 2 in leadership or group organization (12/68).

**MC-2204-0006**

**MOUNTAIN LEADERSHIP TRAINING, WINTER**

**Course Number:** None

**Location:** Cold Weather Training Center, Bridgeport, CA

**Length:** 4 weeks (168 hours)

**Exhibit Dates:** 1/59-12/68

**Objectives:** To teach selected personnel to function effectively in cold and mountainous terrains.

**Instruction:** Lectures and practical exercises in leadership requirements imposed by cold weather and mountainous terrain, preparation of units, features and limitations of supporting arms and services, tactics involved in security, patrols, and attacks, and survival training.

**Credit Recommendation:** In the upper-division baccalaureate category, 2 semester hours in camping and survival training (12/68).

**MC-2204-0007**

**MOUNTAIN LEADERSHIP TRAINING, SUMMER**

**Course Number:** None

**Location:** Cold Weather Training Center, Bridgeport, CA

**Length:** 4 weeks (173 hours)

**Exhibit Dates:** 1/59-12/68

**Objectives:** To train selected personnel to conduct small-unit operations in mountainous and cold weather environments.

**Instruction:** Lectures and practical exercises in leadership in cold weather operations, development of a training program, survival training, care of weapons, arctic transportation, mountain engineering, communications, and land navigation.

**Credit Recommendation:** In the upper-division baccalaureate category, 2 semester hours in camping and survival training (12/68).

**MC-2204-0008**

**INFANTRY REPLACEMENT AND INDIVIDUAL COMBAT TRAINING**

**Course Number:** None

**Location:** Headquarters, Marine Corps Base, C.P. Pendleton, CA

**Length:** 2-3.5 weeks (169 hours)

**Exhibit Dates:** 7/58-12/68

**Objectives:** To provide enlisted personnel with basic infantry training.

**Instruction:** Lectures and practical exercises in individual combat training, including field fortifications, communications, amphibious training, weapons, and basic tactics.

**Credit Recommendation:** Credit is not recommended because of the military nature of the course (12/68).

**MC-2204-0009**

1. **WARRANT OFFICER CANDIDATE SCREENING (Warrant Officer-Candidate)**

2. **WARRANT OFFICER CANDIDATE SCREENING**

**Course Number:** None

**Location:** All Versions: Officer Candidates School, Quantico, VA; Version 1: Training and Test Regiment, Quantico, VA

**Length:** Version 1: 7-10 weeks (262-301 hours), Version 2: 9 weeks (240-281 hours)


**Objectives:** To train enlisted personnel to become warrant officers.

**Instruction:** Lectures and practical exercises in leadership, weapons familiarization, physical training, and small-unit tactics.

**Credit Recommendation:** Version 1: Credit is not recommended because of the military nature of the course.

**MC-2204-0010**

**FIELD ARTILLERY BATTERYMAN**

**Course Number:** Not available

**Location:** Artillery School, C.P. Pendleton, CA.

**Length:** 4 weeks (138 hours)

**Exhibit Dates:** 10/73-12/73

**Objectives:** To train enlisted personnel to perform field artillery batterymen.

**Instruction:** Lectures and practical exercises on the mission, organization, function, and maintenance of an artillery battery and its weapons, including laying and referring, reconnaissance, selection and occupation of positions, field firing exercises, and fire control equipment.

**Credit Recommendation:** Credit is not recommended because of the military nature of the course (5/74).

**MC-2204-0011**

**REDEYE GUNNER—PLATOON TRAINING (ABBREVIATED COURSE)**

**Course Number:** None.

**Location:** Art Reserve Missile Training Detachment, Twentynine Palms, CA;

**Length:** 3 weeks (132 hours)

**Exhibit Dates:** 8/66-6/70

**Objectives:** To train enlisted personnel to perform as gunners on the Redeye air defense weapon system.

**Instruction:** Lectures and practical exercises in the operations and maintenance of the Redeye missile system, including missile firing, identification of friendly and enemy aircraft, tactical employment of weapons, and air control and tactical doctrine.

**Credit Recommendation:** Credit is not recommended because of the military nature of the course (5/74).

**MC-2204-0012**

**REDEYE-GUNNER—PLATOON TRAINING (Redeye Gunner/Operator)**

**Course Number:** None.

**Location:** Air Reserve Missile Training Detachment, Twentynine Palms, CA;

**Length:** 4-9 weeks (135-321 hours)

**Exhibit Dates:** 8/66-3/79

**Objectives:** To train enlisted personnel to perform as gunners on the Redeye air defense weapon system.

**Instruction:** Lectures and practical exercises in the operations and maintenance of the Redeye missile system, including missile firing, identification of friendly and enemy aircraft, tactical employment of weapons, air control and tactical doctrine, map reading, communications, compass operation, tracking and counterintelligence, and search and scan procedures.

**Credit Recommendation:** Credit is not recommended because of the military nature of the course (12/68).

**MC-2204-0013**

**TACTICAL AIR OPERATIONS CENTRAL (TAOC) WEAPONS CONTROLLER/OPTERATOR (Weapons Controller/Opterator)**

**Course Number:** None.

**Location:** Communication-Electronics School, San Diego, CA.

**Length:** 5-6 weeks (175-210 hours)

**Exhibit Dates:** 5/66-12/73

**Objectives:** To train officers and enlisted personnel to operate tactical data systems.

**Instruction:** Lectures and practical exercises in tactical data system introduction, universal console introduction, advanced simulated exercises, advanced air control techniques and procedures, central operator hut operation and supervision, AN/TYA-9.
target acquisition, and aircraft tracking and identification.

**Credit Recommendation:** Credit is not recommended because of the military nature of the course (12/68)

**MC-2204-0014**

**SEA DUTY INDUCTORY**

*(Sea School)*

**Course Number:** None

**Location:** Version 1: Recruiting Depot, San Diego, CA. Version 2: Sea School, Portsmouth, VA.

**Length:** 3-4 weeks (101-134 hours).

**Exhibit Dates:** 7/58-Present.

**Objectives:** To train enlisted personnel to qualify for military sea duty assignments.

**Instruction:** Lectures and practical exercises on duties and shipboard life of a ship's crew, seamanship, navigation, damage control and fire fighting, common core elements of the course (6/75).

**Credit Recommendation:** Credit is not recommended because of the military nature of the course (5/74).

**MC-2204-0018**

**WOMAN MARINE NONCOMMISSIONED OFFICER (NCO) LEADERSHIP**

**Course Number:** None.

**Location:** Woman Officer School, Quantico, VA; Woman Marine Detachment, Quantico, VA; Woman Marine Training Detachment, Quantico, VA.

**Length:** 4 weeks (138-150 hours)

**Exhibit Dates:** 12/68-Present.

**Objectives:** To train enlisted Marines for service as a Marine officer.

**Instruction:** Lectures in leadership training for women Marine noncommissioned officers. Course includes leadership, Marine Corps history, organization and management, military law, and physical training.

**Credit Recommendation:** Credit is recommended in the lower-division baccalaureate/associate degree category, 2 semester hours in leadership or human relations (6/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in leadership or human relations (6/74).

**MC-2204-0019**

**AIRBORNE RADIO OPERATOR/LOADMASTER**

**Course Number:** None

**Location:** Recruit Depot, Parris Island, SC.

**Length:** 3 weeks (120 hours).

**Exhibit Dates:** 7/58-Present.

**Objectives:** To train enlisted personnel as airborne radio operators/loadmasters.

**Instruction:** Lectures and practical exercises on the duties of an airborne radio operator/loadmaster. Topics include international Morse code, general operating procedures, airborne radio operations, load weight and balance, voice operations, and ground support.

**Credit Recommendation:** Credit is not recommended because of the military nature of the course (5/74).

**MC-2204-0020**

**INFANTRY WEAPONS ARMORER**

**Course Number:** None.

**Location:** Ordnance School, Quantico, VA.

**Length:** 8 weeks (264 hours).

**Exhibit Dates:** 1/72-7/74.

**Objectives:** To train enlisted personnel to manage and organize ammunition.

**Instruction:** Lectures and practical exercises in the management of infantry weapons armory. Course includes inspection, maintenance, and field training.

**Credit Recommendation:** Credit is not recommended because of the military nature of the course (5/74).

**MC-2204-0021**

**AMPHIBIOUS WEAPONS**

1. **AMPHIBIOUS WEAPONS**
2. **AMPHIBIOUS WEAPONS**
3. **AMPHIBIOUS WEAPONS**
4. **AMPHIBIOUS WEAPONS** (Junior Course)
5. **JUNIOR COURSE** (Junior School)

**Course Number:** None.

**Location:** Quantico, VA.


**Objectives:** To train candidates for amphibious warfare.

**Instruction:** Lectures and practical exercises on the history, customs, uniforms, insignias, and awards of the Marine Corps, military law, military security, the role of women in the military, leadership
OBJECTIVES: To train officers in tracked-vehicle operations. Instruction: Lectures and practical exercises in the duties of a tank/amphibious vehicle officer. Course includes night operations, maintenance procedures, tracked-vehicle power, amphibious driving, and operation of special equipment.

Credit Recommendation: Credit is not recommended because of the military nature of the course (7/74).

MC-2204-0029

BASIC SHORE PARTY MAN

Course Number: None.
Location: Engineer School, Cp Lejeune, NC.
Length: 6 weeks (191 hours).
Exhibit Dates: 1/71-Present.

Objectives: To train personnel to perform basic shore party tasks.

Instruction: Lectures and practical exercises in construction, demolitions, land mine warfare, and camouflage and field fortifications.

Credit Recommendation: Credit is not recommended because of the military nature of the course (6/75).

MC-2204-0030

AIR DEFENSE OFFICER (Air Defense Control Officer, Automated System)

(Marine Tactical Data System (MTDS) Weapons Controller)

Course Number: None.
Location: Air Ground Combat Training Center, Twentynine Palms, CA, Communications-Electronics School, Twentynine Palms, CA.
Length: 8-12 weeks (283-450 hours).
Exhibit Dates: 12/71-Present.

Objectives: To provide students with knowledge of the functions and operations of a tactical air defense operations center.

Instruction: Lectures and practical exercises in tactical air operations, air intercept control, weapons system characteristics, flight rules and regulations, ground control-intercepts, and related air traffic control procedures. Course contains 5 weeks training on automated systems.

Credit Recommendation: Credit is not recommended because of the military nature of the course (2/76).

MC-2204-0031

AIR CONTROL, ELECTRONIC OPERATOR

Course Number: None.
Location: Air Ground Combat Training Center, Twentynine Palms, CA, Air Command and Control Systems School, Twentynine Palms, CA.
Length: 4-6 weeks (132-222 hours).
Exhibit Dates: 7/74-Present.

Objectives: To train personnel as operators in tactical air operations centers.

Instruction: Lectures and practical exercises in principles of an air defense system, tactical air operations center, radar operations, operation of AN/TYQ-2 equipment, basic air traffic control and pertinent flight regulations, electronic warfare fundamentals, and target set identification and intercept.

Credit Recommendation: Credit is not recommended because of the military nature of the course (7/79).

MC-2204-0032

ARTILLERY SCOUT OBSERVER

Course Number: None.

LOCATION: Schools Battalion, C.P. Pendleton, CA.
Length: 5 weeks (185 hours).
Exhibit Dates: 5/73-12/73.

Objectives: To train enlisted personnel as artillery forward observers.

Instruction: Lectures and practical exercises in communications, organization of the artillery battery, map reading, forward observation procedures, and artillery field firing.

Credit Recommendation: Credit is not recommended because of the military nature of the course (7/74).

MC-2204-0033

FIELD ARTILLERY FIRE CONTROL MAN

Course Number: None.
Location: Army Artillery School, C.P. Pendleton, CA.
Length: 5 weeks (194 hours).
Exhibit Dates: 3/73-12/73.

Objectives: To train enlisted personnel as field artillery fire controlmen.

Instruction: Lectures and practical exercises in artillery mathematics, gunnery and survey, meteorological message, gun direction computers, and artillery field firing.

Credit Recommendation: Credit is not recommended because of the military nature of the course (7/74).

MC-2204-0035

WOMAN OFFICER BASIC

Course Number: None.
Location: Marine Corps School, Quantico, VA.

Objectives: To train newly commissioned women officers in the duties and functions of company and staff officers.

Instruction: Lectures and practical exercises in military law, leadership, management, and administration, military operations, officer assignment and classification, techniques of military instruction, logistics, and communications.

Credit Recommendation: Version 1: In the upper-division baccalaureate category, credit in advanced military science at schools which normally offer such credit is recommended because of the military nature of the course. Version 2: In the upper-division baccalaureate category, 2 semester hours in business organization and management and, on the basis of institutional evaluation, credit in advanced military science and in instructional methods is recommended.

MC-2204-0036

1. NUCLEAR AND CHEMICAL WEAPONS EMPLOYMENT

(Weapons Employment)

2. NUCLEAR, BIOLOGICAL, AND CHEMICAL (NBC) WEAPONS EMPLOYMENT

3. NUCLEAR, BIOLOGICAL, AND CHEMICAL (NBC) WEAPONS EMPLOYMENT

4. NUCLEAR WEAPONS EMPLOYMENT (Atomic Weapons Employment)

Course Number: None.
Location: Marine Corps School, Quantico, VA.
## MC-2204-0037  PLATOON LEADERS CLASS (JUNIOR)

**Course Number:** None.

**Location:** Officer Candidate School, Quantico, VA.

**Length:** 6-7 weeks (210-283 hours).

**Exhibit Dates:** 6/53-4/78.

**Objectives:** To train officer candidates for service as Marine Corps officers.

**Instruction:** Lectures and practical exercises in leadership, infantry weapons, small unit tactics, and other general military subjects.

**Credit Recommendation:** Credit is not recommended because of the limited specialized nature of the course (7/74).

### MC-2204-0038  BASIC MILITARY TRAINING (Recruit Training)

**Course Number:** None.

**Location:** Recruit Depot, Parris Island, SC.

**Length:** 10-11 weeks (375 hours).

**Exhibit Dates:** 12/79-Present.

**Objectives:** To provide basic policy guidance and training in the essential subjects required of all marines and to ensure preparedness for follow-on training.

**Instruction:** Training includes code of conduct, military law, leadership, orientation lectures, history, customs, courtesies, uniform and clothing, mission and organization of the Marine Corps, internal guard, personal health and hygiene, swimming and first aid, close order drill, close combat, observing and reporting, individual movement, camouflage and concealment, field fortifications, helicopter-borne operations, NBC defense, offensive and defensive combat, mines and boobytraps, physical condition, and parades and ceremonies.

**Credit Recommendation:** In the lower-division baccalaureate category, 3 semester hours in advanced military science (7/74).

### MC-2204-0039  NAVAL GUNFIRE OFFICER

**Course Number:** None.

**Location:** Educational Center, Quantico, VA.

**Length:** 11 weeks (309 hours).

**Exhibit Dates:** 6/56-12/68.

**Objectives:** To prepare officers in all phases of naval gunfire support, shore bombardment, and shore fire control with special emphasis on landing forces.

**Instruction:** Lectures and practical exercises in the characteristics of naval gunfire, fire support ships, equipment and materiel.

**gunnery, communications, organization, control and staff functions, operations planning, training, and familiarization with other service organizations.**

**Credit Recommendation:** Credit is not recommended because of the limited specialized nature of the course (7/74).

### MC-2204-0040  PLATOON LEADERS CLASS (SENIOR)

**Course Number:** None.

**Location:** Officer Candidate School, Quantico, VA.

**Length:** 6-8 weeks (260-305 hours).


**Objectives:** To prepare selected personnel to become commissioned officers.

**Instruction:** Lectures and practical exercises in drill, unit formation, command voice, inspections, parades and reviews, physical conditioning, leadership, weapons, code of conduct, small unit tactics, military law, guard duty, map reading, first aid, and indoctrination.

**Credit Recommendation:** In the upper-division baccalaureate category, 3 semester hours in advanced military sciences (7/74).

### MC-2204-0041  AMPHIBIOUS VEHICLE COMPANY OFFICER

**Course Number:** None.

**Location:** Officer Candidate School, Camp Pendleton, CA.

**Length:** 16 weeks (393 hours).

**Exhibit Dates:** 7/58-12/68.

**Objectives:** To train company grade officers in the tactical employment of amphibious tractor and armored amphibious units in combat.

**Instruction:** Lectures and practical exercises in protective maintenance of landing vehicle tank, basic radio communication, map reading, direct and indirect fire gunnery on machine gun and 105mm Howitzer, and tactical employment in night and day operations.

**Credit Recommendation:** Credit is not recommended because of the military-specific nature of the course (7/74).

### MC-2204-0042  BASIC COURSE (Special Basic Course)

**Course Number:** None.

**Location:** Basic School, Quantico, VA.


**Objectives:** To train newly commissioned officers to assume company duties.

**Instruction:** Lectures and practical exercises in amphibious operations, communications, field engineering, infantry weapons, leadership, map and aerial photograph reading, military law, personnel administration, and infantry tactics.

**Credit Recommendation:** Credit is not recommended because of the military-specific nature of the course (7/74).

### MC-2204-0043  ARTILLERY OFFICER ORIENTATION

**Course Number:** None.

**Location:** Marine Corps Schools, Quantico, VA.

**Length:** 4-5 weeks (145-194 hours).

**Exhibit Dates:** 10/56-12/72.

**Objectives:** To train personnel in the duties of the artillery unit officer and the operations of a field artillery firing battery.

**Instruction:** Lectures and practical exercises in the organization of the field artillery unit, communication and equipment, survey, gunnery, observed fire and fire direction procedures, equipment and materials of field artillery bases.

**Credit Recommendation:** Credit is not recommended because of the military-specific nature of the course (7/74).

### MC-2204-0046  BASIC MILITARY TRAINING (WOMEN)

**Course Number:** None.

**Location:** Recruit Depot, Parris Island, SC.

**Length:** 8 weeks (56 hours).

**Exhibit Dates:** 12/79-Present.

**Objectives:** To prepare officers in the duties of the artillery unit officer and the operations of a field artillery firing battery.

**Instruction:** Lectures and practical exercises in the organization of the field artillery unit, communication and equipment, survey, gunnery, observed fire and fire direction procedures, equipment and materials of field artillery bases.

**Credit Recommendation:** Credit is not recommended because of the military-specific nature of the course (7/74).
Pendleton, CA

MORTARMAN MC-2204-0047

Length: 1 semester hour in first aid, physical conditioning/fitness (9/79).

Objectives: To provide intensive training in close order drill, field living, first aid, leadership, physical training, land navigation, map and military law.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (6/75).

MC-2204-0048

MACHINEGUNNER

Course Number: None.

Location: Infantry Training School, Camp Pendleton, CA.

Length: 2 weeks (51 hours)

Objectives: To provide intensive training in weapons and combat skills.

Instruction: Lectures and practical exercises in small arms, machinegun, care and use of machineguns capacitor, and handling.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (6/75).

MC-2204-0049

ANTI-TANK ASSAULTMAN

Course Number: None.

Location: Infantry Training School, Camp Pendleton, CA.

Length: 5 weeks (134-167 hours)

Objectives: To provide intensive training in weapons and combat skills to produce machinegunners capable of close combat with and capturing or destroying the enemy.

Instruction: Course provides instruction in general military subjects pertaining to infantrymen to include tactical employment operations and field exercises in conjunction with rifles, mortars, antitank and assault rifle Topics include camouflage, patrolling operations, and basic offensive and defensive tactics relating to the 7.62 M-60 machinegun.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (6/75).

MC-2204-0050

OFFICER CANDIDATE SCHOOL

(Combined Leaders/Senior) (Combined Junior/Street)

Course Number: None.

Location: Marine Corps School, Quantico, VA.

Length: 15 weeks (535 hours)

Objectives: To provide intensive training in infantry antitank assault weapons.

Instruction: Lectures and practical exercises in general military subjects with emphasis on specialized training in weapons and tactics related to infantry antitank personnel employment on the battlefield.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (6/75).

MC-2204-0051

RIFLEMAN

Course Number: None.

Location: Infantry Training School, Camp Pendleton, CA.

Length: 3 weeks (161 hours)

Objectives: To provide infantrymen with training in weapons and combat skills.

Instruction: Lectures and practical exercises in land navigation, supporting arms, detection of mines and booby traps, helicopter operations, tracked vehicles, techniques of fire and control of firing positions.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (6/75).

MC-2204-0052

INFANTRY WEAPONS ARMORER (BASIC)

Course Number: None.

Location: Ordnance School, Quantico, VA.

Length: Version 1: 7 weeks (280 hours) Version 2: 4-5 weeks (180-203 hours)

Objectives: To train personnel to repair infantry weapons.

Instruction: Lectures and practical exercises in troubleshooting, disassembly, inspection, repair, reassembly and testing of rifles, grenade launchers, rocket launchers, and mortars, care and use of hand tools, and repair by component replacement.

Credit Recommendation: Version 1: Credit is not recommended because of the military-specific nature of the course (6/75).

Version 2: Credit is recommended.

NV

DISEASE VECTOR AND PEST CONTROL

Course Number: B-00-13; B-00-14; B-00-12; B-00-13

Location: Disease Vector Control Center, Alameda, CA; Disease Vector Control Center, Jacksonville, FL.

Length: 4 weeks (146 hours)

Objectives: To provide enlisted personnel with working knowledge of disease vector and pest control.

Instruction: Lectures and practical experience in the basic principles of disease vector and pest control, including basic entomology, operation of various types of insecticidal dispersal equipment, control of arthropods and pest vertebrates, effects of weather on pest control, effects of insecticides and sanitation.

Credit Recommendation: In the vocational certificate category, 2 semester hours in community sanitation and entomology (2/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in community sanitation and entomology (2/74), in the upper-division baccalaureate category, 2 semester hours in community sanitation and entomology (12/68).

NV-0202-0001

MEDICAL ILLUSTRATION TECHNICIAN, CLASS C

Course Number: B-0410-0010, B-0410-10.

Location: National Naval Medical Center, Bethesda, MD.

Length: 26 weeks (990 hours)

Objectives: To prepare personnel as medical illustrators.

Instruction: Lectures and practical exercises in medical illustration, including art history, anatomy, medical illustration, and credit in medical illustration techniques on the basis of institutional evaluation in the medical illustration techniques on the basis of institutional evaluation in the medical illustration techniques on the basis of institutional evaluation.

Credit Recommendation: In the vocational certificate category, 4 semester hours in anatomy, and credit in medical illustration techniques on the basis of institutional evaluation (12/68).

NV-0326-0001

NAVY ADVANCED MANAGEMENT

Course Number: P-00-3307

Location: Defense Resources Management Center, Monterey, CA, Navy Management Systems Center, Norfolk, VA.

Length: 2 weeks (60 hours)

Objectives: To acquaint officers with concepts and techniques of administrative management.

Instruction: Lectures, discussions, and simulations to cover functions of management, quantitative methods, risk and uncertainty, economic principles, model building, production analysis, sampling, planning, programming, and budgeting.

Credit Recommendation: In the upper-division baccalaureate category, 1 semester hour in quantitative methods.
Instructor/Leadership School, Great Lakes, IL, Instructor/Leadership School, San Diego, CA, Instructor/Leadership School, Norfolk, VA.

Length: Version 1. 2 weeks (80 hours) Version 2. 2 weeks (60 hours) Version 3. 4 weeks (120 hours).


Objectives: To provide selected personnel with the knowledge of management and communications principles necessary to manage a Navy school.

Instruction: All Versions: Lectures and practical experiences in the principles and procedures of school management and administration. Course includes theory and techniques in management, supervision, and evaluation in school administration, including group guidance and in individual guidance and counseling. Version 3. Course consists of two phases, instructional procedures and administrative procedures.

Credit Recommendations Version 1: In the upper-division baccalaureate category, 2 semester hours in management (6/75). Version 2: In the upper-division baccalaureate category, 1 semester hour in principles of administration (7/74). Version 3: In the upper-division baccalaureate category, 2 semester hours in instructional methods (1/74).

NV-0419-0001

OFFICERS' EMBARKATION (BASIC)

Course Number: None

Location: Naval Amphibious Base, Norfolk, VA.

Length: 4 weeks (139 hours)

Exhibit Dates: 9/66-Present

Objectives: To train military personnel to prepare and execute plans for amphibious operations.

Instruction: Lectures in the basic techniques of loading amphibious vehicles, preparation of loading plans, characteristics of amphibious ships, mechanized embarkation, data systems, automated amphibious support, and logistical considerations.

Credit Recommendations: In the upper-division baccalaureate category, 2 semester hours in water transportation (1/74).

NV-0419-0002

STAFF EMBARKATION

Course Number: None

Location: Naval Amphibious Base, Norfolk, VA.

Length: 3 weeks (102 hours)

Exhibit Dates: 9/66-Present

Objectives: To train military personnel to prepare and execute plans for amphibious operations.

Instruction: Lectures in the basic techniques of loading amphibious vehicles, preparation of loading plans, characteristics of amphibious ships, mechanized embarkation, data systems, automated amphibious support, and logistical considerations.

Credit Recommendations: In the upper-division baccalaureate category, 2 semester hours in water transportation (1/74).

NV-0419-0003

ENLISTED BASIC AMPHIBIOUS EMBARKATION

(Enlisted Embarkation)(BASIC)

Course Number: G-55-4409

Location: Naval Amphibious Base, Little Creek, Norfolk, VA.

Length: 4 weeks (139-140 hours)

Exhibit Dates: 9/66-Present

Objectives: To train military personnel to prepare and execute plans for amphibious operations.

Instruction: Lectures in the basic techniques of loading amphibious vehicles, preparation of loading plans, characteristics of amphibious ships, mechanized embarkation, data systems, automated amphibious support, and logistical considerations.

Credit Recommendations: In the upper-division baccalaureate/associate degree category, 4 semester hours in transportation management (1/74).

NV-0419-0004

EMBARKATION FOR AMPHIBIOUS OPERATIONS

Course Number: G-8B-4403, H-8B-3551

Location: Naval Amphibious Base, Norfolk, VA; Naval Amphibious Base, San Diego, CA.

Length: 4 weeks (144 hours)

Exhibit Dates: 11/69-Present

Objectives: To train U.S. and allied military officers to prepare and execute plans for amphibious operations.

Instruction: Lectures in the theory of combat loading for amphibious operations, characteristics of amphibious vessels, and logistical considerations.

Credit Recommendations: In the upper-division baccalaureate category, 4 semester hours in water transportation (1/74).

NV-0419-0005

AMPHIBIOUS TRANSPORT/CARGO SHIP EMBARKATION

Course Number: G-8B-4418, G-55-4418

Location: Atlantic Naval Amphibious Base, Little Creek, VA.

Length: 2 weeks (65 hours)

Exhibit Dates: 9/72-Present

Objectives: To train personnel in the preparation and execution of plans for the combat loading of the LPA or HKA for amphibious ships.

Instruction: Lectures and practical exercises on embarkation considerations, ship tour, techniques of combat load-planting, preparation of loading plans, and logistic considerations.

Credit Recommendations: In the upper-division baccalaureate category, 1 semester hour in transportation and amphibious cargo handling (2/74).

NV-0419-0006

INTRODUCTION TO TRANSPORTATION MANAGEMENT

Course Number: None

Location: Naval Supply Center, Oakland, CA.

Length: 2 weeks (65 hours)

Exhibit Dates: 4/71-Present

Objectives: To provide military and civilian personnel with the basic principles of transportation and traffic management.

Instruction: Lectures in aspects of the American transportation system, the fundamentals of traffic management, transportation management, development of transportation regulations, classification, rates, and tariffs, carrier facilities, services, and equipment.

Credit Recommendations: In the lower-division baccalaureate/associate degree category, 4 semester hours in transportation management (1/74).

NV-0419-0007

TRANSPORTATION AND STORAGE OF HAZARDOUS MATERIAL

Course Number: A-8C-0023

Location: Naval Supply Center, Oakland, CA.

Length: 2 weeks (64 hours)

Exhibit Dates: 6/71-Present

Objectives: To provide officers, civilians, and enlisted personnel with the knowledge and skills necessary to administer the storage and transportation of ammunition, explosives, and other hazardous material.

Instruction: Lectures in the storage and transportation of hazardous materials, including military and commercial carrier operations; national, state, and local transportation regulations; air, rail, motor, and pipeline transportation; hazardous materials shipping and packaging, hazardous materials handling, and hazardous materials transportation and storage, preservation and packaging, personal property shipments, shielding and storage, transportation rules and regulations, classification, rates, and tariffs, rail, motor, and pipeline transportation, and other hazardous materials transportation and storage.

Credit Recommendations: Credit is not recommended because of the military-specific nature of life course (2/74).

NV-0419-0008

TRANSPORTATION MANAGEMENT

NV-0419-0009

TRANSPORTATION MANAGEMENT ADVANCED

Course Number: A-8C-0012

Location: Naval Supply Center, Oakland, CA.

Length: 2 weeks (64 hours)

Exhibit Dates: 3/71-Present

Objectives: To provide military and civilian personnel with advanced instruction in transportation and physical distribution management.

Instruction: An advanced seminar in the concepts and problems of domestic and international distribution management, including the fundamentals of policy and regulation, federal and military transportation policy, procedures, and equipment.

Credit Recommendations: Credit is not recommended because of the military-specific nature of life course (2/74).

NV-0419-0010

TRANSPORTATION MANAGEMENT

NV-0419-0011

TRANSPORTATION MANAGEMENT ADVANCED

Course Number: A-8C-0012

Location: Naval Supply Center, Oakland, CA.

Length: 2 weeks (64 hours)

Exhibit Dates: 3/71-Present

Objectives: To provide military and civilian personnel with advanced instruction in transportation and physical distribution management.

Instruction: An advanced seminar in the concepts and problems of domestic and international distribution management, including the fundamentals of policy and regulation, federal and military transportation policy, procedures, and equipment.

Credit Recommendations: Credit is not recommended because of the military-specific nature of life course (2/74).

NV-0419-0012

TRANSPORTATION MANAGEMENT

NV-0419-0013

TRANSPORTATION MANAGEMENT ADVANCED

Course Number: A-8C-0012

Location: Naval Supply Center, Oakland, CA.

Length: 2 weeks (64 hours)

Exhibit Dates: 3/71-Present

Objectives: To provide military and civilian personnel with advanced instruction in transportation and physical distribution management.

Instruction: An advanced seminar in the concepts and problems of domestic and international distribution management, including the fundamentals of policy and regulation, federal and military transportation policy, procedures, and equipment.

Credit Recommendations: Credit is not recommended because of the military-specific nature of life course (2/74).
COURSE EXHIBITS

theory, and transportation inventory modeling.
Credit Recommendation: In the upper-di-
vision baccalaureate category, 3 semester hours in transportation management (1/74).

NV-0419:0010
INTERMEDIATE TRANSPORTATION MANAGEMENT
Course Number: A-8C-0014.
Location: Naval Supply Center, Oakland, CA.
Length: 2 weeks (64 hours).
Exhibit Dates: 4/71-Prese.
Objectives: To train officer to operate as transportation manager at the intermediate level.
Instruction: Lectures in the legal and economic aspects of highway transportation management; freight classification, rates, and tariffs, handling and shipping of hazardous materials, warehouse operations, carrier modes and services; military traffic management, case study preparation and presentation; current developments in motor transport.
Credit Recommendation: In the upper-di-
vision baccalaureate category, 3 semester hours in transportation management (1/74).

NV-0419:0011
PERSONAL PROPERTY TRAFFIC MANAGEMENT
Course Number: A-8C-0021.
Location: Naval Supply Center, Oakland, CA.
Length: 2 weeks (70 hours).
Exhibit Dates: 3/71-Present.
Objectives: To train officer, civilian, and enlisted personnel to ship household goods and other personal property.
Instruction: Lectures and practical exercises in personal property traffic management, including station orders, entitlements, entitlements under permanent and temporary change-of-station orders, management, personal property shipment methods, compensation, personal property problems, standard military transportation and movement procedures, claims, procedures and investigations, and tours.
Credit Recommendation: In the vocational certificate category, 2 semester hours in traffic management, household and personal property (6/74).

NV-0419:0012
MARINE TERMINAL MANAGEMENT
Course Number: A-8C-0022.
Location: Naval Supply Center, Oakland, CA.
Length: 2 weeks (64 hours).
Exhibit Dates: 3/71-Present.
Objectives: To train selected enlisted personnel to operate and manage ocean terminals.
Instruction: Lectures and practical exercises in the operation and management of ocean terminals. Course includes marine terminal operations and management, handling of cargo through the terminal, stevedoring and stevedoring contracts, cargo space allocation, stevedoring and terminal cost controlling.
Credit Recommendation: In the upper-di-
vision baccalaureate category, 3 semester hours in water transportation (7/74).

NV-0419:0013
AIR TRAFFIC MANAGEMENT
Course Number: A-8C-0024.
Location: Naval Supply Center, Oakland, CA.
Length: 2 weeks (64 hours).
Exhibit Dates: 3/71-Present.
Objectives: To train officer in the operation of air traffic.
Instruction: Lectures and practical exercises in air traffic management. Course includes the roles and missions of military and commercial carriers, air carrier management, operations and regulations, military air transportation, flight and terminal equipment, and effective utilization of air transportation.
Credit Recommendation: In the upper-di-
vision baccalaureate category, 2 semester hours in air traffic management (7/74).

INTRODUCTION TO TRAFFIC AND TERMINAL MANAGEMENT
Course Number: None.
Location: Freight Transportation School, Oakland, CA.
Length: 5 weeks (120 hours).
Exhibit Dates: 9/52-12/68.
Objectives: To train personnel in the fundamentals of transportation, traffic, and terminal management.
Instruction: Lectures and practical exercises in the fundamentals of transportation, traffic, and terminal management, including transportation logistics, economics of transportation, bills of lading, commercial and government air shipments, cargo ships, port terminal facilities, ocean shipping; duties of traffic manager, principles of shiplading, duties of marine terminal superintendent, motor carrier operations, materials-handling methods and equipment, transportation, packaging, packing, and marking of shipments, railroad facilities, mobile support, Navy carrier selection and routing policy, harbors and ports, U.S. Customs procedures, classification of rail and motor freight, state, regulations, freight claims and procedures, railroad claims and damage prevention, and shipment of household effects.
Credit Recommendation: In the lower-di-
vision baccalaureate/associate degree category, 1 semester hours in traffic operations (8/74), in the upper-di-
vision baccalaureate category, 3 semester hours in traffic operations (12/68).

INFORMATION OFFICER
Course Number: None.
Location: journalists, School, Great Lakes, IL.
Length: 4-5 weeks (120-150 hours).
Exhibit Dates: 8/54-12/62.
Objectives: To familiarize officers with the field of public relations so that they may carry out assignments of prime responsibility in the Navy's information program.
Instruction: Public relations and communica-
tion, civil and community relations, news writing, media and media relations, case studies and practical problems, and in-
formation programs.
Credit Recommendation: In the upper-di-
vision baccalaureate category, 2 semester hours in journalism (6/76).

RECRUITERS JOURNALISM, CLASS C-I
Course Number: Not available.
Location: journalists, School, Great Lakes, IL.
Length: 4 weeks (120 hours).
Exhibit Dates: 1/58-12/68.
Objectives: To train enlisted personnel to promote the armed services.
Instruction: Lectures and practical exercises in promotion techniques and use of media. Course includes study of community-military relations and publicity tech-
niques (including news writing, radio and television production, camera use, film processing and picture printing), and public relations.
Credit Recommendation: In the vocational certificate category, 2 semester hours in journalism (7/74), in the lower-di-
vision baccalaureate/associate degree category, 4 semester hours in journalism (7/74), in the upper-di-
vision baccalaureate category, 4 semi-
ter hours in journalism (12/68).

RIVERINE/COASTAL ADVISOR TRAINING
Course Number: H-00-1001; H-000-1001.
Location: Inshore Operations Training Center, Mare Island, CA.
Length: 17 weeks (881-921 hours).
Exhibit Dates: 4/70-Prese.
Objectives: To train officers and enlisted personnel to advise in all phases of Riverine...
and coastal warfare units in the Republic of Vietnam.

**Instruction:** Lectures and practical exercises on overseas internal defense and development, including countermobility, survival, medical indoctrination, weapons, engineering, maintenance, and repair; electronic equipment, communications, surveillance, warfare and craft, advanced tactical training, and Vietnamese language.

**Credit Recommendation:** In the upper-division baccalaureate category, credit in Vietnamese language on the basis of institutional evaluation (12/68)

**NV-0701-0001**

**DENTAL TECHNICIAN, MAXILLOFACIAL PROSTHETIC**

(Dental Technician, Maxillofacial Prosthetic, Class C)

**Course Number:** B-331-18

**Location:** National Naval Medical Center, Bethesda, MD

**Length:** 24 weeks (725-784 hours)

**Exhibit Dates:** 6/55-Present

**Objectives:** To train dental technicians in the theory and practice of maxillofacial prostheses, including occlusal, somato, auricular, marnmary, and fixed facial prostheses.

**Credit Recommendation:** Insufficient data for evaluation (2/74)

**NV-0701-0002**

**DENTAL OFFICER INDOCTRINATION**

**Course Number:** None

**Location:** Naval Schools Command, Newport, RI

**Length:** 4 weeks (713 hours)

**Exhibit Dates:** 6/70-Present

**Objectives:** To train dental officers with orientation training in essential dental subjects.

**Instruction:** Lectures and practical exercises on the administrative and operational organization; fundamental skills in shipboard operations; procedures of damage control; staff and operational management, personnel management, dental facilities management, financial management, principles of accounting, and use of office machines.

**Credit Recommendation:** In the upper-division baccalaureate category, credit in dental assisting on the basis of institutional evaluation (12/68)

**NV-0701-0003**

**DENTAL TECHNICIAN, PROSTHETIC, ADVANCED, CLASS B**

(Dental Technician, Advanced Prosthetic, Class B)

**Course Number:** B-331-17

**Location:** Naval Medical Center, Bethesda, MD

**Length:** 24 weeks (960 hours)

**Exhibit Dates:** 6/55-Present

**Objectives:** To train military personnel to teach dental technology.

**Instruction:** Lectures in the fundamentals of teaching dental technology, including English and speech, personnel management, laboratory and office management, dental facilities administration, fixed and removable prostheses, and case study care.

**Credit Recommendation:** Insufficient data for evaluation (2/74)

**NV-0701-0004**

**DENTAL TECHNICIAN RESEARCH ASSISTANT, CLASS C**

**Course Number:** B-331-19; B-331-20

**Location:** Dental School, Bethesda, MD

**Dental Research Institute, Great Lakes, IL**

**Length:** 52 weeks (1950 hours)

**Exhibit Dates:** 1/65-6/70

**Objectives:** To provide instruction in the basic skills and knowledge of dental research procedures.

**Instruction:** Lectures and practical exercises in administration, experimental pathology, microbiology, biochemistry, microscopy, experimental surgery, and experimental animal care.

**Credit Recommendation:** Credit in dental technology on the basis of institutional evaluation (12/68)

**NV-0701-0005**

**DENTAL TECHNICIAN, GENERAL, ADVANCED, CLASS B**

(Class B General Dental Technician School)

**Course Number:** B-330-11

**Location:** National Naval Medical Center, San Diego, CA, Naval Medical Center, Bethesda, MD

**Length:** 24 weeks (900 hours)

**Exhibit Dates:** 6/55-Present

**Objectives:** To provide instruction in the basic administrative aspects of dental assisting.

**Instruction:** Lectures in administrative aspects of dental assisting, including communication skills, personnel management, office management, personnel management, financial management, principles of accounting, and use of office machines.

**Credit Recommendation:** In the upper-division baccalaureate category, credit in dental assisting on the basis of institutional evaluation (12/68)

**NV-0701-0006**

1. **DENTAL TECHNICIAN, BASIC, CLASS A**

2. **CLASS A GENERAL DENTAL TECHNICIAN SCHOOL**

(Dental Technician, General, Class A)

**Course Number:** Version 1: B-330-10

**Version 2:** None

**Location:** Version 1: Dental Technician's School, San Diego, CA; Version 2: National Naval Medical Center, Bethesda, MD

**Length:** Version 1: 12 weeks (480 hours)

**Version 2:** 16 weeks (557-600 hours)

**Exhibit Dates:** Version 1: 12/67-Present

**Version 2:** 3/61-11/67

**Objectives:** To train enlisted personnel to assist dental officers and to qualify for the dental technician rating.

**Instruction:** Lectures and practical experience in basic sciences, preventive dentistry, civilian care, dental administration, radiography, and personnel management.

**Credit Recommendation:** Version 1. In the vocational certificate category, 4 semester hours in dental assisting on the basis of institutional evaluation (2/74).

**NV-0702-0001**

**TISSUE CULTURE TECHNICIAN, CLASS C**

(Tissue Culture Technician)

**Course Number:** B-311-14

**Location:** National Naval Medical Center, Bethesda, MD

**Length:** 16 weeks (640 hours)

**Exhibit Dates:** 12/63-12/68

**Objectives:** To train enlisted personnel as research assistants in tissue culture biological research.

**Instruction:** Lectures and practical experience in tissue culture research assisting, including basic biology and chemistry, preparing, maintaining, and transferring cells, nutrient fluids preparation, short- and long-term storage of cells, and tissue culture techniques.
1-78

COURSE EXHIBITS
term tissue culture; replaten culture tech-
nique, photomicroscopy, and laboratory ap-
presentation and maintenance.

Credit Recommendation: In the vocational
certificate category, 3 semester hours in his-
tology, 2 in medical laboratory technology,
9 in tissue culture technology, and credit in his-
tologic technology on the basis of institu-
tional evaluation (2/74), in the lower-di-
vision baccalaureate/associate degree cate-
ogy, 3 semester hours in histology, 2 in med-
ical laboratory technology, 9 in tissue cul-
ture technology, and credit in histology tech-
technology on the basis of institu-
tional evaluation (2/74).

NV-0702-0002
Medical Technology Technician, Class C
(Medical Technology Technician, Class C)

Course Number: B-311-24, B-311-0025
Location: Naval Hospital, Bethesda, MD, Navy-
Hospital, Great Lakes, IL
Length: 21/2 weeks (2102 hours)
Exhibit Dates: 3/72-Present

Objectives: To train medical technicians to per-
form and supervise advanced laboratory pro-
cedures in all phases of blood bank opera-
tions.

Instruction: Lectures and practical applica-
tion of diagnostic microbiology, parasito-
ology, mycology, serology, hematology, mi-
croscopy, chemistry, quality control, blood
banking, pathology techniques, automated
procedures, histochemistry, urinalysis, and
instrumentation, including analyzers, flame
photometers, osmometers, gas chromatog-
raphy, electrophoresis apparatus, and se-
quential multiple analyzers.

Credit Recommendation: In the vocational
certificate category, 15 semester hours in medi-
cal laboratory technology (including bacteriol-
ogy, parasitology, and mycology), 10 in hemato-
ology, 5 in clinical microscopy and venapun-
ture, 8 in serology and blood banking, 12 in clin-
ical chemistry, 12 in histology and histo-
chemistry, and 2 in pathology and his-
tology; in the vocational certificate cate-
gegory, 6 semester hours in medical laboratory tech-
ology, 7 in histology and histo-
tology, 6 in clinical microscopy and venapun-
ture, and additional credit toward MT or MT on the ba-
sis of lower-division baccalaureate/associate degree exam-
nation (2/74), in the lower-division baccalaureate/associate degree cate-
gy, in the upper-division baccalaureate/associate degree cate-
gy, 2 semester hours in urinalysis and micro-
scopy, 4 in pathology, 3 in clinical che-
nistry, 3 in histology and histo-
tology, and additional credit toward MT or MT on the ba-
sis of national proficiency examination (2/74), in the lower-
division baccalaureate/associate degree cate-
gy, 12 semester hours in bacteriology and bio-
chemistry, 7 in hematology (9/77), Version 2:
In the vocational certificate category, 12 semester hours in bacteriology and bio-
chemistry, 7 in hematology and blood blood, 7 in pathology and hist-
tology, 6 in clinical microscopy and venapun-
ture, and additional credit toward MT or MT on the ba-
sis of national proficiency examination (2/74).

NV-0702-0003
Clinical Laboratory Technician, Class C
(Blood Bank and Clinical Laboratory Tech-

Course Number: B-311-0018, B-311-18, B-
311-19
Location: Health Sciences Education and
Training Command, Bethesda, MD, School of
Health Sciences, San Diego, CA
Length: Version 1: 52 weeks (2087 hours)
Version 2: 52-60 weeks (2625 hours)
Exhibit Dates: Version 1: 1/76-Present
Version 2: 1/54-12/76

Objectives: To train personnel to perform ad-
vanced laboratory procedures and to as-
sist in all phases of blood bank operations.

Instruction: All Versions. Lectures in bac-
teriology, serology and blood banking, he-
matology, parasitology, blood and clinical
chemistry, urinalysis and venapuncture,
techniques. Version 2. Includes histopatho-
gy.

Credit Recommendation: Version 1:
In the lower-division baccalaureate/associate
degree category, 3 semester hours in urina-
lyses techniques, 3 in pathology and 1 in lab-
oratory technology (9/77), in the upper-
division baccalaureate category, 12 semester hours in blood banking and ser-
ology, 6 in clinical microscopy and micro-
scopy, 6 in hematology (9/77), Version 2:
In the vocational certificate category, 12 semester hours in bacteriology and blood
chemistry, 7 in clinical microscopy and bio-
chemistry, 7 in hematology, 12 in ser-
ology and blood banking, 7 in pathology and hist-
tology, 6 in clinical microscopy and venapun-
ture, and additional credit toward MT or MT on the ba-
sis of national proficiency examination (2/74), in the lower-
division baccalaureate/associate degree cate-
gy, 12 semester hours in bacteriology and bio-
chemistry, 7 in hematology, 12 in ser-
ology and blood banking, 7 in pathology and hist-
tology, 6 in clinical microscopy and venapun-
ture, and additional credit toward MT or MT on the ba-
sis of national proficiency examination (2/74), in the upper-
division baccalaureate category, 12 semester hours in bacteriology and blood chemistry (12/68).

NV-0702-0004
Urological Technician, Class C
(Urological Technician, Class C)

Course Number: B-300-0025, B-300-25, B-
300-26, B-300-27, B-300-28
Location: National Naval Medical Center,
Bethesda, MD, School of Health Science Detach-
ment, Portsmouth, VA, School of Health Science,
San Diego, CA
Length: 24-25 weeks (1040 hours)
Exhibit Dates: 1/55-Present

Objectives: To train medical technicians to as-
sist medical officers in the examination and
treatment of urological patients.

Instruction: Lectures in anatomy, physiol-
yogy, urological operating room techniques,
cytophysiological techniques, and urological
radiographic procedures.

Credit Recommendation: In the lower-di-
vision baccalaureate/associate degree cate-
gy, 4 semester hours in urological ano-
maty and physiology, 15 in operating room
techniques. Upper-division baccalaureate cate-
gy, 5 in clinical laboratory (urology), 13 in
clinical pathology and endoscopy, and 3 in
records management, for a total of
55 semester hours (8/77).

NV-0702-0005
Tissue Bank Technician, Class C
(Tissue Bank Technician)
Course Number: Not available
Length: Version 1: 26 weeks (1040 hours)
Version 2: 12 weeks (480 hours)
Exhibit Dates: Version 1: 12/63-12/68
Version 2: 1/54-11/63

Objectives: To train enlisted personnel to
be tissue bank technicians.

Instruction: Lectures on administration, an-
atomy, physiology, histology, bacteriology,
chemistry, genetics, and grafting principles,
and lectures and practical exercises in tissue
bank preservation and tissue culture.

Credit Recommendation: Version 1: In the
vocational certificate category, 8 semester hours in biological science, 12 in tissue cul-
ture and histology (2/74), in the lower-
division baccalaureate/associate degree cate-
gy, 8 semester hours in biological science, 12 in tissue culture or histology (2/74), in the upper-
division baccalaureate category, 8 semester hours in biological science, 12 in tissue culture or histology (2/74).

NV-0702-0006
Clinical Chemistry Technician, Class C
(Clinical Chemistry Technician)
Course Number: B-311-15
Location: National Naval Medical Center,
Bethesda, MD
Length: 12 weeks (480 hours)
Exhibit Dates: 12/63-Present

Objectives: To train enlisted personnel to con-
don quantitative and qualitative analyti-
cal tests on medical laboratory samples.

Instruction: Lectures and practical exer-
cises in mathematics of analytical chemistry,
quantitative analysis, inorganic chemistry, en-
ymology, organic chemistry, steroid chem-
istry, toxicology, and preparation of standards and
solutions.

Credit Recommendation: In the vocational
certificate category, 5 semester hours in med-
ical laboratory technology or chemistry (2/74), in the lower-
division baccalaureate/associate degree cate-
gy, 5 semester hours in medical laboratory tech-
ology or chemistry (2/74), in the upper-
division baccalaureate category, credit in chem-
istry on the basis of institutional eval-
uation (12/68).

NV-0702-0008
Clinical Laboratory Assistant
Technician
Course Number: B-311-10, B-311-11, B-
311-12, B-311-13
Location: Naval School, San Diego, CA, Na-
val School, St Alban's, NY, Naval School, Port-
smouth, VA; Naval School, Great Lakes, IL; Naval Schol, Oakland, CA
Length: 12 weeks (480 hours)
Exhibit Dates: 7/64-Present

Objectives: To train enlisted personnel in ba-
basic medical laboratory procedures.

ERIC
Instructor: Lectures and practical exercises in basic medical laboratory procedures, including bacteriology, histology, blood processing, serology, biochemistry, urinalysis, histopathology, and parasitology.

Credit Recommendation: In the vocational certificate category, 2 semester hours in histology, 2 in chemistry, 2 in bacteriology (1/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in biology, 2 in chemistry, 2 in bacteriology (1/74); in the upper-division baccalaureate category, 2 semester hours in histology, 2 in chemistry, 2 in bacteriology (1/74).

NV-0702-0009
CYTOTECHNOLOGIST
Course Number: B-311-0016
Location: National Naval Medical Center, Bethesda, MD, School of Health Sciences, San Diego, CA
Length: 52 weeks (1938 hours)
Exhibit Dates: 1/57-2/72
Exterior: To train individuals competent to prepare, examine, and evaluate slide presentations of cellular materials for diagnostic purposes.

Instruction: Topics cover cytology specimen preparation including techniques for collection, fixation, and examination of cellular materials, and review of cellular material obtained from a variety of tissues and therapeutic determinations.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in histology, 2 in chemistry, 2 in bacteriology (1/74); in the upper-division baccalaureate category, 3 semester hours in histology, 2 in chemistry, 2 in bacteriology (1/74).

NV-0703-0001
OB/GYN NURSE PRACTITIONER
Course Number: Version 1: B-6F-0012
Version 2: B-6F-012, B-6F-12
Location: Version 1: Regional Medical Center, Bethesda, MD, Naval Regional Medical Center, Oakland, CA, Naval Hospital, Philadelphia, PA. Version 2: Select Naval Hospitals, United States.
Length: Version 1: 36-39 weeks (1440-1500 hours)
Version 2: 24-26 weeks (1040-1100 hours)
Exhibit Dates: Version 1: 2/75-Present

Objectives: To train nurse corps officers to assist physicians in obstetrical and gynecological health care.

Instruction: Lectures and clinical practice in endocrinology, obstetrics, gynecology, oncology, neonatology, pathology, pharmacology, psychiatric counseling, radiology, medical and legal aspects of obstetrics and gynecology, family planning counseling and techniques.

Credit Recommendation: Version 1: In the upper-division baccalaureate category, 2 semester hours in histology, 2 in anatomy and physiology, 8 in obstetrics, 3 in gynecology, 1 in obstetrics, 1 in clinical experience and practice in obstetrics and gynecology (1/77). Version 2: In the upper-division baccalaureate category, 2 semester hours in endocrinology, 3 in anatomy and physiology, 8 in obstetrics, 3 in gynecology, 1 in obstetrics, and 13 in clinical experience and practice in obstetrics and gynecology (1/77).

NV-0703-0002
OPERATING ROOM TECHNICIAN AND MANAGEMENT
Course Number: None.
Location: Long Beach Hospital, Long Beach, CA.
Length: 26 weeks (1040 hours)
Exhibit Dates: 8/72-Present
Objectives: To prepare nurses as surgical assistants and operating room supervisors.

Instruction: Lectures and clinical experience in surgical environment, sterilization, disinfection, and antiseptics, management of surgical instruments, operating room techniques, and standards and controls in the operating room.

Credit Recommendation: Insufficient data for evaluation (2/74).

NV-0703-0003
NEUROPSYCHIATRIC TECHNICIAN, CLASS C
(Or Psychiatry Technician)
Course Number: B-302-45, B-302-46, B-302-47
Location: National Naval Medical Center, Bethesda, MD, Naval Hospital, Oakland, CA, Naval Hospital, Philadelphia, PA.
Length: 1 year
Exhibit Dates: 1/57-12/68
Objectives: To train enlisted personnel to assist in the care and treatment of neuropsychiatric patients.

Instruction: Lectures in neuropsychiatric problems; practical training in first aid, including nursing of mental patients; ward service, clinical experience, special therapies, and general psychiatric nursing.

Credit Recommendation: In the vocational certificate category, 2 semester hours in psychology, 2 in psychiatric nursing or first aid, 2 in mental health assisting, additional credit in psychiatric nursing on the basis of institutional evaluation (2/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in psychology, 2 in psychiatric nursing or first aid, 2 in mental health assisting, additional credit in psychiatric nursing on the basis of institutional evaluation (2/74), in the upper-division baccalaureate category, 2 semester hours in psychology, 2 in psychiatric nursing or first aid, 2 in mental health assisting, additional credit in psychiatric nursing on the basis of institutional evaluation (2/74).

NV-0703-0004
OPERATING ROOM TECHNICIAN, CLASS C
(Operating Room Technician)
Course Number: Version 1: B-301-0033
Version 2: B-301-30, B-301-33, B-301-34, B-301-36, B-301-38
Location: National Naval Medical Center, Bethesda, MD, Naval Regional Medical Center, Oakland, CA, School of Health Sciences, Detachment, Portsmouth, VA, School of Health Sciences, San Diego, CA; Naval Hospital, Chelsea, MA, Naval Hospital, Great Lakes, IL.
Length: Version 1: 26 weeks (1040 hours)
Version 2: 26 weeks (960 hours)
Exhibit Dates: Version 1: 3/76-Present
Version 2: 1/54-2/76.

Objectives: To train personnel in the preparation and operating rooms for surgery and participation in surgical procedures.

Instruction: Practical clinical experience in preparation of operating rooms for surgery and participation in surgical procedures.

Credit Recommendation: Version 1: In the vocational certificate category, 2 semester hours in operating room techniques (2/77). Version 2: In the vocational certificate category, 2 semester hours in operating room techniques (2/77). Version 5: In the vocational certificate category, 3 semester hours in operating room techniques (2/77).
COURSE EXHIBITS

hours in anatomy and physiology, 2 in nursing, 1 in physics, 1 in machine tools, 3 in industrial arts (2/74), in the lower-division baccalaureate/associate degree category, 6 semester hours in anatomy and physiology, 3 in anatomy and physiology, 3 in machine tools, 3 in industrial arts (2/74), in the upper-division baccalaureate category, 2 semester hours in the basis of institutional evaluation, 3 in anatomy and physiology, 3 in machine tools, 3 in industrial arts (2/68).

NV-0704-0002

PHYSICAL AND OCCUPATIONAL THERAPY TECHNICIAN, PHASES I AND II

PHYSICAL AND OCCUPATIONAL THERAPY TECHNICIAN, CLASS C

PHYSICAL AND OCCUPATIONAL THERAPY TECHNICIAN, CLASS C (Physical and Occupational Therapy Techc)

PHYSICAL THERAPY TECHNICIAN, CLASS C

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapy Techc)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapy Technician)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therap)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therap)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Thera}

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Thera}

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Thera}

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapist)

PHYSICAL THERAPY TECHNICIAN, CLASS C (Physical Therapi)
cation baccalaureate/associate degree category, 2 semester hours in anatomy, 1 in physiological, 1 in physics, 6 in applied arts and credit in occupational therapy on the basis of institutional evaluation (2/74), in the upper-division baccalaureate category, 2 semester hours in anatomy, 1 in physiological, 1 in physics, 6 in applied arts, and credit in occupational therapy on the basis of institutional evaluation (2/74).

**NV-0705-0003**

***X-RAY TECHNICIAN***

**Course Number:** B-313-0026

**Location:** Submarine School of Health Sciences, San Diego, CA

**Exhibit Dates:** 1/63-7/70

**Objectives:** To train technicians to operate medical x-ray equipment, to produce and process diagnostic radiographs, to assist in the application of radiation therapy, and to assist in various examinations.

**Instruction:** Lectures on mathematics and electronics clinical application of radiologic and fluoroscopic techniques, photodocumenty and radiation safety, film, screen, and darkroom procedures; and radiation therapy.

**Credit Recommendation:** In the vocational certificate category, 6 semester hours in mathematics, 8 in anatomy, 6 in radiation physics and electronics, 8 in radiologic techniques, 3 in radiation safety, 3 in radiation biology, 3 in nuclear medicine technology, 3 in special procedures, 3 in darkroom techniques and 1 in ethics for a total of 43 semester hours (8/77).

**NV-0705-0004**

***NUCLEAR MEDICINE TECHNICIAN***

**Course Number:** B-312-0010

**Location:** Submarine Medical Center, Groton, CT

**Exhibit Dates:** 4/63-Present

**Objectives:** To train enlisted personnel in radiation monitoring and surveys, including radiological administration, mathematics, physics, reactor plant technology, radiobiology, and dosimetry.

**Credit Recommendation:** In the vocational certificate category, 18 semester hours in optical technology (2/74), in the upper-division baccalaureate category, 2 semester hours in radiology (2/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in radiology (2/74), in the upper-division baccalaureate category, 3 semester hours in radiation therapy, and 3 in physics (2/74).

**NV-0705-0005**

***SUBMARINE MEDICAL OFFICER***

**Course Number:** B-6A-22

**Location:** Submarine Medical Center, Groton, CT

**Exhibit Dates:** 1/63-7/72

**Objectives:** To provide physicians with advanced specialized training in the administration of medical services to naval submarine personnel.

**Instruction:** Lectures on radiological physics, personnel dosimetry, including radiation protection standards, radiobiology, safety principles of nuclear reactors, health physics, safety principles of nuclear reactors, health physics, and practical exercises in diving medicine, scuba familiarization, submarine medicine, specialized instruction in medical testing.

**Credit Recommendation:** Baccalaureate credit is not recommended because of the prerequisites and the professional nature of the course (6/75).
COURSE EXHIBITS

Objectives: To train enlisted personnel to fabricate, measure and maintain and repair surfaced laboratory equipment.

Instruction: Version 1 Lectures and practical exercises in the principles of optics, oculature and anatomicologic, specular fabrication and dispensing, mechanical, ophthalmic, clinical management, and repair and maintenance of laboratory equipment. Version 2. Lectures and practical exercises in the theory and principles of surface grinding of unifocal and multifocal lenses, laboray procedures, layout, blocking, marking, polishing, and polishing of spheres, spherical fidens and prisms, and the theory and principles of surface grinding.

Credit Recommendation: Version 1. In the vocational certificate category, 20 semester hours in general business, 2 in microbiology, 2 in statistics, 6 in environmental sanitation (2/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in speech and communications or general business, 2 in microbiology, 2 in statistics, 6 in environmental sanitation (2/74), in the upper-division baccalaureate category, 2 semester hours in speech and communications or general business, 2 in microbiology, 2 in statistics, 6 in environmental sanitation (2/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in speech and communications or general business, 2 in microbiology, 2 in statistics, 6 in environmental sanitation (2/74), in the upper-division baccalaureate category, 3 semester hours in community sanitation, 5 in pathogenic bacteriology (12/68).

NV-0709-0003

NUCLEAR SUBMARINE MEDICINE TECHNICIAN, CLASS C
(Nuclear Submarine Medicine Technician)

CLASS C
(Submarine Medicine Technician)

Course Number: B-300-0012, B-300-012, B-300-12

Location: Health Sciences Education and Training Center, New London, CT

Length: 12 weeks (480 hours)

Exhibit Dates: 8/75-Present.

Objectives: To train hospital corpsmen to serve on submarines independent of a medical officer.

Instruction: Version 1. This course is a combination of the 12-week Nuclear Medicine Technician course, the 8-week Basic Enlisted Submarine course. Lectures and practical exercises in mathematics, radiological physics, toxicology, nuclear reactor safety, nuclear weapons safety, radiological physics, radiological physics, first aid/minor surgery, preventive medicine, diving medicine, and medicine diagnosis and treatment. Version 2. This course includes the 8-week Basic Enlisted Submarine course. Lectures and practical exercises in medical diagnosis and treatment procedures, anatomy, physiology, pharmaceutical and laboratory procedures, minor surgery, first aid and hygiene, and sanitation.

Credit Recommendation: Version 1: In the lower-division baccalaureate/associate degree category, 60 semester hours in pre-clinical medicine and surgery, 10 in nursing, 3 in medical laboratory technology, 12 in health care science, and additional credit on the basis of institutional evaluation (2/74).

NV-0709-0004

AEROSPACE PHYSIOLOGY TECHNICIAN

Course Number: B-322-11

Location: Naval Aerospace Medical Institute, Pensacola, FL

Length: 12-16 weeks (480-640 hours)

Exhibit Dates: 6/63-Present.

Objectives: To train enlisted personnel to assist in the indoctrination of personnel in aerospace physiology.

Instruction: Lectures on advanced anatomy of the ear, nose, throat, sinuses, and the circulatory and respiratory systems; orientation in test flight chambers, effects of the aviation environment upon the circulatory and respiratory systems; practical exercises in ejection seat training devices; instructor training; and acceleration survival and night vision testing.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 15 semester hours in aerospace physiology or flight surgery assistance, and additional credit on the basis of institutional evaluation (2/74), in the upper-division baccalaureate category, 4 semester hours in aerospace physiology or flight surgery assistance, and additional credit on the basis of institutional evaluation (2/74).
NV-0709-0005

SPECIAL OPERATIONS TECHNICIAN (Special Operations Technician)
Course Number: A-431-0021
Location: Underwater Swimmers School, Key West, FL
Length: 8 weeks (95 hours)
Exhibit Dates: 12/63-Present

Credit Recommendation: To assist hospital corpsmen with an understanding of the effects of pressure on the human body and the treatment of divers' diseases and injuries. Laboratory exercises and practical exercises in diving physics, underwater physiology, accident prevention, use of compression chambers, and decompression sickness.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, credit in diving medicine on the basis of institutional evaluation (2/74), in the upper-division baccalaureate category, credit in diving medicine on the basis of institutional evaluation (2/74).

NV-0709-0006

CARDIOPULMONARY TECHNICIAN, CLASS C
(Cardiopulmonary Technician)
Course Number: B-300-0078, B-300-18, B-300-19
Location: National Naval Medical Center, Bethesda, MD; School of Health Sciences, San Diego, CA
Length: Version 1: 52 weeks (2036 hours) Version 2: 39 weeks (1560 hours) Version 3: 26 weeks (1039 hours)

Objectives: To provide enlisted personnel with the knowledge and skills necessary to perform as cardiopulmonary technical assistants.

Instruction: Lectures and practical exercises in basic cardiopulmonary technical assistance, including anatomy and physiology, physics, electrocardiograph monitoring, pulmonary function tests, cardiac catheterization procedures, surgical techniques, sphygmograph techniques, and operation and maintenance of cardiopulmonary equipment.

Credit Recommendation: Version 1: In the vocational certificate category, 2 semester hours in mathematics, 2 in physics, 2 in mathematics, 2 in clinical chemistry, and 2 in cardiopulmonary or respiratory technology on the basis of institutional evaluation (2/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in mathematics, 2 in physics, 2 in mathematics, 2 in clinical chemistry, and 2 in cardiopulmonary or respiratory technology on the basis of institutional evaluation (2/74), in the upper-division baccalaureate category, 2 semester hours in mathematics, 2 in physics, 2 in mathematics, 2 in clinical chemistry, and 2 in cardiopulmonary or respiratory technology on the basis of institutional evaluation (2/74).

NV-0709-0008

1. ADVANCED HOSPITAL CORPSMAN
   (Independent Duty Technician)
2. MEDICAL SERVICES TECHNICIAN,
   CLASS B
3. ADVANCED HOSPITAL CORPS TECHNICIAN, CLASS B
   (Hospital Corpsman, Advanced)

Course Number: Version 1: B-300-0016, B-300-0019
   All Versions: B-300-150-300-16
Location: School of Health Sciences, San Diego, CA, Naval Hospital, Fort Ronton, VA
Length: Version 1: 40 weeks (1600 hours) Version 2: 26 weeks (800-1040 hours) Version 3: 28 weeks (568 hours)

Objectives: To train personnel to assist medical officers in the care and treatment of patients for ear, nose, and throat conditions.

Instruction: Lectures on the medical and surgical conditions of ear, nose and throat, audiometry, emergencies, nursing care, and operating room procedures. Topics also include care and conditions of the eye.

Credit Recommendation: Version 1: In the vocational certificate category, 2 semester hours in "otolaryngology operating room techniques" (8/77), in the lower-division baccalaureate/associate degree category, 2 semester hours in "otolaryngology anatomy" in the vocational certificate category, 9 in otolaryngology physiology, 6 in audiometry and audiology, and 6 in diagnostic and therapeutic techniques (8/77). Version 2: In the vocational certificate category, 12 semester hours in "otolaryngology technology" in the vocational certificate category, 3 in nursing, 3 in anatomy and physiology, and additional credits in health care technology on the basis of institutional evaluation (2/74), in the lower-division baccalaureate/associate degree category, 12 semester hours in health care technology, 3 in nursing, 3 in anatomy and physiology, and additional credits in health care technology on the basis of institutional evaluation (2/74).
**COURSE EXHIBITS**

**Exhibit Dates: Version 1 9/75-Present**

**Version 2: 9/55-2/72**

Objectives: To train enlisted personnel to assist medical officers in electrocardiographic and basal metabolism examinations.

Instruction: Lectures on physiology of circulation, techniques of electrocardiography, principles of metabolism and clinical application of tests, and basal metabolism techniques.

Credit Recommendation: Version 1. In the vocational certificate category, 6 semester hours in electrocardiographic technology, additional credit in the basis of institutional evaluation (2/74). Version 2. In the vocational certificate category, 12 semester hours in anatomy and physiology, or electrocardiographic and respiratory technology, additional credit on the basis of institutional evaluation (2/74), in the lower-division baccalaureate/associate degree category, 6 semester hours in electrocardiographic technology, additional credit in the basis of institutional evaluation (2/74), in the upper-division baccalaureate category, 6 semester hours in electrocardiographic technology, additional credit on the basis of institutional evaluation (2/74).

**NV-0709-0011**

**ELECTROENCEPHALOGRAPHY TECHNICIAN, CLASS C**

(Electroencephalography Technic)


Location: Version 1: National Naval Medical Center, Bethesda, MD, Naval Hospital, San Diego, CA, Naval Hospital, St. Albans, NY, Naval Hospital, Bethesda, MD, Naval Hospital, Chelsea MA., Naval Hospital, Okinawa, Japan.

Length: 16 weeks (640 hours).


Objectives: To train personnel in electroencephalography technology.

Instruction: Lectures and clinical application of patient-interviewing and -handling approaches, structure and function of nervous system, clinical neurology, psychiatry and medicine, neurophysiology, basic electricity and electronics, EEG instrumentation, and clinical electroencephalography.

Credit Recommendation: Insufficient data for evaluation (2/74).

**NV-0709-0013**

**DERMATOLOGY TECHNICIAN, CLASS C**

(Dermatology Technic)

Course Number: B-300-29

Location: Naval Hospital, Philadelphia, PA.

Length: 16-20 weeks (640 hours).

Exhibit Dates: 12/57-Present.

Objectives: To train enlisted personnel to assist medical officers in the care of patients with cutaneous disorders.

Instruction: Lectures and laboratories in dermatology assisting, including basic laboratory techniques, basic bacteriology, serology, pathology, dermatopathology, and parasitology; common dermatoses diagnosis, medical records and reports, operating room training, and dermatological treatment procedures.

Credit Recommendation: In the vocational certificate category, 4 semester hours in epidemiology, 2 in medical laboratory technology, 12 in dermatology technology on the basis of institutional evaluation (2/74), in the lower-division baccalaureate/associate degree category, 4 semester hours in epidemiology, 2 in medical laboratory technology, 12 in dermatology technology on the basis of institutional evaluation (2/74).

**NV-0709-0015**

**FIELD MEDICAL SERVICE TECHNICIAN (Field Medical Service Officer)**

Course Number: B-300-13; B-300-14.

Location: Field Medical Service School, Cp Lejeune, NC, Field Medical Service School, Cp. Pendleton, CA.

Length: 3-7 weeks (120-280 hours).


Objectives: To train medical personnel in combat survival and field medical and dental practices.

Instruction: Lectures and practical exercises in combat survival and field medical and dental practices. Course includes physical conditioning, the corpsman in the field, field first aid procedures, medical supply in the field, and preventive maintenance.

Credit Recommendation: In the vocational certificate category, 2 semester hours in first aid and 7/74, in the lower-division baccalaureate/associate degree category, 2 semester hours in first aid and 7/74.

**NV-0799-0001**

**NAVAL SCHOOL OF HOSPITAL ADMINISTRATION**

Course Number: None.

Location: National Naval Medical Center, Bethesda, MD.

Length: 32-40 weeks (940-1337 hours).

Exhibit Dates: 5/75-12/68.

Objectives: To provide advanced instruction in the administration of medical and hospital personnel.

Instruction: In the upper-division baccalaureate category, 12 semester hours in anatomy and physiology, or electrocardiographic and respiratory technology, and additional credit on the basis of institutional evaluation (2/74).

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in first aid and 7/74.

**NV-0799-0002**

**NAVY ALCOHOL SAFETY ACTION PROGRAM (NASAP)**

Course Number: None.


Length: 6 weeks (36 hours).

Exhibit Dates: 9/74-Present.

Objectives: To provide instruction on alcoholism, including early identification techniques and preventive alternatives.

Instruction: Through group discussions, lectures, role playing, and demonstrations, the following topics are covered: introduction to the severity of alcohol problems, particular emphasis on the drinking driver, a review of Navy regulations on the subject, medical aspects of alcohol and its physical and mental effects, legal implications of driving while intoxicated, symptoms and phases of alcohol use and abuse, attitudes and values related to both alcohol and a drinking problem; support available from other organizations and agencies, the effects of alcohol abuse on family members and friends, and the exploration of the supervisor's job in supporting the Navy Alcohol Prevention Program.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in alcohol abuse studies (10/78).

**NV-0799-0003**

**PHARMACY TECHNICIAN, CLASS C**

(Pharmacy Technic)


Location: School of Health Sciences, San Diego, CA, School of Health Sciences Detachment, Portsmouth, VA.


Objectives: To train technicians to assist medical and pharmacy officers in the compounding and dispensing of pharmaceutical preparations.

Instruction: Lectures in principles of pharmacy, pharmaceutical calculations, inorganic, organic, and pharmaceutical chemistry, basic pharmacology, drug interaction and toxicology, practical experience in compounding and dispensing pharmacy, and pharmacy administration.

Credit Recommendation: Version 1: In the lower-division baccalaureate/associate degree category, 5 semester hours in principles of pharmacy, 3 in pharmaceutical mathematics, 3 in pharmacology, 1 in pharmacy management, 5 in dispensing and 1 in intravenous admixtures, for a total of 38 semester hours (8/77).

Version 2: In the vocational certificate category, 2 semester hours in pharmaceutical
mathematics, 2 in organic chemistry, 3 in organic chemistry, 2 in principles of pharmacy, 4 in compounding and dispensing pharmacy, 1 in pharmacy orientation, 1 in typing, 5 in basic pharmacology and toxicology, 1 in pharmacy administration (2/74); in the upper-division baccalaureate/associate degree category, 2 semester hours in pharmaceutical mathematics, 2 in inorganic chemistry, 2 in principles of pharmacy, 4 in compounding and dispensing pharmacy, 1 in pharmacy orientation, 1 in typing, 5 in basic pharmacology and toxicology, 1 in pharmacy administration (2/74); in the upper-division baccalaureate category, 2 semester hours in pharmaceutical mathematics, 2 in inorganic chemistry, 2 in organic chemistry, 2 in principles of pharmacy, 4 in compounding and dispensing pharmacy, 1 in pharmacy orientation, 1 in typing, 5 in basic pharmacology and toxicology, 1 in pharmacy administration (2/74).
Credit Recommendation: In the vocational certificate category, 1 semester hour in occupational safety (5/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in occupational safety (5/74).

NV-0802-0002
NUCLEAR WEAPONS DISPOSAL ADVANCED REFRESHER
Course Number: A-4E-0024
Location: Explosive Ordnance Disposal School, Indian Head, MD
Length: 2 weeks (67 hours).
Exhibit Dates: 10/72-Present.
Objective: To train advanced personnel in the procedures of nuclear ordnance disposal.
Instruction: Lectures and practical exercises in nuclear disposal procedures. Topics include nuclear weapon identification, principles of operation, location of safety devices and components, and packaging and labeling operations for contaminated materials and nuclear components.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/74).

NV-0802-0003
SURFACE EXPLOSIVE ORDNANCE DISPOSAL (EOD) ADVANCED REFRESHER
Course Number: A-4E-0025; A-431-0015
Location: Explosive Ordnance Disposal School, Indian Head, MD
Length: 3 weeks (165 hours).
Exhibit Dates: 10/70-Present.
Objective: To train advanced personnel in explosive ordnance disposal procedures and safety precautions in explosive ordnance disposal operations.
Instruction: Lectures and practical exercises in explosive ordnance disposal procedures and operations. Topics include explosive hazards, fuses, munitions, and the effects, precautionary measures, and disposal of nuclear and other explosive materials.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/74).

NV-0802-0004
RADIOPHIC SAFETY OFFICER
Course Number: A-4G-0008
Location: Welding Class C School, San Diego, CA
Length: 2 weeks (65 hours)
Exhibit Dates: 2/68-Present.
Objectives: To train personnel to perform as radiographic safety officers and to supervise radiographers.
Instruction: Lectures and practical exercises in fundamentals of radiography, including applications to industrial radiography; interaction of radiation with matter; mathematics related to radiography; variation of dose-rate with distance, source identity; radiation control, detection, and measurement; principles of radiation detection; AEC rules and regulations; duties of radiographic safety officers; standards for protection against radiation, and familiarization with nondestructive testing.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/74).

NV-0802-0007
NUCLEAR WEAPONS DISPOSAL
Course Number: A-431-0013
Location: Explosive Ordnance Disposal School, Indian Head, MD
Length: 6 weeks (232 hours).
Exhibit Dates: 9/72-Present.
Objectives: To train officers and enlisted personnel in nuclear ordnance disposal procedures.
Instruction: Lectures and practical exercises in nuclear ordnance disposal procedures, including weapons identification, elementary principles of operation, location of safety devices and components, radiation hazards and packaging, and personnel decontamination operations.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/74).
NV-0802-0008  
**ABC WARFARE DEFENSE Afloat**  
**Course Number:** Not available  
**Location:** Version 1: Damage Control Training, Philadelphia, PA; Version 2: Schools Command, Treasure Island, CA  
**Length:** 5 weeks (173-174 hours)  
**Exhibit Dates:** 12/59-12/68  
**Objectives:** To train officers in atomic, biological, and chemical warfare defense afloat.  
**Instruction:** Lectures and practical exercises on ABC warfare defense afloat, including atomic, biological, and chemical warfare effects on personnel, ships and equipment, methods used to reduce or negate these effects, casualty, immunization, requirements of shipboard ABC-defense control; radiological detection; nuclear weapon accidents; protection and debacontamination; disaster recovery; shipboard organization; and anti-personnel biological warfare.  
**Credit Recommendation:** Credit is not recommended because of the specialized nature of the course (12/68)

NV-0802-0009  
**CVA/CVS Air Launched Weapons Supervisor**  
**(CVA/CVS Air Launched Weapons)**  
**Course Number:** C-646-3103  
**Location:** Air Maintenance Training Detachment, Jacksonville, FL; Air Maintenance Training Detachment, Norfolk, VA; Air Maintenance Training Detachment, Mayport, FL; Air Maintenance Training Detachment, North Island, CA; Air Maintenance Training Detachment, Alameda, CA  
**Length:** 3-4 weeks (120-160 hours)  
**Exhibit Dates:** 6/72-9/72  
**Objectives:** To train personnel in the complete sequence of air launched weapons handling.  
**Instruction:** Lectures and practical exercises in procedures and safety precautions in receiving, inspecting, stowage, breakout, assembly, loading, and reporting and recording of air-launched weapons. Topics include ammunition, pyrotechnics, aircraft munitions, and guided missiles.  
**Credit Recommendation:** In the vocational certificate category, 3 semester hours in explosives (5/74).

NV-0802-0010  
**FALLOUT SHELTER ANALYSIS**  
**Course Number:** A-4A-0015  
**Location:** Civil Engineering Corps Officers School, Port Hueneme, CA  
**Length:** 2 weeks (40 hours)  
**Exhibit Dates:** 5/72-Present  
**Objectives:** To provide personnel with an understanding of the strategic nuclear threat and the rationale and importance of a fallout shelter system.  
**Instruction:** Lectures and practical exercises in nuclear energy and the effects of nuclear weapons, fallout radiation shielding, computer applications, and shelter planning and utilization.  
**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (5/74).

NV-0803-0001  
**AMPHIBIOUS RECONNAISSANCE**  
**Course Number:** G-2E-4610, G-010-4610, H-2E-3923, H-010-3923  
**Location:** Landing Force Training Command, Norfolk, VA; Naval Amphibious Base, San Diego, CA  
**Length:** 3-4 weeks (181-191 hours)  
**Exhibit Dates:** 9/65-Present  
**Objectives:** To orient officers and enlisted personnel to conduct amphibious reconnaissance patrols.  
**Instruction:** Lectures in map reading, scouting and patrolling techniques, hydrography, and underwater skills, with emphasis on physical conditioning and swimming.  
**Credit Recommendation:** In the vocational certificate category, credit in evaluation education and swimming on the basis of institutional examination (5/74); in the lower-division bachelor's associate degree category, credit in physical education and swimming on the basis of institutional evaluation (5/74); in the upper-division baccalaureate category, credit in physical education and swimming on the basis of institutional evaluation (5/74).

NV-0803-0002  
1. **ADVANCED NAVAL PARACHUTIST, CLASS C**  
2. **ADVANCED NAVAL PARACHUTIST, NP-II CLASS C**  
(Naval Parachutist, Advanced, Class C)  
**Course Number:** C-602-2021  
**Location:** Technical Training Center, Lakehurst, NJ  
**Length:** Version 1: 3-4 weeks (120 hours);Version 2: 2-3 weeks (88 hours)  
**Exhibit Dates:** 5/74-Present  
**Objectives:** To provide selected Navy and Marine Corps personnel with knowledge and skills to accomplish delayed stable fall parachute descents utilizing advanced glider surface parachutes and high-altitude oxygen equipment.  
**Instruction:** Lectures and practical exercises to include advanced parachute theory, equipment and parachute operations, precision target accuracy, extended delayed opening descents, safety check of parachute equipment, and emergency actions.  
**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (7/74).

NV-0902-0001  
**MANAGEMENT OF MARINE CORPS CLUBS**  
**Course Number:** S-E-0013  
**Location:** Special Services Administrative Activity, Patuxent River, MD  
**Length:** 4 weeks (140 hours)  
**Exhibit Dates:** 1/77-Present  
**Objectives:** To train enlisted personnel, civilians and officers to manage officers, NCOs, and enlisted clubs.  
**Instruction:** Includes lectures, audio-visual presentations, and practical exercises designed to develop managerial skills needed to successfully operate a Marine Corps club. Included are club regulations, accounting, and cost controls and personnel procedures.  
**Credit Recommendation:** In the vocational certificate category, 4 semester hours in leisure services administration (5/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in introduction to institutional management (7/75).  

NV-0902-0002  
**RECREATION MANAGEMENT**  
**Course Number:** S-E-0015  
**Location:** Special Services Administrative Activity, Patuxent River, MD  
**Length:** 4 weeks (140 hours)  
**Exhibit Dates:** 1/77-Present  
**Objectives:** To train Navy, Marine, and civilian personnel to manage Navy/Marine recreational programs and facilities.  
**Instruction:** Includes lectures and practical exercises in the management of recreational facilities and programs. Course includes development of management and administrative abilities in relationship to recreational facilities, personnel management, financial management, accounting, and resource management.  
**Credit Recommendation:** In the vocational certificate category, 3 semester hours in recreational facilities management (7/75); in the lower-division baccalaureate/associate degree category, 2 semester hours in introduction to business management (7/75).

NV-1002-0001  
**BUILDER-TOOL AND EQUIPMENT MAINTENANCE (BU "C")**  
**Course Number:** A-712-0010  
**Location:** Construction Training Center, Gulfport, MS; Construction Training Center, Port Hueneme, CA; Construction School, Davisonville, RI  
**Length:** 10-12 weeks (320-360 hours)  
**Exhibit Dates:** 1/72-Present  
**Objectives:** To train personnel to maintain, condition, and repair tools and machinery.  
**Instruction:** Lectures and practical exercises in preventive maintenance, conditioning and repair of all types of carpenter shop machinery including all powered hand tools for the builder construction trade, non-powered edged and non-powered hand tools for the construction trade, woodworking and sawmill sharpening equipment, two-man saw mill, splicing band, saw blades, sanding and drive belts, coordinate stocking and procurement.  
**Credit Recommendation:** In the vocational certificate category, 5 semester hours in industrial arts/tool and equipment repair (7/76); in the lower-division baccalaureate/associate degree category, 3 semester hours in industrial arts/tool and equipment repair (7/76).

NV-1115-0001  
**INTERMEDIATE MAINTENANCE LEVEL DATA ANALYSIS, CLASS C**  
**Course Number:** None  
**Location:** Naval School, Norfolk, VA; Naval School, San Diego, CA  
**Length:** 3 weeks (102 hours)  
**Exhibit Dates:** 6/69-Present  
**Objectives:** To train officers and enlisted personnel to apply statistical analysis to data collection in accounting and maintenance systems.  
**Instruction:** Lectures in basic applied statistical analysis, including mathematics review, frequency distribution, dispersion, confidence estimation, trends, control charts, man-hour accounting, and computer equipment usage.  
**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 1 semester hour in introductory statistics (2/74); in the lower-division baccalaureate category, 1 semester hour in introductory statistics (2/74).  

NV-1115-0002  
1. **MANAGEMENT ANALYSIS, CLASS C**  
2. **MANAGEMENT ANALYSIS, CLASS O**  
**Course Number:** Version 1: C-7E-2010  
**Version 2:** None
COURSE EXHIBITS

**Location:** Air Tech Inst. Training Center, Memphis, TN

**Length:** 6 weeks (240 hours)

**Exhibit Dates:**
- **Version 1:** 5/72-9/72
- **Version 2:** 5/76-12/76

**Objectives:**
- Provide naval officers with practical experience in maintenance management with training in statistical analysis and management concepts.

**Instructor:**
- Lectures and laboratory
- Statistical methods, inference, data presentation, and management concepts and problems.

**Credit Recommendation:**
- **Version 1:** In the vocational certificate category, 3 semester hours in base statistics (6/75), 2 in applied music (2/74), and 2 in music ensemble (2/74), in the upper-division baccalaureate category, 3 semester hours in managerial statistics (12/76)

**NV-1205-0001**

**Music:** Class A, Basic

- Bassoon (Class A)
- Band (Music, Class C, Refresher)

**Course Number:** A-450-0010, 450-F1

**Location:** School of Music, Little Creek, Norfolk, VA.

**Length:**
- **Version 1:** 24-36 weeks (912 hours), 2 in music ensemble, 2 in basic conducting, 2 in music survey, and 1 in maintenance of current trends in popular music, Advanced Drum Majoring, covering baton and instrument positioning, and general rules for ceremonial participation.
- **Version 2:** 10/78-1/79, 3 in band management.

**Credit Recommendation:**
- **Version 1:** In the lower-division baccalaureate/associate degree category, 1 semester hour in music ensemble, 1 in planning and preparing a Navy unit band (2/74).
- **Version 2:** 1/78-3/79, in the graduate degree category, 2 in music ensemble, 2 in basic conducting, and 1 in planning and preparing a Navy unit band (2/74).

**NV-1205-0002**

**Music Advanced:**

- Class C-1
  - Advanced Band Leader
- Class B, Advanced
- Advanced Course (Class B)
- Class B, Advanced

**Course Number:**
- **Version 1:** A-450-0014, 2-4 in applied music (2/74).
**NAVY**

1-89

**INTRODUCTION TO OCEAN ENGINEERING**

Course Number: A-4A.0025

Location: Naval School Civil Engineer Corps Officers, Port Hueneme, CA

Length: 2 weeks (60 hours)

Exhibit Dates: 7/70-Present

Objectives: To provide students with a general knowledge of ocean engineering

Instruction: Lectures in problems and techniques of ocean engineering, including physical and geological oceanography, legal aspects, and diving

Credit Recommendation: In the vocational certificate category, 2 semester hours in ocean engineering (12/73), in the lower-division baccalaureate/associate degree category, 2 semester hours in oceanography (12/73), in the upper-division baccalaureate category, 2 semester hours in maritime science (12/73).

**AIR-OCEAN ENVIRONMENT COURSE, Class C**

Course Number: None

Location: Air Technical Training Center, Lakehurst, NJ

Length: 4-7 weeks (160-280 hours)

Exhibit Dates: 2/65-Present

Objectives: To provide enlisted personnel with a basic understanding of the physics and chemistry of oceans, and the principles of underwater sound

Instruction: Lectures and practical experiences in the fundamentals of underwater acoustics, physical oceanography, operational equipment and procedure, and environmental analysis and prediction

Credit Recommendation: In the vocational certificate category, 6 semester hours in marine sciences (12/73); in the lower-division baccalaureate/associate degree category, 6 semester hours in oceanography (12/73), in the upper-division baccalaureate category, 6 semester hours in ocean engineering (12/73).

**AVIATION ANTISUBMARINE WARFARE (AASW) FOR NAVAL FLIGHT OFFICERS, PIC**

Course Number: E-2D-0072, E-3D-072

Location: Fleet Aviation Specialized Operational Training Group, Pacific, Moffett Field, CA

Length: 2-3 weeks (82-105 hours)

Exhibit Dates: 9/72-Present

Objectives: To train naval flight officers to operate in equipped VP squadrons and to teach tactics and weaponry of antisubmarine warfare

Instruction: Lectures in the procedures for antisubmarine warfare, including oceanography, underwater acoustics, AASW tactics, AASW electronic equipment, current electronic-warfare concepts and requirements, and mission procedures; inclusion of mathematical treatment of acoustic and oceanographic principles

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours as a technical elective (7/74), in the lower-division baccalaureate/associate degree category, 6 semester hours as a technical elective (7/74).

**NV-1304-0001**

**NV-1304-0002**

**NV-1304-0003**
1. **COURSE EXHIBITS**

**AEROGRAFER'S MATE, CLASS A**

**Course Number:** C-420-2010

**Location:** Air Technical Training Center, Lakehurst, NJ

**Length:** 14-18 weeks (510-717 hours)

**Exhibit Dates:** 3/56-Present

**Objectives:** To train enlisted personnel to perform as aerographer's mates

**Instruction:** Lectures and practical exercises in meteorology, including matter, heat, humidity, and the atmosphere; surface observations, temperature, psychrometric, wind, pressure, precipitation, and sky conditions; upper-air observations; synoptic codes; oceanography; instrumentation, charts, logs, weather map analysis; and basic typing training.

**Credit Recommendation:** In the vocational certificate category, 3 semester hours in weather forecasting or meteorology (5/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in weather forecasting or meteorology (12/68).

---

**AEROGRAFER'S MATE, CLASS B**

**Course Number:** Version 2: C-420-211

**Location:** Air Technical Training Center, Lakehurst, NJ

**Length:** Version 1: 18 weeks (583 hours)

**Version 2:** 22-26 weeks (600-1033 hours)

**Exhibit Dates:** Version 1: 8/73-Present

**Version 2:** 5/73-7/73

**Objectives:** To train aerographer's mates in meteorology, air observation, and supervision and preparation of weather and oceanographic forecasts.

**Instruction:** All versions include lectures and practical exercises in meteorology, air observation, and supervision and preparation of weather and oceanographic forecasts, including various chart analyses, satellite meteorology, instruments, oceanography, map analysis, and forecasting under various conditions; tropical meteorology, numerical weather prediction, management, mathematics, and physics applicable to meteorology, and flight observation.

**Credit Recommendation:** Version 1: In the vocational certificate category, 12 semester hours in weather forecasting or meteorology (5/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in weather forecasting or meteorology (5/74). Version 2: In the vocational certificate category, 12 semester hours in weather forecasting or meteorology (5/74), in the lower-division baccalaureate/associate degree category, 6 semester hours in weather forecasting or meteorology (5/74), in the upper-division baccalaureate degree category, 3 semester hours in weather forecasting or meteorology (5/74).

---

**METEOROLOGICAL, SATELLITE, CLASS C**

**Course Number:** Not available.

**Location:** Air Technical Training Center, Lakehurst, NJ

**Length:** 4 weeks (140 hours)

**Exhibit Dates:** 8/66-12/68

**Objectives:** To train aerographer's mates in the operation and use of meteorological satellites

**Instruction:** Lectures and practical exercises in the operation of automatic picture transmission, terminal ground equipment, and the interpretation of the received data, including equipment and procedure, operational satellite system data, acquisition and grading, operation of APT terminal procedures, component extraction, and use of APT data, synoptic application, and operational use of APT equipment.

**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (6/74).

---

**NAVIGATION SYSTEMS ANALYSIS AND DESIGN**

**Course Number:** A-532-0019, A-532-019

**Location:** Service School Command, San Diego, CA

**Length:** 4 weeks (110-114 hours)

**Exhibit Dates:** 12/68-Present

**Objectives:** To provide experienced programmers with basic training in systems analysis and design.

**Instruction:** Lectures and practical experience in data processing systems analysis, including data communication concepts; data gathering and data analysis, system requirements specification, system design fundamentals; technical and economic feasibility study; manpower planning, system documentation, conversion, evaluation, and maintenance planning, and program evaluation and review techniques.

**Credit Recommendation:** In the vocational certificate category, 2 semester hours in business systems analysis (2/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in business systems analysis (2/74).

---

**NAVITAL-0002**

1. **AN/USQ-20 BASIC PROGRAMMING**

**Course Number:** K-2G-1020

**Location:** Fleet Anti-Air Warfare Training Center, San Diego, CA

**Length:** Version 1: 8 weeks (233 hours)

**Version 2:** 7 weeks (210 hours)

**Exhibit Dates:** Version 1: 7/68-Present

**Version 2:** 7/64-2/73

**Objectives:** To train personnel in the basic principles of programming and operating the AN/USQ-20 computer.

**Instruction:** Practical application of principles of programming, basics of digital computers, flybywiring, unit computer assember programming techniques.

**Credit Recommendation:** In the vocational certificate category, 5 semester hours in computer programming (2/74); in the lower-division baccalaureate/associate degree category, 5 semester hours in computer programming (2/74), in the upper-division baccalaureate category, 4 semester hours in computer programming (12/68).

---

**NAVITAL-0003**

**Course Number:** A-88-0019

**Location:** Supply Corps School, Athens, GA

**Length:** 2 weeks (65 hours)

**Exhibit Dates:** 7/72-Present

**Objectives:** To train supply officers in automated supply systems aboard.

**Instruction:** Lectures and practical exercises in automated supply systems aboard, including systems operation, automatic data processing functions not related to supply and accounting, and resources utilization.

**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (7/74).
Length: 3 weeks (105 hours)
Exhibit Dates: 1/73-Present

Objectives: To provide enlisted personnel with the fundamental knowledge and skills to perform input functions.

Instruction: Operational experience in NTS, data links and communications procedures, data input console and program functions, and data display equipment.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (2/74).

NV-1402-0004

NAVAL TACTICAL DATA SYSTEMS (NTDS) INTERMEDIATE PROGRAMMER COURSE (CS-1)

Course Number: K-2G-1026
Location: Fleet Anti-Air Warfare Training Center, San Diego, CA.
Length: 3 weeks (86-90 hours)
Exhibit Dates: 3/66-Present

Objectives: To teach military or civilian personnel with previous programming experience, the use of CS-1, compiling system personnel, with previous programming experience, nature of the course (2/74).

Functions, and data display equipment.

NTDS data links, and communication programs, to perform data input functions.

Credit Recommendation: In the upper-di vision baccalaureate category, credit computer principles on the basis of institutional evaluation (12/68).

NV-1402-0007

IBM SYSTEM 360 COMPUTER SYSTEM PROGRAMMING (COBOL LANGUAGE) CLASS C

Course Number: A-532-0015.
Location: Data Processing Technician Class C School, San Diego, CA.
Length: 4 weeks (102 hours)
Exhibit Dates: 7/71-Present

Objectives: To teach data processing technicians the concepts and techniques of coding programs in COBOL.

Instruction: Lectures and practical exercises in drawing program flow charts, COBOL language, program structures, and debugging programs.

Credit Recommendation: In the vocational certificate category, 3 semester hours in computer programming (2/74), in the lower-division baccalaureate category, 3 semester hours in computer programming (2/74), in the upper-di vision baccalaureate category, 3 semester hours in computer programming (2/74).

NV-1402-0008

FLEET DATA PROCESSING OFFICERS TRAINING

Course Number: A-8B-0016.
Location: Supply Corps School, Athens, GA.
Length: 3 weeks (180 Hours)
Exhibit Dates: 11/72-Present

Objectives: To train officers in ADP operations management, analysis, and programming.

Instruction: Lectures and practical exercises in operations management, flow charting, design of programs, and computer language (COBOL).

Credit Recommendation: In the vocational certificate category, 3 semester hours in data processing principles (2/74); in the lower-division baccalaureate category, 2 semester hours in computer programming (2/74); in the upper-division baccalaureate category, 2 semester hours in data processing principles (2/74).

NV-1402-0009

CMS-2 PROGRAMMING (CP-642 A&B/USQ-20)

Course Number: J-7E-3772; J-532-3772.
Location: Fleet Anti-Air Warfare Training Center, Dam Neck, VA.
Length: 4 weeks (140 hours)
Exhibit Dates: 12/71-Present

Objectives: To train experienced computer programmers to use the CMS-2 compiler/associate and automatic data processing.

Credit Recommendation: In the vocational certificate category, 3 semester hours in computer programming (2/74); in the lower-division baccalaureate category, 2 semester hours in computer programming (2/74), in the upper-di vision baccalaureate category, 3 semester hours in computer programming (2/74).

NV-1402-0010

DD963 NAVAL TACTICAL DATA SYSTEMS (NTDS) DATA INPUT

Course Number: K-221-0075.
Location: Fleet Combat Training Center, Pacific, San Diego, CA.
Length: 2 weeks (70 hours)
Exhibit Dates: 9/77-Present

Objectives: To train selected enlisted personnel in the skills related to the data collection area of the DD963 Naval Tactical Data System.

Instruction: Classroom lectures and laboratory exercises in NTDS equipment, input functions, user functions, data links, and mock-up/ chalk talk.

Credit Recommendation: No credit is recommended because of the limited specialized nature of the course (7/78).

NV-1402-0011

DIGITAL FUNDAMENTALS

(Computer Basics Class C-Electronics)

Course Number: None.
Location: Electronics Technician School, Great Lakes, IL.
Length: 5 weeks (240 hours)
Exhibit Dates: 10/62-Present

Objectives: To train personnel in computer basics.

Instruction: Lectures and practical exercises in digital, analog, and hybrid computer fundamentals and concepts, including fundamentals of digital computers and data processing techniques, number systems, programming, Boolean algebra, arithmetic operations, control, magnetics, semiconductor logic, analog computer fundamentals, analog components and mathematical applications, analog mechanization, hybrid computer fundamentals, conversion techniques, digital differential analyzer, and algebra.

Credit Recommendation: In the vocational certificate category, 4 semester hours in data processing principles, 2 in switching circuits, 2 in analog circuits (4/74), in the upper-division baccalaureate category, 4 semester hours in data processing principles, 1 in switching circuits, 1 in analog circuits (4/74), in the upper-division baccalaureate category, 3 semester hours in computing science (12/68).

NV-1402-0012

DIGITAL AND ANALOG COMPUTER FUNDAMENTALS

(Computer Basics Class C-Electronics)

Course Number: None.
Location: Electronics Technician School, Great Lakes, IL.
Length: 14 weeks (420 hours)
Exhibit Dates: 10/62-12/68

Objectives: To train personnel in computer basics.

Instruction: Lectures and practical exercises in digital, analog, and hybrid computer fundamentals and concepts, including fundamentals of digital computers and data processing techniques, number systems, programming, Boolean algebra, arithmetic operations, control, magnetics, semiconductor logic, analog computer fundamentals, analog components and mathematical applications, analog mechanization, hybrid computer fundamentals, conversion techniques, digital differential analyzer, and algebra.

Credit Recommendation: In the vocational certificate category, 4 semester hours in data processing principles, 2 in switching circuits, 2 in analog circuits (4/74), in the upper-division baccalaureate category, 4 semester hours in data processing principles, 1 in switching circuits, 1 in analog circuits (4/74), in the upper-division baccalaureate category, 3 semester hours in computing science (12/68).
100 COURSE EXHIBITS

NV-1402-0013
DIGITAL, ANALOG, AND HYBRID COMPUTER FUNDAMENTALS
(Computer Basics Class C Electronics)
Course Number: None.
Location: Electronics Technician School, Great Lakes, IL.
Length: 16 weeks (480 hours).
Exhibit Dates: 10/62-12/68.
Objectives: To train personnel in computer basics.
Instruction: Lectures and practical exercises in digital, analog, and hybrid computer fundamentals and concepts, including fundamentals of digital computers and data processing techniques, number systems, programming, Boolean algebra, arithmetic operations, control, magnetics, semiconductors, logic, analog computer fundamentals, analog computers, and mathematical calculations, and analog mechanization, hybrid computer fundamentals, conversion techniques, and digital digital analyzer.

Credit Recommendation: In the vocational certificate category, 4 semester hours in data processing principles, 2 in switching circuits and 2 in analog circuits (4/74), in the lower-division baccalaureate/associate degree category, 4 semester hours in data processing principles, 2 in switching circuits and 1 in analog circuits (4/24), in the upper-division baccalaureate category, 6 semester hours in computing science (12/68).

NV-1402-0014
COMPUTER PROGRAMMING ORIENTATION
Course Number: K-2G-1021.
Location: Fleet Anti-Air Warfare Training Center, San Diego, CA.
Length: 4 weeks (120 hours).
Exhibit Dates: 10/65-12/68.
Objectives: To train personnel in programming techniques, number systems, programming, Boolean algebra, arithmetic operations, control, magnetics, semiconductors, logic, analog computer fundamentals, analog computers, and mathematical calculations, and analog mechanization, hybrid computer fundamentals, conversion techniques, and digital digital analyzer.

Instruction: Lectures and practical exercises in digital, analog, and hybrid computer fundamentals and concepts, including fundamentals of digital computers and data processing techniques, number systems, programming, Boolean algebra, arithmetic operations, control, magnetics, semiconductors, logic, analog computer fundamentals, analog computers, and mathematical calculations, and analog mechanization, hybrid computer fundamentals, conversion techniques, and digital digital analyzer.

Credit Recommendation: In the vocational certificate category, 4 semester hours in data processing principles, 2 in switching circuits and 2 in analog circuits (4/74), in the lower-division baccalaureate/associate degree category, 4 semester hours in data processing principles, 2 in switching circuits and 1 in analog circuits (4/24), in the upper-division baccalaureate category, 6 semester hours in computing science (12/68).

NV-1402-0015
BASIC PROGRAMMING ORIENTATION FOR MIDDLE MANAGEMENT
Course Number: K-532-0001.
Location: Fleet Anti-Air Warfare Training Center, San Diego, CA.
Length: 2 weeks (56 hours).
Exhibit Dates: 11/71-Present.
Objectives: To train management personnel in the basic principles of digital computer programming in machine code, direct code, and source language, and in the operational characteristics of the NTDS format computer.

Instruction: Lectures and practical exercises in orientation to programming, arithmetic of programming, programming techniques, program languages and methods of use, equipment, and practical programming.

Credit Recommendation: In the vocational certificate category, 1 semester hour in computer programming (2/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in computer programming (2/74), in the upper-division baccalaureate/associate degree category, 1 semester hour in computer programming (2/74), in the upper-division baccalaureate category, 1 semester hour in computer programming (2/74).

NV-1402-0016
CP-967/UYK COMPUTER MAINTENANCE (ELECTRONICS TECHNICIAN, CLASS CI)
Course Number: A-1500081.
Location: Service School Command, San Diego, CA.
Length: 6 weeks (180 hours).
Exhibit Dates: 10/70-Present.
Objectives: To train electronics technicians familiar with digital principles to maintain and repair the 3-M System's CP-967/UYK computer and be able to operate the system in all modes.

Instruction: Lectures and practical exercises in operation of computer, preventive maintenance, troubleshooting, replacement of malfunctioning components, and circuitry of computer.

Credit Recommendation: In the vocational certificate category, 4 semester hours in computer programming (2/74), in the lower-division baccalaureate/associate degree category, 4 semester hours in computer programming (2/74), in the upper-division baccalaureate category, 6 semester hours in computer programming (2/74).

NV-1402-0017
CMS-2 COMPILER LANGUAGE PROGRAMMING
Course Number: K-532-0003.
Location: Fleet Anti-Air Warfare Training Center, San Diego, CA.
Length: 5 weeks (150 hours).
Exhibit Dates: 11/72-Present.
Objectives: To train military and civilian personnel to write, execute, and interpret computer programs at two levels. CP-642B: machine code instructions; CMS-2 direct code.

Instruction: Lectures and practical exercises in arithmetic, of computers, programming techniques, machine instruction for CP-642B; CMS-2 direct codes, hardware, practical programming.

Credit Recommendation: In the vocational certificate category, 3 semester hours in computer programming (2/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in computer programming (2/74); in the upper-division baccalaureate category, 3 semester hours in computer programming (2/74).

NV-1402-0020
DDB3J BASIC CIRCUIT CONCEPTS FOR GAS TURBINE CONTROLS, CLASS CI
Course Number: A-652-0134.
Location: Great Lakes, IL.
Length: 3 weeks (90 hours).
Exhibit Dates: 1/77-Present.
Objectives: To provide a basic understanding of analog devices and logic circuit operations for computer systems components, interpretation of basic logic circuit diagrams in terms of Boolean expressions and Veitch diagrams, and troubleshooting basic logic circuits and combinations.

Credit Recommendation: In the upper-division baccalaureate category, 2 semester hours in computer logic (9/77).

NV-1402-0021
BASIC PROGRAMMING CONCEPTS, CLASS C
Course Number: A-532-0002.
Location: Data Processing Technician Class C School, San Diego, CA.
Length: 3 weeks (116 hours).
Exhibit Dates: 7/71-Present.
Objectives: To train enlisted personnel in the general concepts of digital computers and flow charting.

Instruction: Lectures and practical exercises in data representation, central processing unit design, input/output, and introduc
to software, flow charting, and program documentation.

Credit Recommendation: In the vocational certificate category, 2 semester hours in digital computer concepts (2/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in digital computer concepts (2/74); in the upper-division baccalaureate category, 2 semester hours in digital computer concepts (3/72).

NV-1402-0022
DATA PROCESSING TECHNICIAN, CLASS C
Course Number: Version 1: A-531-0016
Version 2: A-531-016
Location: Service School Command, San Diego, CA. Service School Command, Bainbridge, MD
Length: Version 1: 12 weeks (360 hours)
Version 2: 12-16 weeks (360-380 hours)
Exhibit Dates: Version 1: 2/71-Present
Version 2: 1/81-1/91
Objectives: To train enlisted personnel in the operation of electronic accounting machines and AN/YK (V) computers.
Instruction: Lectures and operating experience in data processing equipment, including card punch, sorter, interpreter, reproducing punch, collator, accounting machine, and digital computers.
Credit Recommendation: Version 1. In the vocational certificate category, 4 semester hours in digital laboratory (2/74); in the lower-division baccalaureate/associate degree category, 4 semester hours in electrical laboratory (2/74); in the upper-division baccalaureate category, credit in electrical laboratory on the basis of institutional evaluation (12/68). Version 2. In the vocational certificate category, 4 semester hours in unit record and computer operation (2/74); in the lower-division baccalaureate/associate degree category, 4 semester hours in unit record and computer operation (12/68).

NV-1402-0023
DD63 NAVAL TACTICAL DATA SYSTEM (NTDS) DATA UTILIZATION
Course Number: K-2G-0074
Location: Fleet Combat Training Center, Pacific, San Diego, CA.
Length: 2 weeks (20 hours)
Exhibit Dates: 8/77-Present.
Objectives: To train officers and enlisted personnel in the operating procedure, capabilities, and limitations of the DD63 Naval Tactical Data System.
Instruction: Classroom lectures and laboratory exercises on NTDS equipment, user function, input function, data links, and mock-up/chalk talk.
Credit Recommendation: No credit is recommended because of the limited specialized nature of the course (7/78).

NV-1402-0024
CENTRAL NAVIGATION COMPUTER (AN/YK-2M)
Course Number: A-193-0248; F-193-090
Location: FBM Submarine Training Center, Charleston, SC.
Length: 3 weeks (90 hours).
Exhibit Dates: 11/72-Present.
Objectives: To train a technician to perform advanced maintenance on the CP-890 (CNC) computer.
Instruction: Lectures and practical exercises in circuitry timing considerations and logic analysis on CP-890 (CNC) computer ship evaluation, keyboard/keyboard communication, monitor clock, memory lockout and executive mode features, interrupts, jumps, program faults, shift input/output, multiply, divide, square root, and floating point. Instructions are highly specialized; however, many of the concepts studied also apply to commercial computers.
Credit Recommendation: In the vocational certificate category, 2 semester hours in computers or computer science (3/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in computers or computer science (3/74); in the upper-division baccalaureate category, 2 semester hours in computer science (3/74).

NV-1402-0025
CENTRAL NAVIGATION COMPUTER (PROCESSOR I)
Course Number: A-193-0247, F-193-089
Location: FBM Submarine Training Center, Charleston, SC.
Length: 2 weeks (60 hours)
Exhibit Dates: 11/72-Present.
Objectives: To train navigation electronics technicians to maintain and repair central navigation computer systems.
Instruction: Lectures and practical exercises in functional operations and equipment analysis of computer power circuits, functional operation and logic analysis of timing and control, memory, main memory, and NDRO memory circuits, timing considerations and logic analysis of process A, indirect sequences, and all read-and-store class instructions. Course is highly specialized; knowledge acquired in the course is applicable only to special-purpose military computers.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1402-0026
CENTRAL NAVIGATION COMPUTER (INPUT/OUTPUT)
Course Number: A-193-0249; F-193-091
Location: FBM Submarine Training Center, Charleston, SC.
Length: 3 weeks (90 hours)
Exhibit Dates: 11/72-Present.
Objectives: To train navigation electronics technicians to maintain CP-890/AN/yk central navigation computer systems.
Instruction: Lectures and practical exercises in functions of the CNC input/output controllers and the function of all input/output circuits, essential events, and their timing relationships for all input/output operations, and logic circuitry for instruction executions. Course is highly specialized; however, the material is applicable to commercial computers.
Credit Recommendation: In the vocational certificate category, 4 semester hours in computers or computer science (3/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in computers or computer science (3/74); in the upper-division baccalaureate category, 2 semester hours in computer science (3/74).

NV-1402-0027
DIGITAL PRINCIPLES AND TECHNIQUES (ELECTRONICS TECHNICIAN, CLASS C)
Course Number: A-100-0019, A-100-0021
1-94

COURSE EXHIBITS

Location: Data Processing Technician, Class NCS, School of Naval Education, San Diego, CA
Length: 4 weeks (96 hours)
Exhibit Dates: 6/71—Present
Objectives: To train data processing technicians in computer operations and programming in CBOL, RPG, and COBOL languages.
Instruction: Lectures and practical exercises in computer operations, programming techniques, and system design.
Credit Recommendation: In the vocational certificate category, 4 semester hours in computer programming (4/74). In the lower-division baccalaureate/associate degree category, 4 semester hours in computer programming (4/74).

Location: Data Processing Technician, Class NCS, School of Naval Education, San Diego, CA
Length: 2 weeks (48 hours)
Exhibit Dates: 6/71—Present
Objectives: To train data processing technicians in computer operations, programming techniques, and system design.
Instruction: Lectures and practical exercises in computer operations, programming techniques, and system design.
Credit Recommendation: In the vocational certificate category, 2 semester hours in computer programming (4/74). In the lower-division baccalaureate/associate degree category, 2 semester hours in computer programming (4/74).

NY-1402-0030

PROGRAMMING, NAVAL TACTICAL DATA SYSTEM (NTDS) OPERATIONAL

Credit Recommendation: In the vocational certificate category, 4 semester hours in computer programming (4/74). In the lower-division baccalaureate/associate degree category, 4 semester hours in computer programming (4/74). In the upper-division baccalaureate category, 4 semester hours in computer programming (4/74).

NY-1402-0034

DATA BASE MANAGEMENT—LCC AMPHIBIOUS SUPPORT INFORMATION SYSTEM LANGUAGE—OPERATOR

Objectives: To train officers and enlisted personnel to operate and supervise data processing systems and equipment.
Instruction: Lectures and practical exercises in computer operations, programming techniques, and system design.
Credit Recommendation: In the vocational certificate category, 3 semester hours in computer programming (4/74). In the lower-division baccalaureate/associate degree category, 3 semester hours in computer programming (4/74). In the upper-division baccalaureate category, 3 semester hours in computer programming (4/74).

NY-1402-0035

STORAGE AND RETRIEVAL DP OPERATOR AND PROGRAMMER

Objectives: To train data processing technicians in data base storage, retrieval, and manipulation, and associated equipment utilization.
Instruction: Lectures and practical exercises in computer programs and control panel wiring, electronic data processing equipment operation, electrical accounting machines, file maintenance procedures, basic intelligence and data base, CDSBS operations and programming, photographic interpretation and equipment operation, NAR program development, and information retrieval and library maintenance subsystems operation.
Credit Recommendation: In the vocational certificate category, 4 semester hours in data processing principles (4/74). In the lower-division baccalaureate/associate degree category, 4 semester hours in data processing principles (4/74). In the upper-division baccalaureate category, 4 semester hours in data processing principles (4/74).

NY-1402-0036

AIRBORNE TACTICAL DATA SYSTEM OPERATIONS, CLASS O

Objectives: To train officers to operate the airborne tactical data system.
Instruction: Lectures and practical exercises in the operation of the airborne tactical data system, including data link systems, air traffic control systems, system sensors, operational systems, operator and team training, and airborne training.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (4/74).

NY-1402-0037

NAVAL TACTICAL DATA SYSTEM OPERATIONS, CLASS Q

Objectives: To train officers to operate the Naval Tactical Data System Shipboard Combat Information Center.
Instruction: Lectures and practical exercises in the operation of the Naval Tactical Data System Shipboard Combat Information Center.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (4/74).

NY-1402-0038

BASIC COMPUTER THEORY (Computer Theory, Basic)

Objectives: To train data processing technicians in computer operations, programming techniques, and system design.
Instruction: Lectures and practical exercises in computer operations, programming techniques, and system design.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (4/74).

NY-1402-0039

PROGRAMMING, DIGITAL COMPUTER CP-64A 

Objectives: To train computer operators in computer operations, programming techniques, and system design.
Instruction: Lectures and practical exercises in computer operations, programming techniques, and system design.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (4/74).
1

Exhibit Dates: 9/72-Present

Credit Recommendation: To train enlisted personnel to operate the Uniform U-1500 computer supply and fiscal system.

Instruction: Lectures and practical exercises in Uniform U-1500 system computer supply and fiscal system operation, including tape and card files, transactions and record document identifiers, card formats, data processing, reports and returns, and returns analysis.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/74).

NV-1302-0014

COURSE OF STUDY: NAVY

Objectives: To train students in the maintenance of the AN/ASB-12 bomb digital test equipment, including digital techniques, numbering systems, digital logic circuits, Boolean algebra, Verdan computer, universal section, shop test equipment familiarization, general-purpose section, DDA section, Verdan inputs/outputs, digital test equipment, and Verdan testing.

Credit Recommendation: In the vocational certificate category, 6 semester hours in digital computer principles (4/72), in the lower-division baccalaureate/associate degree category, 2 semester hours in data processing principles (4/74), in the upper-division baccalaureate category, 3 semester hours in data processing principles (4/74).

NV-1402-0044

RA-SC AN/ASB-12 VERDAN AND DIGITAL TEST EQUIPMENT INTERMEDIATE MAINTENANCE

Objectives: To train students to write, execute, and interpret computer programs.

Credit Recommendation: In the vocational certificate category, 3 semester hours in data processing principles (4/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in data processing principles (4/74), in the upper-division baccalaureate category, 3 semester hours in data processing principles (4/74).

NV-1402-0044

COURSE OF STUDY: NAVY

Objectives: To train students in the maintenance of the AN/ASB-12 bomb digital test equipment, including digital techniques, numbering systems, digital logic circuits, Boolean algebra, Verdan computer, universal section, shop test equipment familiarization, general-purpose section, DDA section, Verdan inputs/outputs, digital test equipment, and Verdan testing.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/74).

NV-1402-0045

STOREKEEPER, CLASS C (UNIFORM AUTOMATED PROCEDURES FOR TENDERS AND REPAIR SHIPS)

Objectives: To train students to write, execute, and interpret computer programs.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/74).

NV-1402-0046

AN/UYYK-5 CMS-2 (Y) COMPILER LANGUAGE PROGRAMMING

Objectives: To train students in the maintenance of the AN/ASB-12 bomb digital test equipment, including digital techniques, numbering systems, digital logic circuits, Boolean algebra, Verdan computer, universal section, shop test equipment familiarization, general-purpose section, DDA section, Verdan inputs/outputs, digital test equipment, and Verdan testing.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/74).

NV-1402-0044
using the AN/USQ-7 CMS-3 programming language.

Instruction: Lectures, homework, and practical exercises in introduction to computers and programming, AN/UYK-7 hardware familiarization, AN/UYK-7 macro code, direct code, and the Ultra assembler language; and AN/UYK-7 CMS-2 compiler language.

Credit Recommendation: In the upper-division baccalaureate category, 3 semester hours in computer programming (6/75).

NV-1402-0047
SSN CENTRAL COMPUTER COMPLEX
SYSTEM LEVEL MAINTENANCE AND SOFTWARE
(Central Computer Complex Combined Maintenance and Software)
Course Number: A-150-014
Location: Submarine School, New London, CT, Submarine Training Center, Pacific, Pearl Harbor, HI
Length: 1/2 weeks (Present hours)
Objectives: To present the systems approach to maintenance of a computer system.

Instruction: Course includes analysis of system programs used to operate and diagnose the computer system. (This is a combination course, consisting of A-150-010 and A-150-014). Plus an additional week of laboratory work on troubleshooting and fault isolation). Course provides familiarization training in programming and analysis necessary to maintain the Central Computer Complex utilizing data flow and overall subsystem interfacing for fault isolation at a system level.

Credit Recommendation: In the vocational certificate category, 2 semester hours in computer technology (9/77).

NV-1403-0001
NEUROPSYCHIATRIC CLINICAL TECHNICIAN
Course Number: Not available
Location: Naval Hospital, Bethesda, MD.
Length: 16 weeks (640 hours)
Exhibit Dates: 1763-12/68.
Objectives: To train enlisted personnel as neuropsychiatric clinical technicians

Instruction: Lectures and practical exercises in neuropsychiatric terminology and non-psychiatric regulations, vital statistics, and consultation and clinical management.

Credit Recommendation: In the vocational certificate category, credit in medical record administration, social work, or hospital administration on the basis of institutional examination (7/74), in the lower-division baccalaureate/associate degree category, credit in medical record administration, social work or hospital administration on the basis of institutional examination (7/74), in the upper-division baccalaureate category, credit in medical record administration, social work or hospital administration on the basis of institutional examination (7/74).

NV-1404-0001
POSTAL CLERK, CLASS A
Course Number: None.
Location: Service School Command, San Diego, CA; Service School Command, Bainbridge, MD.
Length: 3-5 weeks (90-150 hours)
Exhibit Dates: 9/62-Present.
Objectives: To provide enlisted personnel with the technical training necessary to perform duties in the Naval postal service.

Instruction: Lectures and practical exercises in the operation of postal procedures, and on-the-job training in the operation of the Naval post office.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/74).

NV-1404-0002
INTERNATIONAL MORSE CODE OPERATOR
1. INTERMEDIATE MORSE CODE OPERATOR
Course Number: All Versions: A-580-0015
Location: Version 1 Training Centers, San Diego, CA; Training Centers, Bainbridge, MD. Version 2 Radio School, San Diego, CA.
Objectives: To train enlisted personnel to receive and transmit international Morse code.

Instruction: Version 1: Lectures and practical exercises in receiving and transmitting international Morse code, radio telegraph messages, progress and operating signs, call signs and address groups, circuit operation, and distress communications.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/74).

NV-1404-0003
COMMUNICATIONS OFFICER FLEET (Communication Officer Afloat)
Course Number: A-4C-0010
Location: Naval Education and Training Command, Newport, RI
Length: 8 weeks (233-367 hours).
Exhibit Dates: 3/72-Present.
Objectives: To provide background and knowledge in communication practices, techniques, and requirements unique to amphibious operation.

Instruction: Lectures and practical exercises in communications, administration, amphibious concepts and organization, operations order, communication equipment and systems, and security.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/74).

NV-1404-0004
DYNALEC AUTOMATIC TELEPHONE SYSTEM MAINTENANCE, CLASS C
Course Number: A-623-0047
Location: Service School Command, Great Lakes, IL
Length: 6 weeks (180 hours)
Exhibit Dates: 8/76-Present.
Objectives: To train telephone system technicians in the operation, adjustment, and maintenance of the 10, 150 line automatic dial telephone system.

Instruction: Instruction in subsystems related to an automatic dial telephone system including automatic switchboards, crossbar switching, manual switchboard, and troubleshooting and maintenance techniques for the telephone system.

Credit Recommendation: In the vocational certificate category, 3 semester hours in telephone system operation (9/77).

NV-1405-0001
SHIP'S SERVICEMEN RECORDKEEPER
Course Number: A-823-0010, A-823-0011
Location: Naval School, San Diego, CA, Naval School, Norfolk, VA
Length: 3 weeks (90 hours)

Credit Recommendation: In the vocational certificate category, 2 semester hours in typing (6/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in typing (6/74).
NV-1405-0005
NAVY PURCHASE
Course Number: Not available.
Location: Bureau of Supplies and Accounts, Washington, DC.
Length: 4 weeks (114 hours).
Exhibit Dates: 2/81-12/68.
Objectives: To train enlisted personnel to handle the duties of a purchaser of goods and services.
Instructor: Lectures in purchasing practices and procedures. Course includes formal advertising, negotiation, contract administration, office administration, and future trends in purchasing.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (12/68).

NV-1405-0006
LINE OFFICER SUPPLY-LOS
Course Number: A-88-0013.
Location: Mine Warfare School, Charleston, SC.
Length: 3 weeks (90 hours).
Exhibit Dates: 11/61-Present.
Objectives: To train line officers to perform as supply officers aboard minesweepers.
Instruction: Lectures and practical exercises in inventory management, financial management, and food service management, including duties of naval supply officer, organization and functions of supply department aboard minesweeper, material identification and cataloging, coordinated shipboard allowance list, supply operations and assistance program, military standard requisitioning and issue procedures, purchase and receipt of materials and services, and organization and administration of food services.
Credit Recommendation: In the vocational certificate category, 1 semester hour in inventory, management (6/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in purchasing (6/74), in the upper-division baccalaureate category, 2 semester hours in principles of procurement (12/68).

NV-1405-0007
MARINE AVIATION SUPPLY (MECHANIZED), CLASS C
Course Number: C-551-2010.
Location: Air Technical Training Center, Memphis, TN.
Length: 4 weeks (240 hours).
Exhibit Dates: 9/71-Present.
Objectives: To train enlisted personnel to perform as entrance-level aviation supply storekeepers.
Instruction: Lectures and practical exercises in inventory management, financial management, and food service management, including duties of naval supply officer, organization and functions of supply department aboard minesweeper, material identification and cataloging, coordinated shipboard allowance list, supply operations and assistance program, military standard requisitioning and issue procedures, purchase and receipt of materials and services, and organization and administration of food services.
Credit Recommendation: In the vocational certificate category, 1 semester hour in inventory, management (6/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in inventory, management (6/74).

NV-1405-0008
MARINE AVIATION SUPPLY, CLASS C
Course Number: Not available.
Location: Version 1: Air Technical Training Center, Memphis, TN; Version 2: Air Technical Training Center, Jacksonville, FL; Version 3: Air Technical Training Center, Jacksonville, FL.
Length: Version 1: 10 weeks (400 hours).
Version 2: 10 weeks (384 hours).
Version 3: 6 weeks (240 hours).
Objectives: To train enlisted personnel in aviation supply procedures.
Instruction: Lectures and practical exercises in aviation supply procedures, including correspondence, typing, material classification and cataloging, technical publications, allowance lists, requisitioning, stock records and transactions, supply organization, mechanisms procedures, management reports, and procurement procedures.
Credit Recommendation: In the vocational certificate category, 1 semester hour in typing, 3 in property accounting (6/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in property accounting (6/74) Version 1. In the vocational certificate category, 1 semester hour in typing, 3 in property accounting (6/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in property accounting (6/74) Version 2. In the vocational certificate category, 1 semester hour in typing, 3 in property accounting (6/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in typing, 3 in property accounting (6/74); in the upper-division baccalaureate category, 2 semester hours in typing and property accounting on the basis of institutional evaluation (12/68) Version 3.

NV-1405-0009
JOINT AVIATION SUPPLY AND MAINTENANCE MATERIAL, MANAGEMENT
Course Number: A-86-0020.
Location: Supply, Corps School, Athens, GA.
Length: 3 weeks (105 hours).
Exhibit Dates: 8/72-Present.
Objectives: To train commissioned officers in aviation material management.
Instruction: Lectures on supply and maintenance material management. Course includes funding, allowance listing, stock control, storage, shipping, aviation fuels management, maintainance support, supply organization, and a general review of naval aviation.
Credit Recommendation: In the vocational certificate category, 1 semester hour in aviation supply and maintenance material management (6/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in maintenance material management (6/74); in the lower-division baccalaureate category, 1 semester hour in inventory management (6/74).

NV-1405-0010
AVIATION ORDNANCE OFFICERS (MANAGEMENT), CLASS O
(AQMO1)
Course Number: Not available.
1-98. COURSE EXHIBITS

Location: Air Technical Training Center, Jacksonville, FL
Length: 4 weeks (160 hours).
Exhibit Dates: 9/66-Present.
Objectives: To train limited-duty, line, and aviation ordnance officers in ordnance management.

Instruction: Lectures and practical exercises in the duties of aviation ordnance officers, including aviation ordnance management, supply, standard Navy maintenance and material management system, safety and security, procurement and control management, and maintenance data collection and processing.

Credit Recommendation: In the upper-division baccalaureate category, 3 semester hours in supply management (12/68).

NV-1405-0011
SUPPLY ASHORE REFRESHER

Course Number: A-88-0025
Location: Naval Supply Center, Oakland, CA.
Length: 2 weeks (64 hours)
Exhibit Dates: 7/71-Present.
Objectives: To train reserve officers to operate and manage supply activities ashore.

Instruction: Lectures and practical exercises in the operation and management of supply activities ashore. Course includes supply ashore operations and management, supply procurement, inventory control and warehousing, financial management, and distribution management within the military system.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (7/74).

NV-1405-0013

1. STOREKEEPERS (REPAIR PARTS), CLASS C
2. STOREKEEPERS (REPAIR PARTS), CLASS C-1

(Supply Storekeepers (Repair Parts),
Class C-1)

Course Number: Not available.
Location: Storekeepers Class C School, Newport, R.I.
Length: Version 1: 3 weeks (90 hours)
Version 2: 5 weeks (150 hours).
Exhibit Dates: Version 1: 12/66-12/68
Objectives: To train enlisted personnel to be storekeepers.

Instruction: Lectures and practical exercises in storekeeping, including appropriations, accounting, supplies procurement, storage inventory control, ordnance supply system, yards and docks supply system, electronic supply system, and introduction to ships machinery and repair parts supply system.

Credit Recommendation: Version 1: In the vocational certificate category, 2 semester hours in supply management (7/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in supply management (7/74). Version 2: In the vocational certificate category, 3 semester hours in supply management (7/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in supply management (7/74); in the upper-division baccalaureate category, 3 semester hours in supply management and 1 in personnel administration (7/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in supply management and 1 in personnel administration (7/74); in the upper-division baccalaureate category, 4 semester hours in supply management and 2 in personnel administration (12/68).

NV-1405-0015
BASIC QUALIFICATION COURSE OF THE SUPPLY CORPS

Course Number: A-88-0012.
Location: Supply Corps School, Athens, GA.
Length: 14-16 weeks (400-560 hours)
Exhibit Dates: 6/57-12/74.
Objectives: To train selected officers to assume the duties normally associated with supply and disbursing officers in the U.S. Navy.

Instruction: Course covers supply management, personnel management, food service, retail operations, disbursing ashore, and computer operations.

Credit Recommendation: In the vocational certificate category, 3 semester hours in supply management and 1 in personnel administration (7/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in supply management and 1 in personnel administration (7/74); in the upper-division baccalaureate category, 3 semester hours in supply management and 1 in personnel administration (12/68).

NV-1405-0016
BASIC QUALIFICATION COURSE OF THE SUPPLY CORPS

Course Number: A-88-0012.
Location: Supply Corps School, Athens, GA.
Length: 10 weeks (850 hours).
Exhibit Dates: 8/67-12/74.
Objectives: To prepare newly commissioned women officers to assume supply and disbursing duties during a period of mobilization.

Instruction: Lectures and practical exercises in supply management, personnel administration, food service, retail operations, disbursing ashore, and computer operations.

Credit Recommendation: In the vocational certificate category, 2 semester hours in supply management and credit in personnel administration on the basis of institutional evaluation (7/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in supply management and credit in personnel administration on the basis of institutional evaluation (7/74), in the upper-division baccalaureate category, 2 semester hours in supply management and credit in personnel administration on the basis of institutional evaluation (12/68).

NV-1405-0017
STOREKEEPER SUPPLY AFOILERT (INDEPENDENT DUTY), CLASS C

(Storekeepers (Independent Duty), Class C)

Course Number: A-551-0010; A-551-0011
Location: School Command, Norfolk, VA, School Command, Fort Rl, School Command, San Diego, CA.
Length: 5 weeks (150 hours)
Exhibit Dates: 4/64-Present.
Objectives: To train selected enlisted personnel as storekeepers aboard ship.

Instruction: Training in the use of technical and administrative publications, catalogs, and allowance lists, acquisition, control, and issue of stores; financial accounting, stores storage and security; requirements determination; stores management organization; pricing and profit policies; inventory procedures; food service sales, controls, and records.

Credit Recommendation: In the vocational certificate category, 2 semester hours in supply management (8/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in supply management (8/74).

NV-1405-0018
CARRIER GASOLINE AND INERT GAS SYSTEMS, CLASS C

Course Number: Not available.
Location: Air Material Center, Philadelphia, PA.
Length: 6 weeks (240 hours)
Exhibit Dates: 9/56-12/62.
Objectives: To train personnel in the operation and maintenance of carrier gasoline and inert gas systems.

Instruction: Lectures and practical exercises in carrier gasoline system operation and maintenance, carrier inert gas system operation and maintenance, and high capacity aviation fuel system operation and maintenance. Course covers receiving and dispensing bulk quantities of liquid and gaseous materials; measuring liquid flow; and operating principles of inert gas storage systems.

Credit Recommendation: In the vocational certificate category, 1 semester hour in materials handling (7/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in materials handling (7/74), in the upper-division baccalaureate category, 1 semester hour in materials handling (7/74).
null
1-100

"COURSE EXHIBITS"

1.

1. MANAGEMENT ENGINEERING
2. WORK STUDY ANALYSIS
   (Fleet Work Study)

Course Number: S-500-0029, A-500-029
   A-501-021
Location: Manpower and Material Analysis Center, Naval
   Base, Norfolk, VA.
Length: Version 1: 3 weeks (256 hours)
   Version 2: 6 weeks (173 hours).
Exhibit Dates: Version 1: 3/75-Present
Objectives: To train officer, enlisted, and civilian personnel in
   military study and work measurement.

Instruction: Lectures and practical exercises on method study and work measurement.

Credit Recommendation: Version 1: In the lower-division baccalaureate/associate degree category, 3 semester hours in work study analysis (6/74); in the upper-division baccalaureate/associate degree category, 3 semester hours in work study analysis (6/74).

NY-1406-0011
SUPERVISION AND MANAGEMENT, CLASS C
Course Number: C-012-2011
Location: Air Technical Training Center, Memphis, TN.
Length: 92 weeks (80 hours)
Exhibit Dates: 6/67-12/72
Objectives: To provide training supervisors with basic instruction in the principles and techniques of supervision, and in the methods used to improve and evaluate training and instruction.

Instruction: Lectures in the basic principles and techniques of supervision, and in basic supervision-evaluation methods, including a survey of learning processes, programmed instruction, conferences, fundamentals of instructional supervision, management functions, and observation and counseling of trainees.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in training or supervision (2/74); in the upper-division baccalaureate category, 1 semester hour in training or supervision (2/74).

NY-1406-0012
1. MANAGEMENT ENGINEERING
2. WORK STUDY ANALYSIS
   (Fleet Work Study)

Course Number: S-500-0029, A-500-029
   A-501-021
Location: Manpower and Material Analysis Center, Naval
   Base, Norfolk, VA.
Length: Version 1: 3 weeks (256 hours)
   Version 2: 6 weeks (173 hours).
Exhibit Dates: Version 1: 3/75-Present
Objectives: To train officer, enlisted, and civilian personnel in method study and work measurement.

Instruction: Lectures and practical exercises on method study and work measurement, including an introduction to the critical examination of completed, network scheduling, operational, sequence diagrams, and work measurement, time study, rating, activity sampling, synthesis data and analytical estimating, multiproactivity charting, and methods-time measurement.

Credit Recommendation: Version 1: In the lower-division baccalaureate/associate degree category, 2 semester hours in work study analysis (6/75); Version 2: In the vocational certificate category, 3 semester hours in work study analysis (6/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in work study analysis (6/74); in the upper-division baccalaureate/associate degree category, 3 semester hours in work study analysis (6/74).

NY-1406-0015
PERSONNEL, MEN SCHOOL, CLASS C-1,
ENLISTED CLASSIFICATION
Course Number: Not available
Location: Personnelman Class C School.
San Diego, CA.
Length: 4 weeks (120 hours)
Exhibit Dates: 10/56-12/68
Objectives: To train enlisted personnel to be personnel administrators.

Instruction: Lectures and practical exercises in personnel administration, including naval classification system, interviewing principles, testing and evaluating work experiences, communications, naval occupational analysis, and organizational planning and work simplification.

Credit Recommendation: In the vocational certificate category, 3 semester hours in personnel administration (7/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in personnel administration (7/74), in the upper-division baccalaureate category, 3 semester hours in personnel administration (12/68).

NY-1406-0018
1. INTERVIEWING AND CLASSIFICATION
2. PERSONNELMAN, CLASS C-1
INTERVIEWING AND CLASSIFICATION

Course Number: A-500-0013
Location: Personnelman Class C School.
San Diego, CA.
Length: Version 1: 8 weeks (240 hours)
   Version 2: 5-10 weeks (240 hours).
Exhibit Dates: Version 1: 4/67-Present
Objectives: To provide enlisted personnel with the technical knowledge required to perform duties as job classifiers and interviewers.

Instruction: Course covers vocational counseling and testing, survey of occupational titles, recording work experience, public speaking, and interpreting technical data.

Credit Recommendation: Version 1: In the vocational certificate category, 3 semester hours in job evaluation (7/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in job evaluation (7/74); in the upper-division baccalaureate/associate degree category, 3 semester hours in job evaluation (7/74); in the upper-division baccalaureate category, 3 semester hours in personnel classification (12/68).

NY-1407-0001
YEOMAN SCHOOL, CLASS B
   (Class B Yeoman School)

Course Number: None.
Location: Service Schools Command, Bainbridge, MD.
    Service Schools Command.
San Diego, CA.
Length: 13-14 weeks (396-420 hours).
Exhibit Dates: 9/56-12/68.
Objectives: To train yeoman personnel to meet the professional qualifications for advancement to yeoman first class and chief yeoman.

Instruction: Practical exercises in typing, shorthand, personnel accounting, and secretarial practice.

Credit Recommendation: In the vocational certificate category, 3 semester hours in typing, 6 in shorthand (3/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in typing, 6 in shorthand (3/74).

NY-1407-0002
LEGAL CLERK AND COURT REPORTING

Course Number: A-512-010.
Location: Naval Justice School, Newport, RI.
Length: 5-7 weeks (170-239 hours)
Exhibit Dates: 1/69-Present.
Objectives: To provide enlisted personnel with training in court reporting and legal clerkship.

Instruction: Practical experience in military justice documentation and recording, shorthand, stenography, court reporting, and transcription.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (3/74).

NY-1407-0003
STENOGRAPHER, CLASS C
Course Number: Not available.
Location: Yeoman Class C School, Bainbridge, MD.
Length: 6 weeks (210 hours)
Exhibit Dates: 1/61-12/68.
Objectives: To train petty officers in high-speed shorthand and touch-typing.

Instruction: Lectures and practical exercises in stenography and typewriting, including vocabulary and speed exercises in Gregg shorthand, high-speed dictation, oral and written transcription, oral reporting equipment, mechanics of English, and typing.

Credit Recommendation: In the vocational certificate category, 6 semester hours in stenography and typing (7/74), in the upper-division baccalaureate category, credit in stenography and typing on the basis of institutional examination (12/68).

NY-1408-0001
DISBURSING CLERK FINANCIAL RETURNS
   CLASS C

(D Issburstng Clerk, Class C (Financial Re-
   turns)

Course Number: A-542-0014.
Location: Fleet Training Center, Norfolk, VA.
Service Schools Command, San Diego, CA.
Length: 2 weeks (60 hours).
Exhibit Dates: 11/71-Present.
Objectives: To train rated and nonrated disbursing clerks to prepare Navy and DoD reports and financial returns.

Instruction: Lectures and practical exercises in the preparation of collection and disbursement vouchers; reports of disbursement and collections; foreign currency reports; and deposits and disbursements.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (2/74).

NY-1408-0002
DISBURSING CLERK, CLASS C (TRAVEL
   PAYMENTS)

Course Number: A-542-0013.
Location: Naval Schools Command, Norfolk, VA.
Length: 2 weeks (60 hours).
Exhibit Dates: 11/71-Present.
**Objectives:** To train disbursing clerks to master the intricacies of the Navy travel payment procedures.

**Instruction:** Lectures on travel regulations, orders, and vouchers; travel advance and allowances; dependent travel entitlement, and dislocation allowance.

**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (2/74).

### NV-1408-0003

**DEFENSE MANAGEMENT SYSTEMS**

**Course Number:** F-00-3306

**Location:** Naval Postgraduate School, Monterey, CA.

**Length:** 4 weeks (105 hours).

**Exhibit Dates:** 1/70-Present.

**Objectives:** To provide officers with an introduction to the basic principles of management.

**Instruction:** Lectures in resource management, program budgeting, management accounting, systems analysis, marginal analysis, and cost effectiveness; emphasis placed on all areas of management including requirement studies, systems analyses, cost effectiveness, and marginal analysis.

**Credit Recommendation:** In the vocational certificate category, 3 semester hours in management (2/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in management (2/74); in the upper-division baccalaureate category, 3 semester hours in management (12/68).

### NV-1408-0004

**STATION MANAGEMENT SYSTEMS**

**Course Number:** None.

**Location:** Naval Postgraduate School, Monterey, CA.

**Length:** 4 weeks (84 hours).

**Exhibit Dates:** 1/70-Present.

**Objectives:** To train naval officers in the principles and methods of shore station management.

**Instruction:** Lectures in general management theory, quantitative reasoning, statistics, economics, systems analysis and cost analysis, and resources management systems implementation and operation.

**Credit Recommendation:** In the vocational certificate category, 2 semester hours in principles of management (2/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in principles of management (2/74); in the upper-division baccalaureate category, 2 semester hours in principles of management (12/68).

### NV-1408-0005

**DATA ANALYSIS (SHIP'S 3PM SYSTEM), CLASS C**

**Course Number:** A-500-0017

**Location:** Naval Schools Command, Norfolk, VA.

**Length:** 5 weeks (173 hours).

**Exhibit Dates:** 2/72-Present.

**Objectives:** To train officers and petty officers to perform statistical analysis of machine generated data and to present their findings in a report designed to facilitate management decision making.

**Instruction:** Lectures in statistical analysis and its application to management organizations, including frequency, probability, and sampling distributions; hypothesis testing; distribution analysis; and linear correlation and regression.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 3 semester hours in introductory statistics (2/74); in the upper-division baccalaureate category, 3 semester hours in introductory statistics (2/74).

**NV-1408-0006**

**GROUP VIII E/6 ADVANCED MANAGEMENT**

**(GROUP VIII E/6-E/7 Management)**

**Course Number:** 710-0016; A-710-0021.

**Location:** Civil Engineer Corps Officers School, Port Hueneme, CA.

**Length:** 6 weeks (167 hours).

**Exhibit Dates:** 5/72-Present.

**Objectives:** To provide enlisted personnel with advanced training in naval engineering management and administration.

**Instruction:** Lectures on public works management principles, including facilities, utilities, personnel and housing, construction and labor-management relations; planning, scheduling and networking, military budgeting activities, and field exercises in construction project planning.

**Credit Recommendation:** In the upper-division baccalaureate category, 2 semester hours in construction management or technology (3/76).

### NV-1408-0007

**MANAGEMENT AND SUPERVISION OF CONSTRUCTION, NAVY BACCALAUREATE, CLASS C**

**Course Number:** K-012-2068; A-012-0028, A-012-0029, A-012-0030, C-012-2012

**Location:** Fleet Training Group, Pearl Harbor, HI; Fleet Training Center, Norfolk, VA; Service School Command, Great Lakes, IL; Service School Command, San Diego, CA.

**Length:** 6 weeks (70 hours).

**Exhibit Dates:** 3/72-Present.

**Objectives:** To provide petty officers and junior officers with a knowledge of modern management methods.

**Instruction:** Lectures on management of communications processes, motivation and human behavior, personnel management, and leadership.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 1 semester hour in principles of supervision or management (6/75).

### NV-1408-0008

**INSTRUCTOR CLASS C-I ADMINISTRATION AND COUNSELING**

**Course Number:** A-7C-013, A-7C-014

**Location:** Instructor Class C-1 School, Norfolk, VA; Instructor Class C-1 School, San Diego, CA.

**Length:** 2 weeks (60 hours).

**Exhibit Dates:** 7/71-Present.

**Objectives:** To train officers to manage shipboard operations.

**Instruction:** Lectures in human relations, counseling techniques, personnel management, personnel legal management, drug abuse counseling, and responsibilities of division management personnel.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 1 semester hour in personnel administration (2/74); in the upper-division baccalaureate category, 1 semester hour in personnel administration (12/68).

### NV-1408-0009

**CONSTRUCTION CONTRACT ADMINISTRATION AND MANAGEMENT**

**(Contract Administration-Accelerated)**

**Course Number:** A-4A-0032.

**Location:** Civil Engineer Corps Officers' School, Port Hueneme, CA.

**Length:** 2 weeks (66 hours).

**Exhibit Dates:** 2/74-Present.

**Objectives:** To prepare officers to perform as assistant resident officer in charge or independent officer in the construction of contracts or for staff officer positions in contract administration in the engineering field division of Naval facilities.

**Instruction:** Subjects emphasize the formation and daily administration of typical construction contracts. Topics include Naval facilities contract organization, pertinent laws and regulations, plans and specifications, the construction industry, contract types, formal advertising/competitive bidding and negotiation, procurement, government/contractor relations, contractor quality control, correspondence preparation, contract general clauses, payment changes, government estimate preparation, and negotiation techniques. Methods of instruction include lectures, workshops, seminars, case study discussions, and student role playing.

**Credit Recommendation:** In the upper-division baccalaureate category, 3 semester hours in contract administration (7/78).

### NV-1408-0011

**WARRANT OFFICER INDOCTRINATION (Surface Warrant Officer Induction)**

**Course Number:** A-00-0047.

**Location:** Officer Induction School, Newport, RI.

**Length:** 5-7 weeks (163-245 hours).

**Exhibit Dates:** 2/72, 7/72.

**Objectives:** To instruct the newly appointed, surface-designated warrant officer in the responsibilities of his role as an officer.

**Instruction:** Lectures and practical exercises in the duties of a surface-designated warrant officer, including military law, management unit objectives, orientation and indoctrination, tactical objectives, technological objectives, management by objective, division organization, aids to navigation, and BUTTERCUP drill.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 2 semester hours in administration or management (5/74), in the upper-division baccalaureate category, 2 semester hours in administration or management (5/74).

### NV-1408-0012

**ENGINEERING AID, CLASS C, PLANNING AND ESTIMATING (EA/C Planning and Estimating)**

**(Planning and Estimating Construction Group Ratings, Class C)**

**Course Number:** A-412-0012.

**Location:** Construction Training Center, Port Hueneme, CA; Construction Training Center, Gulfport, MS; Construction School, Davisville, RI.

**Length:** 8 weeks (240-243 hours).

**Exhibit Dates:** 10/64-Present.

**Objectives:** To train petty officers to plan and estimate construction projects.

**Instruction:** Lectures and practical exercises in mathematics, blueprint reading, specifications, resource publications, drafting, estimating procedures, estimating variables, material management, and project planning and scheduling.

**Credit Recommendation:** In the vocational certificate category, 8 semester hours in planning and estimating construction projects (7/76), in the lower-division baccalaureate/associate degree category, 4 semester hours in planning and estimating
<table>
<thead>
<tr>
<th>Course Number: A-4A-0011; A-4A-0013; A-4A-0017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objectives: To train enlisted personnel to establish personal and professional credibility, influence of nuclear weapons on construction, planning, scheduling, and resource planning. Also included are lectures and workshops in construction administration, including financial management, principles of budgeting, financing for public works activities, facilities management, public works administration, labor relations, disaster control, principles of management, project planning, scheduling, and resource planning. Also included are lectures and workshops in construction administration, including environmental enhancement, financing facilities projects, military construction programs, capital resource management, influence of nuclear weapons on facilities planning and design, organization, planning and operations, planning considerations and criteria, and applications. Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/74)</td>
</tr>
</tbody>
</table>

**NV-1408-0017**

**SHORE FACILITIES PLANNING**

<table>
<thead>
<tr>
<th>Course Number: A-4A-0017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location: Naval Construction Battalion Center, Port Hueneme, CA.</td>
</tr>
<tr>
<td>Length: 2 weeks (63 hours)</td>
</tr>
<tr>
<td>Exhibit Dates: 2/64-12/68</td>
</tr>
<tr>
<td>Objectives: To train personnel in shore facilities planning and administration.</td>
</tr>
<tr>
<td>Instruction: Lectures and practical exercises in shore facilities planning and administration, including environmental enhancement, financing facilities projects, military construction programs, capital resource management, influence of nuclear weapons on facilities planning and design, organization, planning and operations, planning considerations and criteria, and applications. Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/74)</td>
</tr>
</tbody>
</table>

**NV-1408-0018**

**METHODS ENGINEERING**

<table>
<thead>
<tr>
<th>Course Number: None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location: Bureau of Supplies and Accounts, Washington, DC.</td>
</tr>
<tr>
<td>Length: 7 weeks (280 hours)</td>
</tr>
<tr>
<td>Exhibit Dates: 8/59-12/68</td>
</tr>
<tr>
<td>Objectives: To prepare engineers and aviation personnel with training in modern industrial engineering techniques.</td>
</tr>
<tr>
<td>Instruction: Lectures and practical exercises in process charting, motion study, operational analysis, layout study, methods-time measurement, work sampling, and engineered time standards. Credit Recommendation: In the upper-division baccalaureate category, 4 semester hours in methods engineering (2/74).</td>
</tr>
</tbody>
</table>

**NV-1408-0019**

**AVIATION STOREKEEPER, CLASS B**

<table>
<thead>
<tr>
<th>Course Number: Not available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location: Air Technical Training Center, Memphis, TN.</td>
</tr>
<tr>
<td>Length: 10 weeks (400 hours)</td>
</tr>
<tr>
<td>Exhibit Dates: 9/71-Prent.</td>
</tr>
<tr>
<td>Objectives: To train enlisted personnel to be aviation storekeepers.</td>
</tr>
<tr>
<td>Instruction: Lectures and practical exercises in supervision fundamentals, personnel administration, procurement office administration, correspondence and filing, automatic data processing, inventory management, aviation accounting and finance, and aviation maintenance.</td>
</tr>
</tbody>
</table>
Credit Recommendation: In the vocational certificate category, 4 semester hours in office administration (7/74); in the lower-division baccalaureate/associate degree category, 4 semester hours in office administration (7/74) in the upper-division baccalaureate category, 3 semester hours in office administration (7/74).

Objectives: To qualify selected officers and enlisted personnel for the designation "Qualified in Submarines."

Instruction: Lectures and practical exercises to teach the student the duties and responsibilities of an officer of the deck of a submarine; the principles and procedures of submerged ship control so that he will be able to perform as a diving officer; navigation; submarine damage control; principles of submarine design, construction, and operation; control and maintenance of FBM weapon systems; submarine tactics; and engineering.

Credit Recommendation: In the vocational certificate category, 2 semester hours as elective in management (8/74), in the lower-division baccalaureate/associate degree category, 2 semester hours as elective in management (8/74), in the upper-division baccalaureate category, 2 semester hours in naval administration and 2 in engineering management (12/68).

NY-1408-0020

CHAPLAIN SCHOOL ADVANCED

Course Number: A-5G-0011
Location: Naval Education and Training Center, Newport, RI
Length: 37-39 weeks (859-1246 hours)
Exhibit Dates: 4/72-Present.
Objectives: To train senior chaplains to perform supervisory and managerial roles
Instruction: Lectures and practical exercises in the supervisory and managerial responsibilities of chaplains in the armed services. Course includes managerial behavior, organizational behavior, styles of management, supervisory skills, organizational analysis, current theological trends, oral communication, religious education, pastoral counseling, and contemporary ministry.

Credit Recommendation: In the upper-division baccalaureate category, 15 semester hours in managerial behavior, 10 in organizational behavior, 2 in speech communication, 16 in theology (8/74).

NY-1408-0021

MEDICAL ADMINISTRATIVE TECHNICIAN, CLASS C

(Medical Administrative Technician, Class C)
(Medical Administrative Technician, Dental)
Course Number: B-513-0010, B-513-0011; B-513-0012; B-513-0013.
Location: Hospital Corps School, San Diego, CA; Naval Hospital, Portsmouth, VA.
Length: 30-42 weeks (1,125-1,319 hours)
Exhibit Dates: 6/55-12/71.
Objectives: To train personnel to prepare, maintain, and account for medical supplies, equipment, and staff and patient personnel records
Instruction: Lectures and practical exercises in personnel management, leadership, clerical, payroll, food service, business English composition, effective speaking, office management, accounting principles, and material management.

Credit Recommendation: In the vocational certificate category, 3 semester hours in personnel management, 3 in typing, 3 in business English, 3 in speech, 3 in office management, 3 in principles of accounting (7/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in personnel management, 3 in typing, 3 in business English, 3 in office management, 3 in speech, and 3 in principles of accounting (7/74); in the upper-division baccalaureate category, 15 semester hours in institutional management, and credit in typing, speech, and instructional methods on the basis of institutional evaluation (12/68).

NY-1408-0022

BASIC SUBMARINE OFFICER

(Submarine Officer Basic)
Course Number: F-00-014A; F-00-028A
Location: Submarine School, Groton, CT.
Length: 24 weeks (926-963 hours)
Exhibit Dates: 1/66-Present.

Objectives: To train enlisted personnel to perform as yeomen
Instruction: All Versions: Lectures and practical exercises in the duties of a yeoman, including functions in accounting, advanced typewriting, office etiquette and efficiency, publications, classified material, filing, correspondence, personnel accounting, officer records, captain's office, executive officer's office, enlisted service record, shipboard department offices and associated records, and legal records and procedures.

Credit Recommendation: Version I: Instruction is self-paced beginning 1975. Instruction in typing is provided for students who enter the course as nonqualified typists. Emphasis is on manual records and forms.

Credit Recommendation: Version II: In the vocational certificate category, 2 semester hours in typing for students entering course as nonqualified typists (8/74).

Credit Recommendation: Version III: In the vocational certificate category, 2 semester hours in typing (6/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in office administration (6/74).

NY-1409-0002

NAVY EXCHANGE MANAGEMENT

Course Number: A-8F-0100.
Location: U.S. Navy Ship's Store Office, Brooklyn, NY
Length: 6 weeks (100 hours)
Exhibit Dates: 1/69-Present.
Objectives: To train officers in the management of Navy exchanges
Instruction: Lectures and practical exercises in principles of personnel, retailing and services management, retail display, accounting, and financial methods.

Credit Recommendation: In the vocational certificate category, 2 semester hours in business management (2/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in business management (2/74).

NY-1409-0001

PERSONNELMAN, CLASS A

Location: Service School Command, Bainbridge, MD; Service School Command, San Diego, CA; Naval Training Center, Orlando, FL; Naval Training Center, Memphis, TN, Air Technical Training Center, Millington, TN.
Length: 6-8 weeks (240-304 hours)
Exhibit Dates: 5/66-Present.
Objectives: To provide enlisted Navy and Marine Corps personnel with training in clerical and administrative management.
Instruction: Lectures and practical exercises in office procedures, aeronautical publications, naval maintenance and material management systems, aircraft and equipment accounting, aircraft logs and records, and maintenance administration.

Credit Recommendation: In the vocational certificate category, 3 semester hours in typing (2/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in typing (2/74).

NY-1409-0004

AIRBORNE COMMUNICATOR

Course Number: E-201-0010; E-201-10.
Location: Fleet Aviation Specialized Operational Training Group, Pacific, Moffett Field, CA.
Length: 2 weeks (70 hours)
Exhibit Dates: 8/72-Present.
Objectives: To train personnel to perform as airborne communicators.
Instruction: Lectures and practical exercises in airborne communications, including message format and drafting, standard naval communication procedures, naval communications publications, emergency communica-
COURSE EXHIBITS

cation procedures, radio telephone procedures, airborne teletype operation and procedures, teletype telegraphy, encoding/decoding, authentication procedures, typewriter flight message and operating procedures, and relay procedures.

Objectives In the vocational certificate category, credit in typing on the basis of institutional evaluation (6/74); in the lower-division baccalaureate/associate degree category, credit in typing on the basis of institutional evaluation (6/74).

NV-1409-0007

COMMUNICATIONS YEOMAN, CLASS A

Course Number: A-580-013

Location: Version 1: Communications Yeoman, Class A School, Norfolk, VA.
Version 2: Radioman, Class A School, Bainbridge, MD.

Length: 6 weeks (178-179 hours).

Exhibit Dates: 7/64-12/68.

Objectives: To train enlisted personnel to perform clerical, voice operator, and teletypewriter operator duties.

Instruction: Lectures and practical exercises in the air traffic control, communication systems, electricity, electrical engineering, radio, voice and data communications, voice telegraphy, and teletypewriter operator duties, including defense communication systems, Navy communication, communication systems, voice operators, telegraphy, telecommunication procedures, voice procedure, maintenance and material management, and communication watch standing.

Credit Recommendation: In the upper-division baccalaureate category, credit in typing on the basis of institutional evaluation (12/68).

NV-1409-0008

MARINE AVIATION OPERATIONS CLERICAL, CLASS C

Course Number: C-517-2010

Location: Air Technical Training Center, Memphis, TN.


Objectives: To train personnel in aviation operations clerks.

Instruction: All Versions: Lectures and practical exercises in aviation operations, including field operations, squad operations, flight office methods, and operational tasks. Version 2: Topics include basic typing, flight records and reports, and reports, aviation pay records and reports, security of classified information, aircraft clearance, standard directives system, operation and care of office machines, reproduction of directives, and correspondence.

Credit Recommendation: Version 1: In the vocational certificate category, 1 semester hour in typing (6/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in typing (6/74), in the upper-division baccalaureate category, credit in typing on the basis of institutional evaluation (6/74).

NV-1409-0009

STOREKEEPER SCHOOL, CLASS A

Course Number: A-551-0004

Location: Storekeeper, Class A School, Newport, RI; Storekeeper, Class A School, San Diego, CA.

Length: 12 weeks (360 hours).

Exhibit Dates: 7/58-12/68.

Objectives: To train enlisted personnel to be storekeepers.

Instruction: Lectures and practical exercises in typing and processing naval store-room records.

Credit Recommendation: In the vocational certificate category, 3 semester hours in typing (7/74), in the upper-division baccalaureate category, credit in typing on the basis of institutional evaluation (12/68).

NV-1409-0010

COUNTERINSURGENCY/SELF-PROTECTION/SEER

Course Number: H-00-3222, H-000-3222

Location: Amphibious School, San Diego, CA.

Length: 3 weeks (120 hours).

Exhibit Dates: 1/72-12/72.

Objectives: To train enlisted personnel in Pacific area country orientation, survival, weapons, and counterinsurgency operations.

Instruction: Lectures and practical exercises in the history of insurgent movements, counterinsurgency fundamentals, communistic ideology, organization, and goals; guerrilla and counterinsurgency operations; psychological operations, area cultures, and political orientations, basic language training, field techniques and tactics, and weapons training.

Credit Recommendation: Version 1: In the upper-division baccalaureate category, 1 semester hour in political science (5/74).

NV-1511-0001

COLLEGE OF NAVAL WARFARE

Course Number: P-GO-1101

Location: Naval War College, Newport, RI.


Objectives: To develop understanding in the science of naval warfare, international relations, and interservice operations, with emphasis on applications to future naval warfare, in order to prepare officers for high command and staff positions.

Instruction: Version 1: Lectures, seminars, and extensive reading and writing in the science of naval warfare, international relations, and interservice operations, including applications to future naval warfare, strategy, economics, twentieth-century diplomatic history, political science, management and business administration, and tactics. Version 2: Lectures, readings, and student research in the science of naval warfare, international relations and interservice operations, including applications to future naval warfare, strategy, economics, twentieth-century diplomatic history, political science, management and business administration, and tactics. Version 3: Lectures, readings, and student research in the science of naval warfare, international relations and interservice operations, including applications to future naval warfare, strategy, economics, twentieth-century diplomatic history, political science, management and business administration, and tactics. Version 4: Lectures, readings, and student research in the science of naval warfare, international relations and interservice operations, including applications to future naval warfare, strategy, economics, twentieth-century diplomatic history, political science, management and business administration, and tactics.
2 School of Naval Command and Staff
3 School of Naval Command and Staff
(Command and Staff Course)

Course Number: P-00-1201
Location: Naval War College, Newport, R.I.

Length: 43 weeks

Exhibit Dates: Version 1: 8/73-Present
Version 2: 8/69-7/73
Version 3: 8/54-7/69

Objectives: To develop understanding in the fundamentals of warfare, international relations, and inter-service operations in order to prepare officers for higher command positions.

Instruction: Version 1: Lectures, seminars, and extensive reading and writing on the science of naval warfare, international relations, and inter-service operations, including applications to future naval warfare, strategy, economics, nineteenth- and twentieth-century diplomatic history, political science, management, and business administration, and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; 12 semester hours in the areas of economics, nineteenth- and twentieth-century diplomatic history, political science, and international relations, all within the Strategy curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the combined areas of economics, nineteenth- and twentieth-century diplomatic history, political science, and international relations, all within the Strategy curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the combined areas of economics, nineteenth- and twentieth-century diplomatic history, political science, and international relations, all within the Strategy curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the combined areas of economics, nineteenth- and twentieth-century diplomatic history, political science, and international relations, all within the Strategy curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the combined areas of economics, nineteenth- and twentieth-century diplomatic history, political science, and international relations, all within the Strategy curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the combined areas of economics, nineteenth- and twentieth-century diplomatic history, political science, and international relations, all within the Strategy curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the combined areas of economics, nineteenth- and twentieth-century diplomatic history, political science, and international relations, all within the Strategy curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the combined areas of economics, nineteenth- and twentieth-century diplomatic history, political science, and international relations, all within the Strategy curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the combined areas of economics, nineteenth- and twentieth-century diplomatic history, political science, and international relations, all within the Strategy curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the combined areas of economics, nineteenth- and twentieth-century diplomatic history, political science, and international relations, all within the Strategy curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the combined areas of economics, nineteenth- and twentieth-century diplomatic history, political science, and international relations, all within the Strategy curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the combined areas of economics, nineteenth- and twentieth-century diplomatic history, political science, and international relations, all within the Strategy curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the combined areas of economics, nineteenth- and twentieth-century diplomatic history, political science, and international relations, all within the Strategy curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the combined areas of economics, nineteenth- and twentieth-century diplomatic history, political science, and international relations, all within the Strategy curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the combined areas of economics, nineteenth- and twentieth-century diplomatic history, political science, and international relations, all within the Strategy curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the combined areas of economics, nineteenth- and twentieth-century diplomatic history, political science, and international relations, all within the Strategy curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the combined areas of economics, nineteenth- and twentieth-century diplomatic history, political science, and international relations, all within the Strategy curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the combined areas of economics, nineteenth- and twentieth-century diplomatic history, political science, and international relations, all within the Strategy curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the combined areas of economics, nineteenth- and twentieth-century diplomatic history, political science, and international relations, all within the Strategy curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the combined areas of economics, nineteenth- and twentieth-century diplomatic history, political science, and international relations, all within the Strategy curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the combined areas of economics, nineteenth- and twentieth-century diplomatic history, political science, and international relations, all within the Strategy curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the combined areas of economics, nineteenth- and twentieth-century diplomatic history, political science, and international relations, all within the Strategy curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the combined areas of economics, nineteenth- and twentieth-century diplomatic history, political science, and international relations, all within the Strategy curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the combined areas of economics, nineteenth- and twentieth-century diplomatic history, political science, and international relations, all within the Strategy curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the combined areas of economics, nineteenth- and twentieth-century diplomatic history, political science, and international relations, all within the Strategy curriculum, 12 semester hours in the areas of management and business administration within the Defense Economics and Decision Making curriculum; and in the Tactics curriculum, credit is not recommended because of the military-specific nature of the course (8/74); in the graduate degree category, 9 semester hours in the combined
COURSE EXHIBITS

Science, diplomatic history, and, to some degree, economics. For each of the seven topics or blocks of work, the student is assigned a core set of readings and a list of recommended supplementary materials. Required reading for Version 1 totals approximately 700 pages. For the course on the basis of a study of these, the student prepares one or more analytical papers on a topic or topics chosen from a prescribed list. The basis for intellectual technique is a detailed three or four page critique of each essay prepared by a member of the faculty. By the completion, for a core course, each student will have written between 45 and 90 pages for submission. An integrative examination is given as the final exercise in the course. Written submissions exceed 3000 pages; written submissions for component parts of this Version I course total approximately 150 pages. An integrative examination is given as the final exercise in the course. Longer papers which generally average a total of 30 pages.

Credit Recommendation: In the graduate degree category, 3 semester hours in history, 3 in international relations, and 2 in political science for students completing the course with a grade of B or higher (5/78).

DEFENSE ECONOMICS AND DECISION MAKING OFF-CAMPUS GRADUATE SEMINAR

Course Number: None.

Location: Naval War College Off-Campus Location, Washington, DC.

Length: 32 weeks (64 hours).

Exhibit Dates: 9/77-1/80.

Objectives: To further the students’ awareness of the importance of the scarcity of resources as a constraint upon the allocation of these resources among competing uses, both public and private. Stress is placed upon the analytical techniques available for decision making in a context of scarcity with attention to the strengths and limitations of technical analysis.

Instruction: The course embraces microeconomic analysis, and the analytical techniques useful in decision making; the behavioral problems involved in the decision-making process, and the management principles and techniques useful in decision making in the public and private sectors. There are 40 weekly seminar meetings, one mid-term and a final examination, oral reports, and written reports. Assigned readings exceed 2300 pages; additional recommended readings are considerably more. Examinations and papers are read by the seminar instructors and by the faculty at the Naval War College.

Credit Recommendation: In the graduate degree category, 3 semester hours in behavioral analysis in decision making, 2 in behavioral analysis in decision making, and 3 in management principles, public and private, for those students completing the course with a grade of B or higher (5/78).

DEFENSE ECONOMICS AND DECISION MAKING SELF-ADMINISTERED SEMINAR (NAVAL WAR COLLEGE)

Course Number: None.

Location: Naval War College Nonresident Location, Jacksonville, FL, Naval War College Nonresident Location, Norfolk, VA.

Length: 32 weeks (64 hours).

Exhibit Dates: 9/77-1/80.

Objectives: To further the students’ awareness of the importance of the scarcity of resources as a constraint upon the allocation of these resources among competing uses, both public and private. Stress is placed upon the analytical techniques available for decision making in a context of scarcity with attention to the strengths and limitations of technical analysis.

Instruction: The self-administered seminar (SAS) is administered by the students themselves without an instructor present. Close faculty supervision is provided, however, through faculty staff, visits, guest lectures, the use of audio and audio-visual tapes of lectures at the Naval War College, by telephone with College faculty as well as the Defense Economics and Decision Making Seminar instructor in Washington, D.C., being available for consultation, and through the use of conference telephone calls wherein College faculty can provide guidance and respond to questions during the actual seminar meetings. The course is divided into five major parts embracing microeconomic analysis and the analytical techniques useful in decision making; the behavioral problems that must be considered in the decision-making process; and the management principles and techniques useful in decision making in the public and private sectors. Assigned readings exceed 180 pages; additional recommended readings are considerably more. Students are required to submit a number of written reports which are critiqued by the faculty in detail. Written submissions for component parts of this course range between 46 and 73 pages. An integrative examination is given as the final exercise in the course.

Credit Recommendation: In the graduate degree category, 2 semester hours in quantitative economic analysis, 2 in behavioral analysis in decision making, and 2 in management principles, public and private, for students completing the course with a grade of B or higher (5/78).

STRATEGY AND POLICY OFF-CAMPUS GRADUATE SEMINAR

Course Number: None.

Location: Naval War College Off-Campus Location, Washington, DC.

Length: Once weekly for 38 weeks (76 hours).

Exhibit Dates: 9/74-10/77.

Objectives: To develop an understanding, insight, and analytical abilities of the student regarding the uses of national power and resources in relations among nations.

Instruction: The seminar program is offered on a one-weekly basis. The course involves questions of international politics, civilian-military relations, the uses of military forces, the development of national strategies, concepts of national interest, diplomacy, etc. The method used is an intensive study of selected historical periods, events, and the writings of key theorists. The course is arranged around a series of case studies ranging over time from the Peloponnesian War to World War II and beyond. The course involves an interdisciplinary approach. The basic materials used are historical, but there are major components that represent international relations, political Science, economics, and related topics. For each of the seven topics or blocks of work the student is assigned a core set of readings and a list of recommended supplementary materials. The student is evaluated on formal oral presentations, two examinations and seven required papers which generally average a total of 30 pages.

Credit Recommendation: In the graduate degree category, 2 semester hours in history, 2 in international relations, 2 in political science for students completing the course with a grade of B or higher (4/76).
Instruction: The self-administered seminar (SAS) is administered by the students themselves without an instructor present. Close faculty supervision is provided through faculty visits, guest lectures, the use of audio and audio-visual types of lectures at the Naval War College by telephone with College faculty as well as retired and full time instructors in Washington, D.C. being available for consultation, and through the use of conference telephone calls where College faculty can provide guidance and respond to questions during the actual seminar meetings. The course involves questions of international politics, civilian-military relations, the roles of military factors, the development of national strategies and concepts of national interest, diplomacy, etc. The method used is the intensive study of selected historical periods, events, and the writings of key theorists. The course is built around a series of case studies ranging over time from the Peloponnesian War to World War II and beyond. The course involves an interdisciplinary approach. The basic materials used are historical, but there are major components that represent international relations, political science, diplomatic history to some degree, economics. For each of the seven topics or blocks of work, the student is assigned a core set of readings and a list of optional supplementary materials. Required reading totals at least 4500 pages for the course. On the basis of a study of these, the student prepares five to ten page analytical papers on topics chosen from a prescribed list. The basic instructional technique is a detailed three-or-four-page critique of each essay prepared by a member of the faculty. Students are also required to give three ten or fifteen minute oral critiques of essays written by other seminar members. An integrative examination is given as the final exercise in the course.

Credit Recommendation: In the graduate degree category, 6 semester hours in a combination of history, international relations, and political science (to be apportioned by the receiving institution) for students completing the course with a grade of B or higher (3/78).

NV-1512-0001
INTERCULTURAL RELATIONS—RACE, RELIGION, AND RACIAL TRAINING
Course Number: A-00-0117
Location: Naval Amphibious School, San Diego, CA.
Length: 3 weeks (120 hours)
Exhibit Dates: 7/72-Present
Objectives: To train enlisted personnel.

Credit Recommendation: In the graduate degree category, 6 semester hours in human relations or basic psychology (8/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in human relations or basic psychology (8/74); in the upper-division baccalaureate/associate degree category, 2 semester hours in human relations or basic psychology (8/74); in the upper-division baccalaureate/associate degree category, 2 semester hours in human relations or basic psychology (8/74); in the upper-division baccalaureate/associate degree category, 2 semester hours in human relations or basic psychology (8/74); in the upper-division baccalaureate/associate degree category, 2 semester hours in human relations or basic psychology (8/74); in the upper-division baccalaureate/associate degree category, 2 semester hours in human relations or basic psychology (8/74); in the upper-division baccalaureate/associate degree category, 2 semester hours in human relations or basic psychology (8/74).
NAVAL STAFF ADVISOR
Location: Naval Amphibious School, San Diego, CA.
Length: 20-60 weeks.

Exhibit Dates: 11/72-Present.
Objectives: To train enlisted personnel to advise Vietnamese on staff organization and procedures.

Instruction: Lectures and practical exercises in human response training, group dynamics, group behavior, leadership, and behavior in society.

Credit Recommendation: In the vocational certificate category, 3 semester hours in human relations or group relations (7/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in human relations or group relations, 3 in social sciences (7/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in human relations or group relations, 3 in social sciences (7/74).

NV-1513-0004
CHAPLAIN SCHOOL BASIC
Course Number: A-5G-0010.
Location: Naval Education and Training Center, Newport, RI.
Length: 8 weeks (200 hours).
Exhibit Dates: 4/72-Present.
Objectives: To train chaplains to serve the personal religious needs of military personnel.

Instruction: Lectures and practical exercises in the duties of a chaplain in the military. Course includes supervision, guidance, and counseling, drug abuse, discipline, minority group advancement, human growth and development, counseling techniques, group processes and interactions, and leadership skills.

Credit Recommendation: In the vocational certificate category, 3 semester hours in guidance and counseling, 3 in group dynamics (7/74); in the upper-division baccalaureate/associate degree category, 3 semester hours in guidance and counseling, 3 in group dynamics (8/74).
system, and generator operation and troubleshooting.

Credit Recommendation: In the vocational certificate category, 1 semester hour in chemical technology elective (5/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in chemical technology elective (5/74).

**NV-1601-0006**

OXYGEN GENERATOR MECHANICAL MODEL 6L16 (ENLISTED)

Course Number: F-652-044

Location: Submarine School, Groton, CT

Length: 4 weeks (120 hours)

Exhibit Dates: 5/68-Present

Objectives: To train enlisted personnel to maintain the 6L16 electrolytic oxygen generator under normal and emergency conditions.

Instruction: Lectures and practical exercises on the operation and maintenance of the 6L16 electrolytic oxygen generator. Course includes function of flow systems and electronic control systems, normal and emergency operating principles, valves, transducers, hydraulic flow components, electrolytic cell, calibration, preventive maintenance, check-out and test procedures, security precautions, and system troubleshooting.

Credit Recommendation: In the vocational certificate category, 1 semester hour as an elective in chemical technology (5/74); in the lower-division baccalaureate/associate degree category, 1 semester hour as an elective in chemical technology (5/74).

**NV-1601-0007**

OXYGEN EQUIPMENT (CLASS C)

Course Number: Not available

Location: Air Technical Training Unit, Lakehurst, NJ.

Length: 14 weeks (560 hours)

Exhibit Dates: 4/56-12/68

Objectives: To train personnel in the maintenance, testing, and repair of oxygen equipment.

Instruction: Lectures and practical exercises in the maintenance, testing, and repair of the aircraft oxygen equipment, including regulators, full-pressure systems, oxygen regulating pressure reducing systems, oxygen test stands, and conversion units, and ready-room and flight-line procedures.

Credit Recommendation: In the vocational certificate category, 5 semester hours in oxygen equipment (5/74); in the lower-division baccalaureate/associate degree category, 3 semester hours as an elective in aeronautical technology (5/74).

**NV-1601-0008**

ELECTROLYTIC OXYGEN GENERATOR OPERATORS

Course Number: A-652-0057

Location: Submarine Training Center, Pearl Harbor, HI.

Length: 2 weeks (60 hours)

Exhibit Dates: 1/77-Present

Objectives: To train personnel to operate and maintain the 6L-16 oxygen generator.

Instruction: Lectures and practical exercises in the maintenance and operation of the 6L-16 oxygen generator, including detailed analysis and troubleshooting of all mechanical components, purging of the oxygen generator, valve nomenclature, cell construction and installation, cell jumpering, and electrolyte refill of cell, basic flow path, transducers, electrical systems and instrumentation panel, start-up, normal operation, and "shut-downs, cleaning and degreasing, and gas analyzers.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (5/74).

**NV-1601-0009**

6L16 OXYGEN GENERATOR TECHNICIAN

Course Number: A-622-0034, F-623-044

Location: Submarine School, Groton, CT

Length: 6 weeks (180 hours)

Exhibit Dates: 3/70-Present

Objectives: To train personnel to perform on the 6L16 oxygen generator technicians.

Instruction: Lectures and practical exercises in the maintenance and troubleshooting of the 6L16 oxygen generator, including maintenance and material management systems; electrolysis and the electrolytic cell; functional analysis of flow systems and the electronic control system, electrolysis power supply description, analysis, operation, calibration, and troubleshooting; electronic control system power supplies and description; pressure controller circuit analysis, gas analyzer, and system troubleshooting and maintenance.

Credit Recommendation: In the vocational certificate category, 2 semester hours as an elective in chemical technology (5/74); in the lower-division baccalaureate/associate degree category, 1 semester hour as an elective in chemical technology (5/74).

**NV-1601-0010**

COMPRESSED GASES, CLASS C, HIGH PRESSURE OXYGEN-NITROGEN PLANT (Cryogenics, Class C)

(Cryogenics, Class C)

(Cryogenics, Class C)

Location: Submarine School, Groton, CT

Course Number: A-750-0010

Location: Norfolk Naval Shipyard, Portsmouth, VA

Length: 14 weeks (436-452 hours)

Exhibit Dates: 10/61-Present

Objectives: To train personnel to operate and maintain high-pressure liquid oxygen/nitrogen generating plants and associated equipment.

Instruction: Lectures and practical exercises in the operation and maintenance of high-pressure liquid oxygen/nitrogen generating plants and associated equipment, including physics and chemistry of cryogenics, air liquefaction, cryogenic storage, transfer and handling equipment, high-pressure air compressors and vacuum pumps, refrigeration, recondenser components and repair, and operation of specific generating plant equipment.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (5/74).

**NV-1601-0011**

TURBINES & MK 16 MOD 3 AND MK 16 MOD 5 INTERMEDIATE MAINTENANCE

Course Number: A-123-0132, K-123-592

Location: Service Schools Command, Orlando, FL; Fleet Training Group, Pearl Harbor, HI.

Length: 15 weeks (420-450 hours)

Exhibit Dates: 2/68-Present

Objectives: To train torpedomen and strikers to operate and maintain the MK 16 turbines and associated test equipment.

Instruction: Lectures and practical exercises in the operation and maintenance of MK 16 turbines and associated test equipment, including fuel oil storages, overhauls, repair, disassembly, and assembly, and maintenance and preservation.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (5/74).

**NV-1601-0012**

SELF-NOISE DETERMINATION AND CLASSIFICATION

Course Number: F-210-013

Location: Service School Command, Great Lakes, IL.

Length: 4 weeks (160 hours)

Exhibit Dates: 12/76-Present

Objectives: To train enlisted personnel in submarine noise reduction, mechanical vibration and measurement, and use of sound measurement equipment.

Instruction: Lectures and practical exercises in the operation and maintenance of the DD963 class destroyer.

Credit Recommendation: In the vocational certificate category, 1 semester hour in noise control or sound control (5/74).

**NV-1601-0013**

ENGINEERING CONTROL AND SURVEILLANCE SYSTEM OPERATOR, CLASS C

Course Number: A-652-0074

Location: Service School Command, Great Lakes, IL.

Length: 4 weeks (160 hours)

Exhibit Dates: 12/76-Present

Objectives: To provide technical knowledge and skills in the performance of duties and supervision of personnel involved in the operation of engineering control and surveillance systems of the DD963 class destroyer.

Instruction: Areas of instruction include a working knowledge of the operation and maintenance of the following systems: electrical plant control equipment, propulsion and auxiliary machinery control equipment, propulsion and auxiliary machinery information systems equipment, propulsion local operating equipment, and central information system equipment.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in maintenance of engineering instrumentation or mechanical control systems (9/77).

**NV-1601-0014**

ENGINEERING CONTROL AND SURVEILLANCE SYSTEM MAINTENANCE, CLASS C

Course Number: A-652-0137

Location: Service School Command, Great Lakes, IL.

Length: 10-12 weeks (400-480 hours)

Exhibit Dates: 1/77-Present

Objectives: To train qualified electricians in the duties and supervision of the engineering control and surveillance systems of the DD963 class destroyer.

Instruction: Areas of instruction cover the following systems: electrical plant control equipment, propulsion and auxiliary machinery control equipment, propulsion local operating equipment, and propulsion auxiliary machinery control equipment.
i-110 COURSE EXHIBITS

i n e r u shine, mar a in system e q u i p me n t a n d i n’S m port s i s to e q u i p m e n t .

Credit Recommendation: In the lower-d i vision baccalaureate/associate degree category, 3 semester hours in computer operations and 5 as electives in electrical technology (9/77).

NV-1601-0015
DD-963 CENTRALIZED DAMAGE CONTROL CONSOLE OPERATOR, CLASS C1
Course Number: A-652-0079
Location: Service School Command, Great Lakes, IL.
Length: 2 weeks (80 hours).
Exhibit Dates: 2/77-Present.
Objectives: To train enlisted personnel to operate and maintain the damage control/fuel control consoles for the DD-963 class destroyer.
Instruction: Areas of instruction include the following subsystems: hazard detection panel, fire-main control panel, fuel oil fill and transfer panel, JP-5 control panel, fuel oil and JP-5 local control panels.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (9/77).

NV-1601-0016
DD-963 CENTRALIZED DAMAGE CONTROL SYSTEM CONSOLE MAINTENANCE, CLASS C1
Course Number: A-652-0081
Location: Service School Command, Great Lakes, IL.
Length: 3 weeks (120 hours).
Exhibit Dates: 5/77-Present.
Objectives: To train personnel to operate and maintain the damage control/fuel control console for the DD-963 class destroyer.
Instruction: Areas of instruction include emergency operations, line-up, monitoring, recognizing and acknowledging simulated fault and hazard conditions and security.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in instrumentation or systems controls (9/77).

NV-1601-0017
SEM DEGASSING SYSTEM FOR DD-963 DESTROYER, CLASS CI
Course Number: A-690-0022
Location: Service School Command, Great Lakes, IL.
Length: 2 weeks (60 hours).
Exhibit Dates: 4/76-Present.
Objectives: To train personnel to operate and maintain the degassing system.
Instruction: Instruction in the theory of degassing, the operation of the degassing control systems, adjustment, maintenance and troubleshooting associated electrical equipment related to the degassing systems for ships.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (9/77).

NV-1606-0001
INTELLIGENCE ADVISOR VIETNAM
Course Number: A-3A-0023
Location: Naval Amphibious School, Coronado, San Diego, CA.
Length: 2 weeks (67 hours).
Exhibit Dates: 3/75-Present.
Objectives: To train intelligence officers as operators and advisors in Vietnam by providing thorough study of intelligence processes, functions, and skills.

Instruction: Study of U.S. and Vietnamese intelligence organizations; specialized intelligence activities.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (2/74).

NV-1606-0002
IOIC SUPERVISOR
Course Number: D-3A-013
Location: Reconnaissance Attack-Squadron Three, Albany, GA.
Length: 5 weeks (200 hours).
Exhibit Dates: 5/74-Present.
Objectives: To train the student in the processing of electronically acquired intelligence information.
Instruction: Electronic data processing methods; photographic processing; storage; programming; compatible interfacing; maintenance procedures.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in electronic data processing, 3 in basic photography (2/74); in the upper-division baccalaureate category, 3 semester hours in electronic data processing, 3 in basic photography (2/74).

NV-1606-0003
INTELLIGENCE OFFICER, VIETNAM (Naval Field Intelligence Officer, Vietnam)
Course Number: H-3A-5516
Location: Amphibious School, Coronado, San Diego, CA.
Length: 13 weeks (811 hours).
Exhibit Dates: 4/67-Present.
Objectives: To provide commissioned officers with functional training in the organizational development of intelligence communities, with emphasis on the Vietnamese community, language, and culture.
Instruction: Political history of Southeast Asia; comparative religions and cultures; intelligence methods; Vietnamese language; geopolitical concepts.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in Far Eastern language and literature, 3 in political science (2/74); in the upper-division baccalaureate category, 3 semester hours in Far Eastern language and literature, 3 in political science (2/74).

NV-1606-0004
AMPHIBIOUS INTELLIGENCE STAFF OFFICER
Course Number: H-3A-5515
Location: Naval Amphibious School, San Diego, CA.
Length: 2 weeks (80 hours).
Exhibit Dates: 1/70-3/71.
Objectives: To train commissioned and warrant officers in amphibious intelligence operations, concepts, and principles.
Instruction: Collection, processing, and dissemination of intelligence; intelligence briefing techniques; counterintelligence theory; principles of counterintelligence.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in information and communications, 1 in business administration (2/74); in the upper-division baccalaureate category, 1 semester hour in information and communications, 1 in business administration (2/74).

NV-1606-0005
MARINE ENLISTED BASIC COMBAT INTELLIGENCE
Course Number: G-243-4212
Location: Amphibious School, Little Creek, VA.
Length: 2 weeks (60 hours).
Exhibit Dates: 1/70-Present.
Objectives: To train enlisted Marines in basic amphibious combat intelligence functions and procedures.
Instruction: Map and aerial photograph reading, counterintelligence, and reconnaissance methods; beach studies; battalion organization; collection, production, and dissemination of information and military intelligence data.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in photomapping, 1 in military security, 1 in public administration (2/74); in the upper-division baccalaureate category, 1 semester hour in photomapping, 1 in military security, 1 in public administration (2/74).

NV-1606-0006
INTELLIGENCE MAN (AIR/GROUND)
Course Number: H-243-3167
Location: Naval Amphibious Base, San Diego, CA.
Length: 3 weeks (100 hours).
Exhibit Dates: 11/71-Present.
Objectives: To train enlisted personnel for intelligence duty as assistants in the collection of military material in combat situations.
Instruction: Map instruction; collection, production, and dissemination of intelligence; organizational methods; naval communications procedures; automated intelligence, basic correspondence and filing techniques; combat situations analysis and information collection and reporting.
Credit Recommendation: In the vocational certificate category, credit in topography on the basis of institutional evaluation (2/74); in the lower-division baccalaureate/associate degree category, credit in topography on the basis of institutional evaluation (2/74).

NV-1606-0007
1. BASIC UNDERWATER DEMOLITION/SEAL TEAM TRAINING (Basic Underwater Demolition/Seal Team Training)
2. UNDERWATER DEMOLITION TRAINING (Underwater Demolition Training)
3. UNDERWATER DEMOLITION TRAINING (Enlisted)

NV-1606-0008
INTELLIGENCE ADVISOR VIETNAM
Location: Amphibious School, San Diego, CA.
Objectives: To train officers and enlisted personnel in the principles and physics of scuba diving.
Instruction: Basics of scuba diving and proper use of scuba diving apparatus.
Credit Recommendation: In the vocational certificate category, 3 semester hours in marine science technology (12/73); in the lower-division
baccalaureate/associate degree category, 3 semester hours in marine science technology (12/73); in the lower-division baccalaureate/associate degree category, 3 semester hours in ocean engineering (1/74).

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (12/68).

**NV-1606-0008**

**DIVER FIRST CLASS**


Objectives: To train enlisted personnel in advanced diving, salvage, and rescue operations.

- Lectures and practical experience in advanced ship salvage and submarine rescue methods, helium-oxygen techniques, scuba techniques, underwater welding, and a review of diving physics.

- Instruction: In the vocational certificate category, 6 semester hours in marine science technology (12/73); in the lower-division baccalaureate/associate degree category, 6 semester hours in marine science or oceanography, (12/73), in the upper-division baccalaureate category, 3 semester hours in ocean engineering (12/73).

Credit Recommendation: In the vocational certificate category, 4 semester hours in marine science technology (1/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in ocean engineering (1/74).

**NV-1606-0009**

**DEEP SEA HELIUM-OXYGEN DIVING OFFICERS**


Objectives: To train diving officers in the use of helium-oxygen deep diving techniques.

- Lectures and practical experience in principles and problems of deep diving and use of helium-oxygen mixtures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (12/73).

**NV-1606-0010**

**DIVER SECOND CLASS**

(EOD Diver Candidates)

Course Number: A-433-0022. Location: Naval School, Key West, FL; Naval School, Norfolk, VA, Naval School, San Diego, CA; Naval School, Guam, MI; Naval School, Pearl Harbor, HI; Naval School, Subic Bay, RP! Location: Diving and Salvage School, Washington, DC. Length: 7-9 weeks (210-365 hours). Exhibit Dates: 6/62-Present. Objectives: To train enlisted personnel in the basic aspects of scuba diving and underwater practices.

- Lectures and practical experience in the physics and medical aspects of diving, swimming and underwater swimming, buoyant ascent training, underwater search and inspection, communications, photography, demolition, use and maintenance of deep sea and lightweight diving equipment, and methods of underwater cutting.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (12/73).

**NV-1606-0011**

**SCUBA DIVER**


Objectives: To train enlisted personnel in the basic aspects of scuba diving and underwater operations.

- Instruction: Lectures and practical experience in the physics and medical aspects of diving; swimming and underwater swimming; buoyant ascent training, underwater search and inspection, communications; photography; demolition; use, maintenance, and repair of deep sea and lightweight diving equipment; methods of underwater cutting and repair.

Credit Recommendation: In the vocational certificate category, 4 semester hours in marine science technology (1/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in ocean engineering (1/74).

**NV-1606-0012**

**CLOSED AND SEMICLOSED SCUBA**

Course Number: None. Location: Naval School, Key West, FL. Length: 4 weeks (125 hours). Exhibit Dates: 12/62-12/68.

Objectives: To train enlisted personnel in all aspects of mixed-gas scuba diving and underwater practices.

- Instruction: Lectures and practical experience in mixed-gas scuba diving, diving medicine and physics, equipment use and maintenance, and underwater search and inspection.

Credit Recommendation: In the vocational certificate category, 4 semester hours in marine science technology (1/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in ocean engineering (1/74).

**NV-1606-0013**

**UNDERWATER PHOTOGRAPHER/SCUBA**

Course Number: None. Location: Naval School, Key West, FL. Length: 5 weeks (138 hours). Exhibit Dates: 12/62-12/68.

Objectives: To train enlisted personnel in the basic principles of scuba diving and underwater photography.

- Instruction: Lectures and practical experience in the physics and medical aspects of diving; swimming and underwater swimming; buoyant ascent training; underwater search and inspection; communications; photography; demolition; use and maintenance of deep sea and lightweight diving equipment, and methods of underwater cutting.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (12/73).

**NV-1606-0014**

**MEDICAL DEEP SEA DIVING TECHNICIAN (Medical Deep Sea Diving Technician)**

(Dive Sea Divers)


- Objectives: To train hospital personnel in the physiological effects of diving, and in diving techniques.

Instruction: Lectures and practical experience in diving physics and physiology as applied to the treatment of compressed-gas illness, accidents with mixed-gas diving, and the use of decompression and treatment tables.

Credit Recommendation: In the vocational certificate category, 6 semester hours in paramedical programs or ocean engineering (12/73); in the lower-division baccalaureate/associate degree category, 6 semester hours in marine science technology (12/73); in the upper-division baccalaureate category, 4 semester hours in marine sciences (12/73).

**NV-1606-0015**

**SHIP SALVAGE DIVING OFFICERS**


Objectives: To train officers in the use of diving equipment.

Instruction: Diving with deep-sea, lightweight, and scuba diving; diving medicine and first aid, and underwater engineering as applied to salvage operations.

Credit Recommendation: In the vocational certificate category, 4 semester hours in ocean engineering (12/73); in the lower-division baccalaureate/associate degree category, 6 semester hours in ocean engineering (12/73); in the upper-division baccalaureate category, 4 semester hours in ocean engineering (12/73).

**NV-1606-0016**

**MASTER DIVER QUALIFICATION**


Objectives: To prepare experienced divers to meet the eligibility requirements for the title, Master Diver.

Instruction: Lectures and practical experience as refresher training in diving techniques, and safety, with emphasis on supervisory training.

Credit Recommendation: In the vocational certificate category, 4 semester hours in marine sciences (12/73); in the lower-division baccalaureate/associate degree category, 4 semester hours in oceanography (12/73); in the upper-division baccalaureate category, 3 semester hours in marine engineering (12/73).

**NV-1606-0017**

**MEDICAL DEPARTMENT DIVING OFFICERS**


Objectives: To provide medical officers with instruction in diving techniques with emphasis on physiological aspects.

Instruction: Familiarization with deep sea, lightweight, and helium diving; operational use of SCUBA; limited training in underwater mechanics; and diving techniques with emphasis on physiological aspects.

Credit Recommendation: Baccalaureate credit is not recommended because course
participation is limited to medical doctors (6/75).

**NV-1606-0018**

**BASIC PROP FLIGHT INSTRUCTOR**

- **Course Number:** Q-2A-0060.
- **Location:** Naval Air Station, Corpus Christi, TX.
- **Length:** 3 weeks (117 hours).
- **Exhibit Dates:** 7/73-Present.
- **Objectives:** To train pilots as flight instructors for basic prop aircraft.

**Instruction:** Lectures and in-flight training in teaching propeller aircraft flight procedures, including the synthetic instrument trainer, instrument simulator, radio instrument simulators, safety procedures, flight flight procedures, and aircraft preflight and takeoff procedures.

**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (2/74).

**NV-1606-0019**

**FLIGHT INSTRUCTOR TRAINING**

- **Course Number:** None.
- **Location:** Naval Air Station, Corpus Christi, TX.
- **Length:** 2 weeks (1-78 hours).
- **Exhibit Dates:** 6/67-Present.
- **Objectives:** To train qualified pilots to be instructor pilots.

**Instruction:** Lectures include the basic principles of education, orientation for the instructor pilot, applied aerodynamics, safety procedures, oral communications, and leadership training.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 2 semester hours in aerodynamics, 1 in education (2/74).

**NV-1606-0020**

**PROSPECTIVE PROP FLIGHT INSTRUCTOR (Prospective ME (Prop) Flight Instructor (TS-2A Type Aircraft))**

- **Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (2/74).

**NV-1606-0021**

**PROSPECTIVE TA-J FLIGHT INSTRUCTOR**

- **Course Number:** Not available.
- **Location:** Naval Air Station, Corpus Christi, TX.
- **Length:** 10 weeks (73 hours).
- **Exhibit Dates:** 1/70-Present.
- **Objectives:** To train pilots as flight instructors for the TA-J aircraft.

**Instruction:** Flight training, including instrument navigation, operational navigation, and air-in-ground and air-to-air weapons; and lectures and practical exercises in flight rules and regulations, aerodynamics, and engineering.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 3 semester hours in training as an instructor pilot (2/74).

**NV-1606-0022**

**RA-5C AIRCRAFT FAMILIARIZATION**

- **Course Number:** C-2A-3742.
- **Location:** Air Maintenance Training Detachment, Albany, GA; Air Maintenance Training Detachment, Sanford, FL.
- **Length:** 2 weeks (77-84 hours).
- **Exhibit Dates:** 2/67-Present.
- **Objectives:** To provide pilots and reconnaissance attack navigators with training in the operation of RA-5C aircraft and systems.

**Instruction:** Lectures and practical exercises in RA-5C aircraft and systems functions and operation, including electrical, hydraulic, power plant, fuel, and flight control systems operation; and air data computer, master flight reference, approach power compensator, survival, and environmental systems functions and operating procedures.

**Credit Recommendation:** In the vocational certificate category, 1 semester hour in aircraft familiarization (3/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in aircraft familiarization (3/74).

**NV-1606-0023**

**BASIC JET NAVIGATION, CLASS C**

- **Course Number:** None.
- **Location:** Air Technical Training Center, Glynco, GA.
- **Length:** 4 weeks (160 hours).
- **Exhibit Dates:** 1/70-Present.
- **Objectives:** To train naval flight officers in basic jet aircraft navigation.

**Instruction:** Lectures in jet aircraft navigation theory; aircraft equipment, flight safety and survival; flight planning; dead reckoning, low-level, and radar navigation; and practical experience in navigation operations.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 6 semester hours in navigation (2/74); in the upper-division baccalaureate category, credit in navigation on the basis of institutional evaluation (12/68).

**NV-1606-0024**

**COMMAND INTELLIGENCE OFFICER (CIO)**

- **Course Number:** K-3A-5005.
- **Location:** Air Technical Training Center, Pacific, San Diego, CA.
- **Length:** 2 weeks (68 hours).
- **Exhibit Dates:** 10/73-Present.
- **Objectives:** To provide basic instruction in the specific functions and responsibilities of the collateral duty command intelligence officer.

**Instruction:** Instruction includes collection and dissemination of intelligence information and recognition and capabilities of foreign weapon systems. Methods involve classroom studies and briefings on intelligence aids and techniques and practical exercises on organizing, preparing, and presenting intelligence briefs.

**Credit Recommendation:** Credit is not recommended because of the limited specialized nature of the course (6/75).

**NV-1606-0025**

**TA-J ADVANCED JET**

- **Course Number:** None.
- **Location:** Naval Air Station, Corpus Christi, TX.
- **Length:** 20 weeks (115-129 hours).
- **Exhibit Dates:** 2/70-Present.
- **Objectives:** To qualify student aviators as jet pilots.

**Instruction:** Flight training and lectures and practical exercises in aerodynamics, engineering, flight regulations, navigation, and meteorology.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 3 semester hours in flight experience, 6th theory of flight (2/74).

**NV-1606-0026**

**SSBN NAVIGATION OFFICER**

- **Course Number:** A-2G-0011.
- **Location:** Guided Missiles School, Dam Neck, VA.
- **Length:** 10 weeks (362 hours).
- **Exhibit Dates:** 11/72-Present.
- **Objectives:** To train officer to manage the operation of the navigation subsystem of the fleet ballistic missile weapons system.

**Instruction:** Lectures and practical exercises in the management of the navigational subsystem of the fleet ballistic missile weapons system, including administrative procedures, inertial theory and principles of SINS operation, navigation, subsystem equipment operation and calibration procedures, calibration theory, and conventional navigation and piloting.

**Credit Recommendation:** Insufficient data for evaluation (3/74).

**NV-1606-0027**

**RAVIN-RADIOSONDE SET OPERATOR, CLASS C**

- **Course Number:** C-420-2013.
- **Location:** Air Technical Training Center, Lakelfurst, NJ.
- **Length:** 6-7 weeks (243-279 hours).
- **Exhibit Dates:** 4/65-Present.
- **Objectives:** To train enlisted personnel to operate radiosonde and rawinsonde upper-air equipment.

**Instruction:** Lectures and practical exercises in radiosonde and rawinsonde upper-air equipment operation, upper-air data evaluation, winds/spk computer radiosonde recorders preventing, and meterological data evaluation procedures. In the upper-division baccalaureate category, credit in weather forecasting techniques on the basis of institutional evaluation (4/74).

**NV-1606-0028**

**AVIATION ANTI-SUBMARINE WARFARE (AASW) FOR FIRST TOUR PILOTS, P/IC**

- **Course Number:** E-2D-070.
- **Location:** Fleet Aviation Specialized Operational Training Group, Pacific, Moffett Field, CA.
- **Length:** 3 weeks (91 hours).
- **Exhibit Dates:** 8/72-Present.
Objectives: To train pilots in air anti-submarine warfare in P-3C (land-based ASW) aircraft.

Instruction: Lectures and practical exercises in air anti-submarine warfare in P-3C (land-based ASW) aircraft. Topics include oceanography and underwater acoustics, tactical maneuvering of aircraft engaged in ASW, AASW sensors and related equipment, and electronic warfare concepts.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/74).

**NV-1606-0029**

RAWIN SET OPERATOR, CLASS C

Course Number: Not available.

Location: Air Technical Training Unit, Lakehurst, NJ.

Length: 5 weeks (200 hours).

Exhibit Dates: 3/55-12/68.

Objectives: To train aircrew officers and enlisted personnel with radiosonde equipment experience to operate and maintain aerome- teorological equipment and to evaluate meteoro- logical data.

Instruction: Lectures and practical exercises in radiosonde data evaluation, rawin set theory and associated equipment operation, preflight ground equipment check, radiosonde assembly launching procedures, and data evaluation.

Credit Recommendation: In the upper-di vision baccalaureate category, credit in weather forecasting techniques on the basis of institutional evaluation (12/68).

**NV-1606-0030**

PHOTOGRAPHIC INTELLIGENCEMAN (PT)

(Photographic Interpretation/Radar Target Analysis)

Course Number: A-342-0010.

Location: Intelligence School, Washington, DC.

Length: 14-16 weeks (420-480 hours).

Exhibit Dates: 8/57-12/68.

Objectives: To train enlisted personnel in air intelligence, photographic interpretation, and radar target analysis.

Instruction: Lectures and practical exercises in photography and photographic interpretation, charts, metrics, target analysis, radar and radar target analysis, and operational and intelligence planning.

Credit Recommendation: In the vocational certificate category, 6 semester hours in photographic interpretation (5/74); in the lower-division baccalaureate/associate degree category, 6 semester hours in photographic interpretation (5/74); in the upper-division baccalaureate category, 4 semester hours in photographic interpretation (5/74).

**NV-1606-0031**

ADVANCED NAVIGATION TRAINING

(STUDENT NAVAL FLIGHT OFFICER)

Course Number: Q-2D-0023.

Location: Aviation Training Center, Pensacola, FL.

Length: 9 weeks (311 hours).

Exhibit Dates: 3/73-Present.

Objectives: To train personnel in advanced navigation.

Instruction: Lectures and practical exercises in advanced navigation, including emergency, day-flight, night-flight, patrol-flight, and extended-flight procedures; briefs; debriefs; flight planning; celestial navigation; advanced navigation techniques; synthetic navigation training, and electronic navigation systems.

Credit Recommendation: In the lower-di vision baccalaureate/associate degree category, 6 semester hours in navigation (6/74).

**NV-1606-0032**

ADVANCED NAVIGATION TRAINING

(POSTGRADUATE NAVAL AVIATOR)

Course Number: None.

Location: Aviation Training Center, Pensacola, FL.

Length: 6 weeks (178 hours).

Exhibit Dates: 3/73-Present.

Objectives: To train personnel in advanced navigation.

Instruction: Lectures and practical exercises in advanced navigation, including emergency, day-flight, night-flight, patrol-flight, and extended-flight procedures; briefs; debriefs; flight planning; celestial navigation; advanced navigation techniques; synthetic navigation training, and electronic navigation systems.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/526).

**NV-1606-0033**

ADVANCED NAVIGATION TRAINING

(POSTGRADUATE COAST GUARD AVIATOR)

Course Number: None.

Location: Aviation Training Center, Pensacola, FL.

Length: 5 weeks (261 hours).

Exhibit Dates: 3/73-Present.

Objectives: To train personnel in advanced navigation.

Instruction: Lectures and practical exercises in advanced navigation, including emergency, day-flight, night-flight, patrol-flight, and extended-flight procedures; briefs; debriefs; flight planning; celestial navigation; advanced navigation techniques; synthetic navigation training, and electronic navigation systems.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/526).

**NV-1606-0034**

PILOTS C-121 SIMULATOR AND ADVANCED FLIGHT

Course Number: D-2B-012.

Location: Oceanographic Air Survey Unit, Patuxent River, MD.

Length: 6 weeks (180 hours).

Exhibit Dates: 12/66-12/68.

Objectives: To train prospective C-121 pilots and plane commanders in ground and flight techniques.

Instruction: Lectures and practical exercises in C-121 ground and flight techniques, including use of the operational flight simulator and normal and emergency flight procedures and tactics.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (12/68).

**NV-1606-0035**

PILOTS C-121 SIMULATOR AND BASIC FLIGHT

Course Number: D-2B-013.

Location: Oceanographic Air Survey Unit, Patuxent River, MD.

Length: 5 weeks (90 hours).

Exhibit Dates: 12/66-12/68.

Objectives: To train prospective C-121 pilots in basic C-121 ground and flight procedures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/526).

**NV-1606-0036**

FLEET REPLACEMENT RADAR NAVIGATOR

(Bombardier Navigator)

Course Number: Not available.

Location: Naval Air Station, Whidbey Island, WA.

Length: 16-20 weeks (552-698 hours).

Exhibit Dates: 1/63-12/68.

Objectives: To train commissioned officers as fleet replacement radar navigators.

Instruction: Lectures and practical exercises in the duties of fleet replacement radar navigators. Course includes radar navigation, communications, navigation equipment, celestial navigation, sextant usage, flight patterns, and electronic warfare.

Credit Recommendation: In the vocational certificate category, 8 semester hours in navigation (12/74); in the lower-division baccalaureate/associate degree category, 5 semester hours in navigation (7/74); in the upper-division baccalaureate category, 5 semester hours in navigation (12/68).

**NV-1606-0037**

PROSPECTIVE PHASE I CV (JET) (TF/AF-9) TACTICAL FLIGHT INSTRUCTOR

Course Number: Not available.

Location: Air Advanced Training Command, Corpus Christi, TX.

Length: 10 weeks (129 hours).

Exhibit Dates: 8/63-12/68.

Objectives: To train pilots as tactical flight instructors in TF/AF-9 aircraft.

Instruction: Lectures and practical exercises in the duties of a tactical flight instructor. Course includes instruments, navigation, formation, flight operations, weapons, and carrier qualifications.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (7/74).

**NV-1606-0038**

PROSPECTIVE ADVANCED NAVIGATION FLIGHT INSTRUCTOR

Course Number: Q-2D-0064.

Location: Air Advanced Training Command, Corpus Christi, TX.

Length: 11-16 weeks (95-151 hours).

Exhibit Dates: 9/63-12/68.

Objectives: To train naval aviators and observers as flight instructors.

Instruction: Lectures and practical exercises in flight instructor training, including navigation training, instruments familiarization, flight training, flight rules and regulations, meteorology, engineering, and synthetic instrument training.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (7/74).

**NV-1606-0039**

PROSPECTIVE TF/TAF-9 FLIGHT INSTRUCTOR

Course Number: Not available.

Location: Naval Air Station, Corpus Christi, TX.

Length: 10 weeks (167-190 hours).

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (7/74).
NV-1606-0040

PROSPECTIVE VA (PROP) TACTICAL FLIGHT INSTRUCTOR

Course Number: Not available.
Location: Air Advanced Training Command, Corpus Christi, TX.
Length: 10 weeks (72 hours).
Exhibit Dates: 1/63-1/68.
Objectives: To train flight instructors in VA (Prop) tactical flight training.
Instruction: Lectures and practical exercises in VA (Prop) flight training, including navigation, tactics, weapons, and navigation on the T-28 and A-1H aircraft.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (7/74).

NV-1606-0041

PROSPECTIVE PHASE II CV (JET) (F11A) TACTICAL FLIGHT INSTRUCTOR

Course Number: Not available.
Location: Air Advanced Training Command, Corpus Christi, TX.
Length: 10 weeks (72 hours).
Exhibit Dates: 12/63-12/68.
Objectives: To train flight instructors in F11A jet aircraft.
Instruction: Lectures and practical exercises in flight procedures for F11A jet aircraft, including formation, tactics, air-to-air weapons, ground-controlled intercept procedures, night flying, instrumentation, and high-altitude navigation.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (7/74).

NV-1606-0042

FLIGHT INSTRUCTOR INDOCTRINATION GROUP

Course Number: Not available.
Location: Air Basic Training Command, Pensacola, FL.
Length: 3 weeks (91 hours).
Exhibit Dates: 7/64-12/68.
Objectives: To train aviators as flight instructors.
Instruction: Lectures and practical exercises in flight instruction procedures, including instructional methods, learning principles, testing methods and score interpretation, flight psychology, coordinating oral communications, and applied aerodynamics, basic physics, various theories and equations, and procedures, flight training, jet engine theory and components, reciprocating engines, various curves, take-off and landing problems, stability, and control systems.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in instructional methods (12/68).

NV-1606-0043

PC 4 TACTICAL COORDINATOR POSITIONAL TRAINING FOR NAVAL FLIGHT OFFICER

Course Number: E-2D-0075.
Location: Fleet Aviation Specialized Operational Training Group, Pacific, Moffett Field, CA.
Length: 2 weeks (70 hours).
Exhibit Dates: 10/72-Present.
Objectives: To provide PC flight officers with tactical training in antisubmarine warfare.
Instruction: Lectures and practical exercises on PC 4 flight aircraft tactical coordinator positional training, including armament/ordnance hardware; flight station review, TACCO station hardware and software; TACCO station familiarization, recovery, tactical navigation, steering/splash points, audio control, sensor processing, initialization, and multipurpose display; switch functions; specific laboratory; and practice trainer brief and debrief.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (7/74).

NV-1606-0044

1. NAVAL FLIGHT OFFICER TRAINING (FLIGHT, ACADEMIC, FLIGHT SUPPORT)
2. NAVAL FLIGHT OFFICER TRAINING (FLIGHT, ACADEMIC, FLIGHT SUPPORT)
3. BASIC NAVAL AVIATION OFFICER
4. NAVAL AVIATION OFFICER
5. AVIATION LIMITED DUTY OFFICER (LDO) INDOCTRINATION

NV-1606-0045

1. NAVigation FLIGHT TRAINING, NAVAL AVIATOR AND NAVAL FLIGHT OFFICER

NAVAL FLIGHT OFFICER TRAINING
(Navigation Flight Training, Pilot and Naval Aviation Officer (Navigator))

Course Number: None.
Location: Air Advanced Training Command, Corpus Christi, TX.
Length: 3-4 weeks (55-80 hours).
Exhibit Dates: 5/63-Present.
Objectives: To train pilots and flight officers to perform the duties of aerial navigators.
Instruction: Lectures and practical exercises in the duties of an aerial navigator. Course includes radio navigation, celestial navigation, dead reckoning, plotting, antisubmarine warfare navigation, radar navigation, and flight planning.
Credit Recommendation: In the vocational certificate category, 2 semester hours in navigation (8/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in navigation (8/74).

NV-1606-0046

1. FLIGHT PREP-RATION, NAVAL AVIATION CADET AND AVIATION OFFICER CANDIDATE

(Pre-flight, Naval Aviation Cadets and Aviation Officer Candidates)

2. PRE-FLIGHT, NAVAL AVIATION CADETS AND AVIATION OFFICER CANDIDATES

Course Number: None.
Location: Air Basic Training Command, Pensacola, FL.
Length: 14-16 weeks (543-582 hours).
Objectives: To train enlisted personnel in aviation and aircraft fundamentals.
Instruction: All Versions: Lectures and practical exercises in aviation and aircraft fundamentals, including mathematics, physics, flight training, flight training, training device problems, flight operations, and aerodynamics. Version 1: Topics include electricity and electronics, radar fundamentals, computer systems, electronic warfare, advanced systems, navigation branch, flight preparation navigation, airways navigation, dead reckoning navigation, training device problems, flight operations, and aerodynamics. Version 2: Instruction includes navigation, air intelligence, and personnel administration.
Credit Recommendation: Version 1: In the lower-division baccalaureate/associate degree category, 1 semester hour in navigation, 1 in aeronautics (8/74). Version 2: In the lower-division baccalaureate/associate degree category, 1 semester hour in navigation (8/74).
1. FLIGHT SYSTEMS  
(Flight Preparation, Officer)  
(Pre-flight, Officer)  
2. PRE-FLIGHT, OFFICER  
Location: Air Basic Training Command, Pensacola, FL  
Length: 4-10 weeks (130-375 hours)  
Objectives: To train personnel in aviation and aircraft fundamentals.  
Instruction: All Versions: Lectures and practical exercises in aviation and aircraft fundamentals, including mathematics, physics, flight vision, elementary physics, human behavior fundamentals, leadership training, naval history, military justice, physical training, survival training, and principles of flight.  
Version 2: Instruction includes navigation, air intelligence, and personnel administration.  
Credit Recommendation: Version 1: In the lower-division baccalaureate/associate degree category, 1 semester hour in navigation, 1 in aeronautics (8/74).  
Version 2: In the lower-division baccalaureate/associate degree category, 1 semester hour in navigation (8/74).  

NV-1606-0048  
PRIMARY PHASE, BASIC PILOT TRAINING  
Course Number: None  
Location: Air Basic Training Command, Pensacola, FL  
Length: 8-9 weeks (42-56 hours)  
Exhibit Dates: 1/60-Present.  
Objectives: To train basic aviators to fly T-34 aircraft.  
Instruction: Lectures and practical exercises in T-34 aircraft flight training, including basic pilot training, maneuvers, flight rules, aeronautics, stalls, spins, and emergency procedures.  
Credit Recommendation: In the vocational certificate category, 1 semester hour in aeronautics (8/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in aeronautics (8/74).  

NV-1606-0049  
BASIC PHASE, PILOT TRAINING  
Course Number: None  
Location: Air Basic Training Command, Pensacola, FL  
Length: 23-32 weeks (232-794 hours)  
Exhibit Dates: Version 1: 1/60-Present.  
Version 2: 1/54-12/49.  
Objectives: To train personnel who have completed primary pilot training to fly high-performance aircraft.  
Instruction: Lectures and practical exercises in high-performance aircraft flight training, including flight maneuvers, basic instrument flight; radio navigation, formation flying, aerodynamics, communications, aircraft systems, flight rules, meteorology, navigation, and weapons system.  
Credit Recommendation: Version 1: In the vocational certificate category, 1 semester hour in aeronautics, 1 in communications, 2 in navigation, 1 in aeronengineering (8/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in aeronautics, 2 in navigation, 1 in communications, 1 in aeronengineering (8/74).  
Version 2: In the vocational certificate category, 2 semester hours in aeronautics, 2 in navigation, 1 in communications, 1 in aeronengineering (8/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in aeronautics, 2 in navigation, 1 in communications, 1 in aeronengineering (8/74).  

ADVANCED PHASE, PILOT TRAINING  
Course Number: None  
Location: Air Advanced Training Command, Corpus Christi, TX  
Length: 10-23 weeks (223-953 hours)  
Exhibit Dates: Version 1: 1/44-Present.  
Objectives: To train pilots to be fully qualified fleet pilots.  
Instruction: Lectures and practical exercises in flight tactics, advanced navigation, weapons and warfare, instrument flight, aerodynamics, meteorology, and combat operations.  
Credit Recommendation: In the vocational certificate category, 1 semester hour in aeronautics, 1 in navigation, 1 in aeronengineering (8/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in aeronautics, 1 in navigation, 1 in aeronengineering (8/74).  

NV-1606-0050  
AVIATION FLEET PREPARATORY COURSE I AND II, CLASS P  
Course Number: Not available.  
Location: Air Technical Training Center, Memphis, TN.  
Length: 4-6 weeks (193-240 hours)  
Exhibit Dates: 8/70-Present.  
Objectives: To provide enlisted personnel with training in fleet aviation operations.  
Instruction: Lectures and practical exercises in aviation operations, including organization and familiarization, aircraft squadrons, personnel management, aircraft carriers, air department division; survival and emergency equipment; personnel and aircraft survival; fire fighting and crash rescue; handtools and hardware; aviation maintenance procedures; aircraft familiarization; basic aircraft systems; aircraft handling and aircraft maintenance.  
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/75).  

NV-1606-0051  
AVIATION FLEET PREPARATORY COURSE I  
Course Number: Not available.  
Location: Air Technical Training Center, Lakehurst, NJ.  
Length: 3 weeks (120 hours)  
Exhibit Dates: 7/56-12/68.  
Objectives: To train officers who have completed instruction in basic pilot training to fly E-2 aircraft.  
Instruction: Lectures and flight exercises in E-2 fleet training, including advanced navigation, weapons and warfare, instrument flight, formation flying, instrument familiarization, aircraft squadrons, aircraft carriers, air department division; survival and emergency equipment; personnel and aircraft survival; fire fighting and crash rescue; handtools and hardware; aviation maintenance procedures; aircraft familiarization; basic aircraft systems; aircraft handling and aircraft maintenance.  
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/75).  

NV-1606-0052  
RADIOSONDE SET OPERATOR, CLASS C  
Course Number: Not available.  
Location: Air Technical Training Center, San Diego, CA.  
Length: 2 weeks (100 hours)  
Exhibit Dates: 7/71-Present.  
Objectives: To provide reserve officers with training in the fundamentals of air intelligence.  
Instruction: Specialized training in aircraft navigation intelligence.  
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/75).  

NV-1606-0053  
E-1B AIRCRAFT PILOT TRAINING  
Course Number: D-2B-0016.  
Location: Carrier Airborne Early Warning Training Squadron 120, Norfolk, VA.  
Length: 16 weeks (160 hours)  
Exhibit Dates: 2/74-Present.  
Objectives: To train aviators to pilot the E-1B aircraft.  
Instruction: Lectures and flight exercises in formation flying, instrument familiarization, and carrier operations.  
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/75).  

NV-1606-0054  
E-2B AIRCRAFT PILOT TRAINING  
Course Number: D-2B-0015.  
Location: Carrier Airborne Early Warning Training Squadron 120, Norfolk, VA.  
Length: 16 weeks (160 hours)  
Exhibit Dates: 2/74-Present.  
Objectives: To train aviators to pilot the E-2B aircraft.  
Instruction: Lectures and flight exercises in formation flying, instrument familiarization, and carrier operations.  
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/75).  

NV-1606-0055  
RESERVE AIR INTELLIGENCE (RAI)  
Course Number: J-3A-0055; K-3A-5011; K-3A-527.  
Location: Fleet Intelligence Training Center, Pacific, San Diego, CA.  
Length: 2 weeks (100 hours)  
Exhibit Dates: 7/71-Present.  
Objectives: To provide reserve officers with training in the fundamentals of air intelligence.  
Instruction: Specialized training in aircraft navigation intelligence.  
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/75).  

NV-1606-0056  
RESERVE BASIC INTELLIGENCE TRAINING SUBJECTS (BITCS)  
Course Number: K-3A-5010; K-3A-526.  
Location: Fleet Intelligence Training Center, Pacific, San Diego, CA.  
Length: 2 weeks (68 hours)  
Exhibit Dates: 7/71-Present.  
Objectives: To provide entry-level training to commissioned or reserve officers in the area of intelligence.  
Instruction: Includes discussions on the intelligence environment, intelligence methods, photographic intelligence, including imagery interpretation; and other related topics such as security, naval messages, operation plans and orders, and electronics countermeasures.  
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in intelligence or public security (6/75).  

NV-1606-0057  
S-3A COPILOT AVIONICS  
Course Number: E-2A-1718; E-2A-0018.  
Location: Fleet Aviation Specialized Operational Training Group, North Island, CA.  
Length: 6 weeks (187 hours)  
Exhibit Dates: 5/74-Present.  

Navy
1-116 COURSE EXHIBITS

Objectives: To prepare copilots for S-3A mission training in the replacement squadron (YV-41).

Instruction: Lectures and practical exercises in navigation systems, communications, and electronic surveillance measures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/75).

NV-1606-0058
AVIATION FLEET PREPARATORY COURSE I

Course Number: Not available.

Location: Air Technical Training Center, Memphis, TN.

Length: 4-6 weeks (193-240 hours)

Exhibit Dates: 1/72-7/75

Objectives: To provide enlisted personnel with training in fleet aviation operations.

Instruction: Lectures and practical exercises in aviation operations, including organization and familiarization; aircraft squadrons; aircraft carriers; air divisional services; and survival and emergency equipment.

Credit Recommendation: Credit is not recommended because of the limited specific nature of the course (6/74).

NV-1606-0059
AMPHIBIOUS STAFF INTELLIGENCE OFFICER (ASIO)

Course Number: K-3A-5006.

Location: Fleet Intelligence Training Center, Pacific, San Diego, CA.

Length: 4-6 weeks (68 hours)

Exhibit Dates: 1/70-Present

Objectives: To provide training in amphibious operations and amphibious staff intelligence functions.

Instruction: Topics include amphibious orientation, with emphasis on an overall view of composition and organization, intelligence planning and characteristics of the area of amphibious operations.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (6/75).

NV-1606-0060
OPERATIONS SPECIALIST, CLASS A1

Course Number: A-221-0011.

Location: Service School Command, Great Lakes, IL.

Length: 14-15 weeks (442-480 hours)

Exhibit Dates: 11/72-Present

Objectives: To train personnel to perform duties required in a combat information center.

Instruction: Lectures and practical exercises in procedures used in message communications, radar navigation, radar course plotting, using vector plotting in the operation of radar systems and data interpretation.

Credit Recommendation: In the vocational certificate category, 2 semester hours in navigation practices and 1 in navigation laboratory (9/77).

NV-1606-0061
AIRBORNE SYSTEMS

Course Number: None.

Location: Test Pilot School, Patuxent River, MD.

Length: 48 weeks (442-476 hours).

Exhibit Dates: 11/72-Present.

Objectives: To train experienced pilots, Naval Flight Officers, and engineers to become qualified engineering test pilots, test flight officers, and test project engineers.

Instruction: Classroom lectures, assignments, examinations, aircraft demonstrations, and test flying assignments including aircraft performance, aerodynamics, propulsion, stability and control, flight testing, and airborne systems. Prerequisites include college, physics or mechanics and mathematics through algebra and differential calculus.

Credit Recommendation: In the upper-division baccalaureate category, 2 semester hours in aircraft performance, 2 in introductory aerodynamics, 3 in jet propulsion, 3 in stability and control, and 3 in flight testing, for a total of 16 hours (7/79).

NV-1606-0062
FIXED WING FLIGHT MECHANICS

Course Number: None.

Location: Test Pilot School, Patuxent River, MD.

Length: 48 weeks (429-434 hours)

Exhibit Dates: 1/71-7/75

Objectives: To train experienced aviators and engineers to become qualified engineering test pilots and test project engineers.

Instruction: Classroom lectures, assignments, examinations, airborne demonstrations, and test flying assignments including aircraft performance, aerodynamics, propulsion, stability and control, flight testing, and airborne systems. Prerequisites include college physics or mechanics and mathematics through algebra and differential calculus.

Credit Recommendation: In the upper-division baccalaureate category, 3 semester hours in aircraft performance, 2 in introductory aerodynamics, 3 in jet propulsion, 3 in stability and control, and 4 in flight testing, for a total of 15 hours (7/79).

NV-1606-0063
ROTARY WING FLIGHT MECHANICS

Course Number: None.

Location: Test Pilot School, Patuxent River, MD.

Length: 48 weeks (439-445 hours)

Exhibit Dates: 1/73-Present

Objectives: To train experienced aviators and engineers to become qualified engineering test pilots and test project engineers.

Instruction: Classroom lectures, assignments, examinations, airborne demonstrations, and test flying assignments, including aircraft performance, aerodynamics, propulsion, stability and control, flight testing, and airborne systems. Prerequisites include college physics or mechanics and mathematics through algebra and differential calculus.

Credit Recommendation: In the upper-division baccalaureate category, 2 semester hours in aircraft performance, 2 in introductory aerodynamics, 3 in jet propulsion, 3 in stability and control, and 4 in flight testing, for a total of 15 hours (7/79).

NV-1701-0001
P-3 AIR CONDITIONING, PRESSURIZATION AND UTILITY ORGANIZATIONAL MAINTENANCE

Course Number: C-603-3532

Location: Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA.

Length: 2 weeks (80 hours)

Exhibit Dates: 9/70-Present

Objectives: To train enlisted personnel to operate and maintain aircraft air-conditioning, pressurization, and utility systems.

Instruction: Lectures and practical exercises in the maintenance of aircraft air-conditioning, pressurization, and utility systems. Topics include aircraft air conditioning with high-pressure air and components, and ground air conditioning and air conditioning systems.

Credit Recommendation: In the vocational certificate category, 2 semester hours in aircraft air-conditioning unit (6/74).

NV-1701-0002
LITHIUM BROMIDE AIR CONDITIONING

Course Number: A-720-0002; F-652-041

Location: Fleet Ballistic Missile Submarine Training Center, Charleston, SC; Submarine School, Groton, CT.

Length: 2 weeks (60 hours)

Exhibit Dates: 1/75-Present

Objectives: To train enlisted personnel to perform basic maintenance procedures on a lithium bromide air-conditioning unit.

Instruction: Lectures and practical exercises in the operation and maintenance of lithium bromide absorption systems. Course includes a study of the construction and operation of components, leak testing, purge system operation, and preventive maintenance.

Credit Recommendation: In the vocational certificate category, 1 semester hour in operation and maintenance of a lithium bromide air-conditioning unit (5/74).

NV-1701-0003
E-2B AND C-1A ENVIRONMENTAL SYSTEMS ORGANIZATIONAL MAINTENANCE

Course Number: C-602-3472

Location: Air Maintenance Training Detachments North Island, CA.

Length: 2 weeks (60-75 hours)

Exhibit Dates: 1/69-Present

Objectives: To train enlisted personnel to operate and maintain aircraft air-conditioning systems.

Instruction: Lectures and practical exercises in the maintenance of aircraft environmental systems.

Credit Recommendation: In the vocational certificate category, 1 semester hour in aircraft air-conditioning unit (5/74).

NV-1701-0004
R-11 CENTRIFUGAL 110 TON AIR CONDITIONING COMBINED OFFICE AND MAINTENANCE

(110 Ton R11 Centrifugal Air Conditioning Unit (York))

Course Number: A-652-0111; F-652-032

Location: Submarine School, Groton, New London, CT; Fleet Ballistic Missile Submarine Training Center, Charleston, SC; Submarine Training Center, Pacific, Pearl Harbor, HI.

Length: 2 weeks (60 hours)

Exhibit Dates: 4/72-Present

Objectives: To train enlisted personnel to operate and perform mechanical maintenance on a centrifugal refrigeration system.

Instruction: Lectures and practical exercises in the maintenance of a centrifugal refrigeration system. Topics include centrifugal compressor and capacity control mechanism construction and operation, and the maintenance procedures involved in the use of the air-purging system.
Credit Recommendation: In the vocational certificate category, 1 semester hour in mechanical maintenance of a centrifugal refrigeration unit (5/74).

NV-1701-0005
AIR CONDITIONING AND REFRIGERATION, CLASS C
(Air Conditioning and Refrigeration, Class C)
Course Number: A-720-010; A-720-011.
Location: Air Conditioning and Refrigeration School, San Diego, CA; Air Conditioning and Refrigeration School, Norfolk, VA.
Length: 8 weeks (240-247 hours).
Exhibit Dates: 7/58-Present.
Objectives: To train enlisted personnel to operate, test, maintain, and repair air-conditioning and refrigeration equipment and systems.
Instruction: Lectures and practical exercises in the operation, testing, maintenance, and repair of air-conditioning and refrigeration equipment and systems, including refrigeration unit components, accessories, and controls; basic mathematics; refrigeration fundamentals; electrical systems in refrigeration, compressors and condensers, air-cooled equipment; water coolers, ice makers; refrigeration and air-conditioning plant operations, and psychrometrics and applications, including ventilation and air purification.
Credit Recommendation: In the vocational certificate category, 1 semester hour in mechanical maintenance of a centrifugal refrigeration unit (5/74); in the lower-division unit (5/74).

NV-1703-0001
CONSTRUCTION MECHANIC/AUTOMOTIVE ELECTRICAL, MAINTENANCE, CLASS C (CMEC Auto Electrical Maintenance)
Course Number: A-610-0026.
Location: Construction Training Center, Gulfport, MS; Construction Training Center, Port Hueneum, CA.
Length: 5 weeks (150 hours).
Exhibit Dates: 1/72-Present.
Objectives: To train enlisted personnel to operate, test, maintain, and repair automotive and construction equipment electrical systems
Instruction: Lectures and practical exercises in the maintenance and repair of automotive and construction equipment electrical systems, including electrical fundamentals, electrical test equipment, storage battery operation, cranking motors and switches, ignition systems, direct current charging systems, semiconductors, and alternating current charging systems.
Credit Recommendation: In the vocational certificate category, 1 semester hour in automotive maintenance (5/74).

NV-1700-0006
CENTRIFUGAL AIR CONDITIONING PLANT OPERATION AND MAINTENANCE
Course Number: A-720-0025.
Location: Development and Training Center, San Diego, CA.
Length: 2 weeks (60 hours).
Exhibit Dates: 9/72-Present.
Objectives: To train personnel to operate and maintain centrifugal refrigeration and air conditioning equipment.
Instruction: Classroom and practical instruction in the operational characteristics and procedures for centrifugal refrigeration systems, including operation, theory, control, and service/repair of centrifugal units and accessory centrifugal equipment.
Credit Recommendation: In the vocational certificate category, 2 semester hours in plant operation and maintenance (6/75); in the lower-division baccalaureate/associate degree category, 1 semester hours in basic refrigeration (6/74).

NV-1702-0001
CASCADE 100 POUND WASHER/EXTRACTOR MAINTENANCE, CLASS C
Course Number: A-690-0017.
Location: Technical Training Command, San Diego, CA.
Length: 2 weeks (60 hours).
Exhibit Dates: 4/72-Present.
Objectives: To train personnel to perform corrective maintenance on the cascade 100-pound combination washing and extracting machine.
Instruction: Lectures and practical exercises on the maintenance and repair of the assemblies and systems of the cascade 100-pound combination washing and extracting machine, including a general description of the washing and extracting machine, manual operation, troubleshooting, formula card programming, formula operation of the washer/extractor, electrical controls, description of the fill and drain circuit, and electrical adjustment.
Credit Recommendation: In the vocational certificate category, 1 semester hour in appliance repair (5/74).

NV-1703-0002
ENGINEER, GAS TURBINE ENGINES, CLASS C (CMEC Auto Electrical Maintenance)
Course Number: Not available.
Location: Engineman School, Great Lakes, IL.
Length: 7-8 weeks (215-230 hours).
Exhibit Dates: 6/63-12/68.
Objectives: To train enginemen to supervise turbine engine operators.
Instruction: Lectures and practical exercises in basic gas turbine engine principles, operation, and construction; component systems; and specific gas turbine engine operation, adjustment, troubleshooting, components, and accessories.
Credit Recommendation: In the vocational certificate category, 3 semester hours in gas turbine engines (5/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in mechanical or automotive technology (5/74).

NV-1703-0003
CONSTRUCTION MECHANIC/AUTOMOTIVE TRANSMISSIONS, CLASS C (CMEC Auto Trans)
Course Number: A-610-0021.
Location: Construction Training Center, Gulfport, MS.
Length: 2 weeks (60 hours).
Objectives: To train enlisted personnel to test, adjust, and repair automatic transmissions on automotive and construction equipment.
Instruction: All Versions: Lectures and practical exercises in hydraulics, torque converters, planetary gear systems, and automatic transmission control systems theory and principles, operation, disassembly, inspection, repair, assembly, and troubleshooting of powerglide, Ford C-4, Cruise-O-Matic, Allison torque反响, and automatic/automatic torque converters and powershift transmissions.
Credit Recommendation: In the vocational certificate category, 5 semester hours in automotive or heavy equipment (5/74); in the lower-division baccalaureate/associate degree category, 6 semester hours in automotive or heavy equipment (5/74).

NV-1703-0004
GENERAL MOTORS ENGINES (6-278A)
Course Number: F-652-018.
Location: Submarine School, Groton, CT.
Length: 2 weeks (60 hours).
Exhibit Dates: 11/72-Present.
Objectives: To train enlisted personnel to supervise automotive or heavy equipment.
Instruction: Lectures and practical exercises in the repair and maintenance of General Motors engines, including the engine components and systems, camshafts, timing gears and engine timing procedures, and disassembly, cleaning, inspection, reassembly, and testing of the air blower, cylinder unit, governor and unit injector.
Credit Recommendation: In the vocational certificate category, 5 semester hours in automotive or heavy equipment (5/74).

NV-1703-0005
MINE WARFARE ENGINEEREN (Engineman Basic)
Course Number: A-652-0038.
Location: Mine Warfare School, Charles ton, SC.
Length: 3 weeks (90 hours).
Exhibit Dates: 11/71-Present.
Objectives: To train petty officers in diesel engine theory.
Instruction: Lectures and demonstrations in diesel operation and construction, precision measurements, fuel properties, fuel systems, intake and exhaust systems, and piping and valves.
Credit Recommendation: In the vocational certificate category, 3 semester hours in automotive technology and heavy equipment (5/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in automotive technology and heavy equipment (5/74).

NV-1703-0006
AVIATION SUPPORT EQUIPMENT GASOLINE ENGINE INTERMEDIATE MAINTENANCE
Course Number: C-602-3214.
Location: Air Maintenance Training Detachment, Jacksonville, FL; Air Maintenance Training Detachment, North Island, CA.
Length: 3 weeks (120 hours).

Navy


**SHIP'S SERVICE GAS TURBINE GENERATOR MODULE (ALLISON 501) MAINTENANCE, CLASS C**

Course Number: A-652-0076.
Location: Service School Command, Great Lakes, IL.
Length: 7 weeks.
Exhibit Dates: 6/77-Present.

Objectives: To train personnel to maintain and operate the LM2500 gas turbine generator module (Allison 501).

Instruction: Lectures and practical exercises in gas turbine generator maintenance and operation, inspection, and troubleshooting.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in gas turbine generator maintenance and operation (6/77).

**NV-1704-0003**


Location: Air Technical Training Center, Great Lakes, IL.
Length: 2 weeks (360-392 hours).
Exhibit Dates: 6/76-Present.

Objectives: To train traffic control officers.

Instruction: Lectures and practical exercises in air traffic control.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in air traffic control (6/74).

**NV-1704-0004**

AIR CONTROLMAN, CLASS A - COURSE NUMBER: C-222-2210.

Location: Air Technical Training Center, Olathe, KS.
Length: 10 weeks (400-560 hours).
Exhibit Dates: 6/77-Present.

Objectives: To train air traffic control officers.

Instruction: Lectures and practical exercises in air traffic control.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in air traffic control (6/74).

**NV-1704-0005**

AIR CONTROLMAN T (TOWER), CLASS A - COURSE NUMBER: None.

Location: Air Technical Training Unit, Olathe, KS.
Length: 8 weeks (400 hours).

Objectives: To train air traffic control tower operators.

Instruction: Lectures and practical exercises in air traffic control.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in air traffic control (6/74).

**SHIP'S SERVICE GAS TURBINE GENERATOR MODULE (ALLISON 501) MAINTENANCE, CLASS C**

Course Number: A-652-0076.
Location: Service School Command, Great Lakes, IL.
Length: 7 weeks.
Exhibit Dates: 6/77-Present.

Objectives: To train personnel to maintain and operate the LM2500 gas turbine generator module (Allison 501).

Instruction: Lectures and practical exercises in gas turbine generator maintenance and operation, inspection, and troubleshooting.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in gas turbine generator maintenance and operation (6/77).

**NV-1704-0003**


Location: Air Technical Training Center, Great Lakes, IL.
Length: 2 weeks (360-392 hours).
Exhibit Dates: 6/76-Present.

Objectives: To train traffic control officers.

Instruction: Lectures and practical exercises in air traffic control.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in air traffic control (6/74).

**NV-1704-0004**

AIR CONTROLMAN, CLASS A - COURSE NUMBER: C-222-2210.

Location: Air Technical Training Center, Olathe, KS.
Length: 10 weeks (400-560 hours).
Exhibit Dates: 6/77-Present.

Objectives: To train air traffic control officers.

Instruction: Lectures and practical exercises in air traffic control.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in air traffic control (6/74).

**NV-1704-0005**

AIR CONTROLMAN T (TOWER), CLASS A - COURSE NUMBER: None.

Location: Air Technical Training Unit, Olathe, KS.
Length: 8 weeks (400 hours).

Objectives: To train air traffic control tower operators.

Instruction: Lectures and practical exercises in air traffic control.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in air traffic control (6/74).

**SHIP'S SERVICE GAS TURBINE GENERATOR MODULE (ALLISON 501) MAINTENANCE, CLASS C**

Course Number: A-652-0076.
Location: Service School Command, Great Lakes, IL.
Length: 7 weeks.
Exhibit Dates: 6/77-Present.

Objectives: To train personnel to maintain and operate the LM2500 gas turbine generator module (Allison 501).

Instruction: Lectures and practical exercises in gas turbine generator maintenance and operation, inspection, and troubleshooting.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in gas turbine generator maintenance and operation (6/77).

**NV-1704-0003**


Location: Air Technical Training Center, Great Lakes, IL.
Length: 2 weeks (360-392 hours).
Exhibit Dates: 6/76-Present.

Objectives: To train traffic control officers.

Instruction: Lectures and practical exercises in air traffic control.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in air traffic control (6/74).

**NV-1704-0004**

AIR CONTROLMAN, CLASS A - COURSE NUMBER: C-222-2210.

Location: Air Technical Training Center, Olathe, KS.
Length: 10 weeks (400-560 hours).
Exhibit Dates: 6/77-Present.

Objectives: To train air traffic control officers.

Instruction: Lectures and practical exercises in air traffic control.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in air traffic control (6/74).

**NV-1704-0005**

AIR CONTROLMAN T (TOWER), CLASS A - COURSE NUMBER: None.

Location: Air Technical Training Unit, Olathe, KS.
Length: 8 weeks (400 hours).

Objectives: To train air traffic control tower operators.

Instruction: Lectures and practical exercises in air traffic control.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in air traffic control (6/74).
NV-1704-0009
AIR CONTROLMAN W (EARLY WARNING), "CLASS A"
Course Number: None.
Location: Naval Air Station, Glynco, GA.
Length: 4 weeks (160 hours).
Objectives: To train enlisted personnel in air traffic control, and radar surveillance techniques.
Instruction: Lectures and practical exercises in air traffic control and radar surveillance techniques, including air navigation, electronic fundamentals applicable to radar operations, and communications techniques.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 9 semester hours in electronics, 2 in air traffic control, 2 in navigation (3/74); in the upper-division baccalaureate category, credit in air control tower operations on the basis of institutional evaluation (12/68).

NV-1704-0010
AIR CONTROLMAN (RADAR), "CLASS A"
Course Number: None.
Location: Air Technical Training Unit, Offutt, NE.
Length: 4 weeks (160 hours).
Objectives: To provide enlisted personnel with training in radar operations applicable to air traffic control.
Instruction: Lectures and practical exercises in air traffic control fundamentals, air traffic communications, aircraft characteristics, and radar theory and applications to air traffic control.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in air navigation, 3 in air traffic control (3/74).

NV-1704-0011
AIR CONTROL, "CLASS 0"
Course Number: None.
Location: Naval Air Station, Glynco, GA.
Length: 5 weeks (200 hours).
Exhibit Dates: 11/56-12/68.
Objectives: To provide chief petty officers and officer personnel with training in all phases of air control.
Instruction: Lectures, and practical exercises in anti-submarine air operations, offensive and defensive aircraft operations, jet aircraft familiarization, air control data collection equipment usage, and basic air control procedures and techniques.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (3/74).

NV-1704-0012
CARRIER AIR TRAFFIC CONTROL CENTER (OFFICER), "CLASS C(70)"
Course Number: C-2G-2016.
Location: Air Technical Training Center, Glynco, GA.
Length: 5-6 weeks (160-264 hours).
Exhibit Dates: 3/65-Present.
Objectives: To provide officers and air controller training in carrier air traffic control center operations.
Instruction: Lectures and practical exercises in carrier air traffic control center equipment and operating procedures, carrier controller training, and Naval Tactical Data System (NTDS) console training.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (12/68).

NV-1704-0013
A-1E HYDRAULIC AND PNEUMATIC SYSTEMS ORGANIZATIONAL MAINTENANCE
Course Number: C-602-3793.
Location: Air Maintenance Training Detachment, Lemoore, CA; Air Maintenance Training Detachment, Cecil Field, FL.
Length: 4 weeks (160 hours).
Exhibit Dates: 9/72-Present.
Objectives: To train maintenance personnel in the techniques, modifications, and servicing procedures applicable to A-1E aircraft control systems.
Instruction: Practical experience in troubleshooting, maintenance, and servicing structures, aircraft, hydraulic, pneumatic, primary flight control, and auxiliary systems.
Credit Recommendation: In the vocational certificate category, credit in evaluation and pneumatic systems on the basis of institutional evaluation (3/74); in the lower-division baccalaureate/associate degree category, credit in hydraulic and pneumatic systems on the basis of institutional evaluation (3/74).

NV-1704-0014
KC-130F T-56-A-16 ENGINE INTERMEDIATE MAINTENANCE/CLOSED ENGINE REPAIR
Course Number: C-601-3507.
Location: Air Maintenance Training Detachment, El Toro, CA.
Length: 2 weeks (80 hours).
Exhibit Dates: 6/71-Present.
Objectives: To train fleet personnel in the maintenance of KC-130F aircraft engines.
Instruction: Practical experience in planned maintenance systems, general specifications of engines, and disassembly, cleaning, and engine inspection and preservation.
Credit Recommendation: In the vocational certificate category, credit in aircraft engine maintenance on the basis of institutional evaluation (3/74); in the lower-division baccalaureate/associate degree category, credit in aircraft engine maintenance on the basis of institutional evaluation (3/74).

NV-1704-0015
A-4 AUTOMATIC FLIGHT CONTROL SYSTEM INTERMEDIATE MAINTENANCE
Course Number: C-602-3735.
Location: Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Beaufort, SC.
Length: 1 week (80 hours).
Exhibit Dates: 11/72-Present.
Objectives: To train enlisted personnel to maintain the A-4 aircraft's flight control systems.
Instruction: Practical experience in troubleshooting, circuit analysis, testing, publications procedures, and intermediate maintenance.
Credit Recommendation: In the vocational certificate category, 2 semester hours in maintenance electronics (3/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in maintenance electronics (12/68).

NV-1704-0016
TF-30-P-4/408 ENGINE INTERMEDIATE MAINTENANCE/CLOSED ENGINE REPAIR
(TF30-P-8 Intermediate Maintenance/Complete Engine Repair)
Course Number: C-601-3132.
Location: Air Maintenance Training Detachment, Lemoore, CA; Air Maintenance Training Detachment, Cecil Field, FL.
Length: 4 weeks (160 hours).
Exhibit Dates: 7/68-Present.
Objectives: To provide maintenance personnel with instruction in TF30-P-4/408 aircraft engine maintenance.
Instruction: Lectures and practical exercises in TF30-P-4/408 aircraft engine maintenance, including engine component inspection and repair; engine systems operation; and engine assembly, disassembly, and testing procedures.
Credit Recommendation: In the vocational certificate category, 2 semester hours in turbomachinery engine laboratory (3/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in turbine engine laboratory (3/74).

NV-1704-0017
P-3 T56-A-10W ENGINE AND RELATED SYSTEMS MAINTENANCE, NO. 56
Course Number: Not available.
Location: Air Maintenance Training Detachment, Palanquin River, MD; Air Maintenance Training Detachment, Moffett Field, CA.
Length: 5 weeks (200 hours).
Exhibit Dates: 1/68-Present.
Objectives: To provide maintenance personnel with training in P-3 aircraft power plant and related systems maintenance.
Instruction: Lectures and practical exercises in P-3 aircraft power plant and related systems maintenance, including engine organizational and intermediate maintenance procedures, operating principles, and theory; and propeller and related systems maintenance, installation, inspection, and repair.
Credit Recommendation: In the vocational certificate category, 3 semester-hours in power plant organizational maintenance, 1 in power plant intermediate maintenance (3/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in power plant intermediate maintenance, 1 in power plant intermediate maintenance (3/74).

NV-1704-0018
UH-1E T53-L-11 ENGINE ORGANIZATIONAL MAINTENANCE
Course Number: C-601-3341.
Location: Air Maintenance Training Detachment, Cp. Pendleton, CA.
Length: 2 weeks (80 hours).
Exhibit Dates: 3/70-Present.
Objectives: To train maintenance personnel to maintain the T53-L-11 aircraft turbine engine systems.
Instruction: Lectures and practical exercises in T53-L-11 turbine engine system operation and maintenance, including inspection, line servicing, troubleshooting, testing, adjusting, and repairing all engine systems and components.
Credit Recommendation: In the vocational certificate category, credit in T53-L-11 turbine engine organizational maintenance on the basis of institutional evaluation (3/74); in the lower-division baccalaureate/associate degree category, credit in T53-L-11 turbine engine organizational maintenance on the basis of institutional evaluation (3/74).
NV-1704-0019
P-3 T56-A-10/4 ENGINE AND RELATED SYSTEMS ORGANIZATIONAL MAINTENANCE (P-3 T56-A-14 Engine and Related Systems Maintenance)
Course Number: C-601-3533
Location: Air Maintenance Training Detachment, New River, NC; Air Maintenance Training Detachment, Air Support Wing, Santa Ana, CA; Air Maintenance Training Detachment, Whidbey Island, WA.
Length: 4-5 weeks (160-200 hours).
Exhibit Dates: 1/68-Present.
Objectives: To train maintenance personnel to repair P-3 aircraft power plants and related systems.
Instruction: Lectures and practical exercises in P-3 aircraft power plant and related systems maintenance, including P-3A-14 power plant system maintenance and service, engine diagnosis and troubleshooting, jet engine theory, test equipment operation, and propeller and related systems.
Credit Recommendation: In the vocational certificate category, credit in T56-A-14 engines and related systems maintenance on the basis of institutional evaluation (3/74); in the lower-division baccalaureate/associate degree category, credit in T56-A-14 engines and related systems maintenance on the basis of institutional evaluation (3/74).

NV-1704-0020
T58-GE-8F ENGINE INTERMEDIATE MAINTENANCE/COMPLETE ENGINE REPAIR
Course Number: None.
Location: Air Maintenance Training Detachment, Oceana, VA; Air Maintenance Training Detachment, Whidbey Island, WA.
Length: 3 weeks (120 hours).
Exhibit Dates: 1/68-Present.
Objectives: To train maintenance personnel to maintain, test, and troubleshoot the T58-GE-8F engine control system at the organizational maintenance level.
Instruction: Lectures and practical exercises in a T58-GE-8F engine control system organizational maintenance, including engine data computer operation, general automatic flight control maintenance, introduction to automatic flight, automatic flight control actuators and signal flow location and function, operational checks and line equipment check-out procedures, and system testing and troubleshooting.
Credit Recommendation: In the vocational certificate category, 2 semester hours in automatic control system maintenance (3/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in automatic control system maintenance (3/74).

NV-1704-0023
A-4E/F/TA-4F AIRCRAFT MECHANIC ORGANIZATIONAL MAINTENANCE
Course Number: C-600-3719.
Location: Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Beaufort, SC.
Length: 2 weeks (80 hours).
Exhibit Dates: 3/71-Present.
Objectives: To train aviation maintenance personnel to repair and maintain A-4E/F/TA-4F aircraft engines.
Instruction: Lectures and practical exercises in T58-GE-8F maintenance, including engine systems repair and testing; engine construction familiarization; special tools operation; and engine inspection, disassembly, complete repair, and reassembly.
Credit Recommendation: In the vocational certificate category, 2 semester hours in turbine engine laboratory (3/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in turbine engine laboratory (3/74).

NV-1704-0024
JS5-P408 ENGINE INTERMEDIATE MAINTENANCE/COMPLETE ENGINE REPAIR
Course Number: C-601-3138.
Location: Air Maintenance Training Detachment, Beaufort, SC; Air Maintenance Training Detachment, Whidbey Island, WA.
Length: 3 weeks (120 hours).
Exhibit Dates: 4/73-Present.
Objectives: To train maintenance personnel to maintain and repair JS5-P408 engines.
Instruction: Lectures and practical exercises in jet engine systems and inspection, disassembly, cleaning, repair, reassembly, and testing of all engine systems.
Credit Recommendation: In the vocational certificate category, credit in JS5-P408 turbine engine maintenance and repair on the basis of institutional evaluation (3/74); in the lower-division baccalaureate/associate degree category, credit in JS5-P408 turbine engine maintenance and repair on the basis of institutional evaluation (3/74).
Credit Recommendation: In the vocational certificate category, 2 semester hours in turbine engine laboratory (3/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in turbine engine laboratory (3/74).

NV-1704-0029
T36-44/A/8A ENGINE AND AEROPRODUCTS
A6441-FN-248 PROPELLER
INTERMEDIATE MAINTENANCE
T36-44/A/8A Engine and A6441-FN-248 Prope-
rler
Course Number: C-601-3134; C-611-74.
Location: Air Maintenance Training De-
tachment, North Island, CA.
Length: 2 weeks (80 hours).
Exhibit Dates: 4/68-Present.
Objectives: To provide maintenance per-
sion with the knowledge and skill to perform
intermediate maintenance on turbo-
prop engine and propeller systems of
E2/C2 type aircraft.
Instruction: Lectures and practical exer-
cises in Intermediate levels of maintenance
including engine disassembly/reassembly,
propeller and propeller systems mainte-
nance and rigging, using E2/C2 type air-
craft as training aids.
Credit Recommendation: In the lower-di-
vision baccalaureate/associate degree cate-
gory, 2 semester hours in turbine engine
repair (3/74), in the lower-division
baccalaureate/associate degree cat-
gory, 1 semester hour in turbine engine
repair (3/74).

NV-1704-0030
F/RF-4B/J HYDRAULIC ORGANIZATIONAL
MAINTENANCE
Course Number: C-602-3383.
Location: Maintenance Training De-
tachment, El Toro, CA; Air Maintenance
Training Detachment, Cherry Point, NC.
Length: 3 weeks (120 hours).
Exhibit Dates: 5/71-Present.
Objectives: To train maintenance person-
nel in the servicing and maintenance of
F/RF-4B/J aircraft hydraulic systems.
Instruction: Practical experience in main-
tenance and servicing of hydraulic systems
and pneumatic, landing gear, and related sys-
tems; and air, utility, flight, and surface systems.
Credit Recommendation: In: the vocational certificate category, 2 semester hours in air-
craft hydraulic and pneumatic systems (3/74), in the lower-
division baccalaureate/associate degree category, 1
semester hour in aircraft hydraulic and pneumatic systems (3/74).

NV-1704-0032
CH-l5 T-64/GE-413 ENGINE
INTERMEDIATE MAINTENANCE/COMPLETE ENGINE REPAIR
Course Number: C-602-3444.
Location: Air Maintenance Training De-
tachment, Santa Ana, CA.
Length: 3 weeks (120 hours).
Exhibit Dates: 9/70-Present.
Objectives: To provide maintenance per-
sion with the latest information on modi-
fications, servicing procedures, and mainte-
nance applicable to the CH-15 T-64/GE-413
engine.
Instruction: Lectures and practical exer-
cises in engine familiarization, engine main-
tenance and complete engine repair, and
equipment and applicable maintenance pro-
cedures.
Credit Recommendation: In: the vocational certificate category, credit in helicopter engine repair on the basis of institutional
evaluation (3/74), in the lower-division
baccalaureate/associate degree category, credit in helicopter engine repair on the basis of institutional evaluation (3/74).

NV-1704-0033
TF30-P-6 INTERMEDIATE MAINTENANCE/COMPLETE ENGINE REPAIR
Course Number: None.
Location: Air Maintenance Training De-
tachment, Cecil Field, FL; Air Maintenance
Training Detachment, Lemoore, CA.
Length: 4 weeks (160 hours).
Exhibit Dates: 7/68-Present.
Objectives: To train maintenance personnel
in the techniques, modifications, and
complete engine repairs applicable to the
TF30-P-6 power plant.
Instruction: Lectures and practical exercises
in power plant sections, engine disas-
ssembly, assembly, and complete engine repairs.
Credit Recommendation: In the vocational certificate category, 3 semester hours in turbine engine
repair (3/74), in the lower-division
baccalaureate/associate degree category,
1 semester hour in turbine engine repair (3/74).

NV-1704-0034
E-1B MH-67 AUTOMATIC FLIGHT CONTROL SYSTEM INTERMEDIATE MAINTENANCE
Course Number: None.
Location: Air Maintenance Training De-
tachment, North Island, CA; Air Mainte-
nance Training Detachment, Norfolk, VA.
Length: 2 weeks (80 hours).
Exhibit Dates: 9/68-Present.
Objectives: To train maintenance personnel
in the procedures for maintaining, re-
pairing, and functionally testing the MH-67
automatic flight control system.
Instruction: Lectures and practical exercises
in MH-67 autopilots, intermediate mainte-
nance of components and circuitry, testing,
and troubleshooting.
Credit Recommendation: In the vocational certificate category, 2 semester hours in au-
topilot electronics familiarization laboratory (3/74), in the lower-
division baccalaureate/associate degree category, 1
semester hour in suboptol electronics familiar-
ization laboratory (3/74).

NV-1704-0035
A-4 AUTOMATIC FLIGHT CONTROL SYSTEM ORGANIZATIONAL MAINTENANCE
Course Number: C-602-3724.
Location: Air Maintenance Training De-
tachment, Kingsville, TX; Air Maintenance
Training Detachment, Lemoore, CA; Air Mainte-
nance Training Detachment, El Toro, CA; Air Maintenance
Training Detachment, Sanford, FL.
Length: 2 weeks (80 hours).
Exhibit Dates: 2/72-Present.
Objectives: To train enlisted personnel to
repair the automatic flight control system of the
F-4K aircraft.
Instruction: Lectures and practical exercises
in the operation and maintenance of
automatic flight control system components
and control circuits, line testing, and trou-
bleshooting procedures.
Credit Recommendation: In the vocational certificate category, credit in a-4 automatic flight control system organizational maintenance on the basis of institutional evaluation (2/74).

NV-1704-0036
E-2A FLIGHT TECHNICIAN ORGANIZATIONAL LEVEL MAINTENANCE, NO. 4
Course Number: Not available.
Location: Air Maintenance Training De-
tachment, North Island, CA.
Length: 8 weeks (320 hours).
Exhibit Dates: 2/72-Present.
Objectives: To train radar operators in the
utilization of equipment to assess perform-
ance, isolate faults, and perform inflight ad-
tajments and maintenance on radar sys-
tems.
Instruction: Lectures and practical exer-
cises in radar detection systems, naviga-
tion subsystems, communication subsystems,
and control and display subsystems of E-2A
aircraft.
Credit Recommendation: In the vocational certificate category, 5 semester hours in in-
flight maintenance (3/74); in the lower-di-
vision baccalaureate/associate degree cat-
gory, 2 semester hours in inflight mainte-
nance (3/74).

NV-1704-0037
J-60-P-3A/6 ENGINE INTERMEDIATE MAINTENANCE/COMPLETE ENGINE REPAIR
Course Number: Not available.
Location: Air Maintenance Training De-
tachment, Norfolk, VA.
Length: 2 weeks (64 hours).
Exhibit Dates: 1/71-Present.
Objectives: To provide maintenance personnel
with instruction in complete engine repair procedures for the J-60-P-3A/6 engine.
Instruction: Lectures and practical exercises
in basic engine and systems familiarization,
engine inspection repair procedures, including
disassembly, inspection, and assembly
procedures; and care of inactive en-
gines.
Credit Recommendation: In the vocational certificate category, credit in jet engine intermedi-
ate maintenance/repair on the basis of institutional evaluation (3/74); in the lower-
division baccalaureate/associate degree category, credit in jet engine intermediate
maintenance/repair on the basis of institutional evaluation (3/74).

NV-1704-0038
RA-7 AVIONICS OFFICERS/SUPERVISORS ORGANIZATION IDENTIFICATION
Course Number: None.
Location: Air Maintenance Training De-
tachment, Sanford, FL.
Length: 2 weeks (80 hours).
Exhibit Dates: 11/72-Present.
Objectives: To train senior noncommis-
sioned officers in the various avionics sys-
tems associated with the RA-SC weapons
system.
Instruction: Lectures and practical exer-
cises in location, general operating char-
acteristics, and maintenance requirements for
RA-SC electrical and indicating systems; flight and instrumentation electronics; fire control systems; electronics and electronic measure "systems; and reconnaissance systems.
Credit Recommendation: In the vocational certificate category, credit in avionics/electronics familiarization on the basis of institutional evaluation (3/74); in

1-122 COURSE EXHIBITS

the lower-division baccalaureate/associate degree category, 1 semester hour in aviation/electronics familiarization on the basis of institutional evaluation (3/74).

NV-1704-0039

P-3 AIRCRAFT FAMILIARIZATION, NO 2
(P-3 Aircraft Familiarization (Pilots))

Course Number: C-24A-351.

Location: Air Maintenance Training Detachment, Moffett Field, CA; Air Maintenance Training Detachment, Patrick Field, FL.

Length: 3 weeks (112 hours).

Exhibit Dates: 1/68-Present.

Objectives: To familiarize pilots with the observation and systems function of multimission turboprop aircraft.

Instruction: Lectures and practical experience in power plant, airframes, furnishings, electrical and emergency systems.

Credit Recommendation: In the vocational certificate category, 1 semester hour in aircraft familiarization (3/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in aircraft familiarization (3/74).

NV-1704-0040

1. RA-5C SURVIVAL AND ENVIRONMENTAL SYSTEMS ORGANIZATIONAL MAINTENANCE

RA-5C SURVIVAL AND ENVIRONMENTAL SYSTEMS ORGANIZATIONAL MAINTENANCE

Course Number: None.

Location: Versions 1: Air Maintenance Training Detachment, Albany, GA; Version 2: Air Maintenance Training Detachment, Sanford, FL.

Length: Version 1: 4 weeks (160 hours).
Length: Version 2: 3 weeks (200 hours).


Objectives: To train maintenance personnel to maintain and repair RA-5C survival and environmental systems.

Instruction: Practical experience in operation, maintenance, and servicing of RA-5C canopy, ejection seat, oxygen and heating/ventilation systems.

Credit Recommendation: Version 1: In the vocational certificate category, 1 semester hour in survival and environmental systems maintenance (3/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in survival and environmental systems maintenance (3/74). Version 2: In the vocational certificate category, 2 semester hours in survival and environmental systems maintenance (3/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in survival and environmental systems maintenance (3/74).

NV-1704-0041

RA-5C STRUCTURES AND HYDRAULIC SUBSYSTEMS ORGANIZATIONAL MAINTENANCE

RA-5C STRUCTURES AND HYDRAULIC SUBSYSTEMS ORGANIZATIONAL MAINTENANCE

Course Number: None.

Location: Air Maintenance Training Detachment, Albany, GA; Air Maintenance Training Detachment, Sanford, FL.

Length: 5-7 weeks (200-280 hours).

Exhibit Dates: 1/68-Present.

Objectives: To train maintenance personnel to maintain and repair RA-5C aircraft structures and hydraulic systems.

Instruction: Practical training in inspection, troubleshooting, and repair of RA-5C structures and hydraulic power, landing gear, arresting gear, wing, tail, folding, pneumatic power, and lift control systems.

Credit Recommendation: In the vocational certificate category, 2 semester hours in RA-5C structures and hydraulic system maintenance (3/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in RA-5C structures and hydraulic system maintenance (3/74).

NV-1704-0042

AVIATION BOATSWAIN'S MATE E ( AIRCRAFT LAUNCH AND RECOVERY EQUIPMENT), CLASS A

AVIATION BOATSWAIN'S MATE E (AIRCRAFT LAUNCH AND RECOVERY EQUIPMENT), CLASS A

Course Number: C-620-2012.

Location: Air Technical Training Center, Lakeland, NJ; Air Technical Training Center, Philadelphia, PA.

Length: 10 weeks (380-384 hours).

Exhibit Dates: 6/65-Present.

Objectives: To train enlisted personnel in the operation of aircraft launch and recovery equipment aboard aircraft carriers.

Instruction: Lectures and practical exercises in aviation fundamentals, aircraft carrier fire fighting, firefighting apparatus, and arresting gear, barrier, and optical systems.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (3/74).

NV-1704-0043

UH-1E AIRFRAME AND RELATED SYSTEMS ORGANIZATIONAL MAINTENANCE

UH-1E AIRFRAME AND RELATED SYSTEMS ORGANIZATIONAL MAINTENANCE

Course Number: C-600-3341.

Location: Air Maintenance Training Detachment, Ellyson Field, FL; Air Maintenance Training Detachment, Camp Pendleton, CA.

Length: 2-4 weeks (80-160 hours).

Exhibit Dates: 1/68-Present.

Objectives: To train enlisted personnel in the operation, inspection, and repair of airframe and related systems of the UH-1E aircraft.

Instruction: Practical training in maintenance and repair of airframe, landing gear, power plant, flight control, rotor, hydraulic and utility systems, and design, construction, furnishings and assembly of utility systems.

Credit Recommendation: In the vocational certificate category, 1 semester hour in aircraft specialized familiarization (3/74).

NV-1704-0044

TARGET DRONE, CLASS C

TARGET DRONE, CLASS C

Course Number: None.

Location: Air Technical Training Unit, El Centro, CA.

Length: 9 weeks (360 hours).

Exhibit Dates: 1/55-12/68.

Objectives: To train enlisted personnel in the operation, maintenance, overhaul, and repair of drone aircraft.

Instruction: Practical experience in flight operations, safety procedures, power plant and electronic maintenance, and fueling.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (3/74).

NV-1704-0045

RA-5C POWER PLANTS AND RELATED SYSTEMS ORGANIZATIONAL MAINTENANCE

RA-5C POWER PLANTS AND RELATED SYSTEMS ORGANIZATIONAL MAINTENANCE

Course Number: C-601-3741.

Location: Air Maintenance Training Detachment, Albany, GA; Air Maintenance Training Detachment, Sanford, FL.

Length: 3-4 weeks (120-160 hours).

Exhibit Dates: 1/68-Present.

Objectives: To train fleet maintenance personnel to inspect, test, and repair RA-5C power plants and related systems.

Instruction: Lectures and practical exercises in the base J-79 engine, aircraft fuel systems, power plants and component systems, inspections, tests, rigging procedures, and maintenance of RA-5C power plants and systems.

Credit Recommendation: In the vocational certificate category, 2 semester hours in power plant systems maintenance (3/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in power plant systems maintenance (3/74).

NV-1704-0046

DOUGLAS MODEL D-704 AND SARGENT-FLETCHER MODEL 31-300 AIR REFUELING STORES ORGANIZATIONAL MAINTENANCE

DOUGLAS MODEL D-704 AND SARGENT-FLETCHER MODEL 31-300 AIR REFUELING STORES ORGANIZATIONAL MAINTENANCE

Course Number: C-602-3013.

Location: Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Oceana, VA; Air Maintenance Training Detachment, Leesmore, CA; Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Beaufort, SC.

Length: 3 weeks (120 hours).

Exhibit Dates: 7/70-Present.

Objectives: To train maintenance personnel to maintain and repair Douglas and Sargent-Fletcher air refueling stores.

Instruction: Lectures and practical exercises in inspection, disassembly, cleaning, repair, and reassembly of the Douglas Model D-704 and Sargent-Fletcher Model 31-300 air refueling stores systems, components, and equipment.

Credit Recommendation: In the vocational certificate category, credit in air refueling stores maintenance on the basis of institutional evaluation (3/74), in the lower-division baccalaureate/associate degree category, credit in air refueling stores maintenance on the basis of institutional evaluation (3/74).

NV-1704-0047

SH-3 AIRFRAMES AND HYDRAULIC SYSTEMS ORGANIZATIONAL MAINTENANCE

SH-3 AIRFRAMES AND HYDRAULIC SYSTEMS ORGANIZATIONAL MAINTENANCE

Course Number: C-602-3396.

Location: Air Maintenance Training Detachment, Quonset Point, RI; Air Maintenance Training Detachment, Imperial Beach, CA.

Length: 3 weeks (109 hours).

Exhibit Dates: 1/73-Present.

Objectives: To train fleet maintenance personnel to maintain and repair SH-3 helicopter airframe and hydraulic systems.

Instruction: Lectures and practical exercises in removal, replacement, adjustment, and testing of pertinent landing gear,Arresting gear, hydraulic powerplants, and repair of airframe and hydraulic systems.

Credit Recommendation: In the vocational certificate category, 3 semester hours in airframe
NV-1704-0048
P-3 FLIGHT ENGINEER SYSTEM, No. 6
Course Number: C-050-3531.
Location: Air Maintenance Training Detachment, Moffett Field, CA; Air Maintenance Training Detachment, Patuxent River, MD.
Length: 3 weeks (200 hours)
Exhibit Dates: 2/74-3/74.
Objectives: To train flight crews on P-3 flight engineering and hydraulics.
Instruction: Lectures and practical exercises in aircraft and electrical systems, power plant and related systems, hydraulic, structure, and pressurization systems, radio and navigation aids, autopilot, and emergency systems.
Credit Recommendation: In the vocational certificate category, credit in P-3 hydraulic and flight control system maintenance on the basis of institutional evaluation (3/74); in the lower-division baccalaureate/associate degree category, credit in P-3 hydraulic and flight control system maintenance on the basis of institutional evaluation (3/74).

NV-1704-0049
H-53, T-44-GE-6/4A INTERMEDIATE MAINTENANCE/COMPLETE ENGINE REPAIR
Course Number: None.
Location: Air Maintenance Training Detachment, Santa Ana, CA.
Length: 2 weeks (120 hours)
Exhibit Dates: 2/73-3/74.
Objectives: To train maintenance personnel to maintain and repair T-44-GE-6 engines at the intermediate level.
Instruction: Lectures and practical exercises in engine familiarization, including torque, compressor, combustion, turbine, and exhaust flame accessory sections; engine related systems, including air flow utilization, lubrication, fuel system, and electrical systems, and engine maintenance and repair.
Credit Recommendation: In the vocational certificate category, 2 semester hours in intermediate maintenance/complete engine repair (3/74).

NV-1704-0050
P-3 HYDRAULICS AND FLIGHT CONTROLS SYSTEM MAINTENANCE, No. 10
Course Number: Not available.
Location: Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA.
Length: 2 weeks (120 hours)
Exhibit Dates: 2/73-3/74.
Objectives: To train maintenance personnel to maintain and repair P-3 aircraft hydraulic and flight control systems at the intermediate and organizational levels.
Instruction: Lectures and practical exercises in diagnosis, troubleshooting, maintenance, and servicing of the P-3 hydraulic power, auxiliary power, landing gear systems, steering, brake systems, primary flight controls, flap systems, and tab booster and rudder boost systems.
Credit Recommendation: In the vocational certificate category, credit in P-3 hydraulic and flight control system maintenance on the basis of institutional evaluation (3/74).

NV-1704-0051
QH-50C AIRFRAME AND RELATED SYSTEMS INTERMEDIATE MAINTENANCE
Course Number: None.
Location: Air Maintenance Training Detachment, Dam Neck, VA; Air Maintenance Training Detachment, North Island, CA.
Length: 3 weeks (128 hours)
Exhibit Dates: 1/68-3/74.
Objectives: To train maintenance personnel to maintain and repair QH-50C aircraft and related systems.
Instruction: Lectures and practical exercises in QH-50C aircraft maintenance, including airframe and engine familiarization, avionics and target control, handling and special support equipment maintenance, and airframe, power plant, and related systems inspections, maintenance, repair, and troubleshooting procedures.
Credit Recommendation: In the vocational certificate category, credit in aircraft maintenance on the basis of institutional evaluation (3/74); in the lower-division baccalaureate/associate degree category, credit in aircraft maintenance on the basis of institutional evaluation (3/74).

NV-1704-0052
QH-50D AIRFRAME, POWERPLANT AND RELATED SYSTEMS ORGANIZATIONAL MAINTENANCE
(QH-50D Airframe and Related System Intermediate Maintenance)
Course Number: None.
Location: Air Maintenance Training Detachment, Dam Neck, VA; Air Maintenance Training Detachment, North Island, CA.
Length: 2 weeks (120 hours)
Exhibit Dates: 2/73-3/74.
Objectives: To train maintenance personnel to maintain and repair QH-50D aircraft and related systems.
Instruction: All Versions: Practical experience in components maintenance, testing of J-79-GE-10 engine repair (3/74); lower-division baccalaureate/associate degree category, 3 semester hours in turbine engine repair (3/74).
Credit Recommendation: In the vocational certificate category, 2 semester hours in light aircraft familiarization (2/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in light aircraft familiarization (2/74).

NV-1704-0053
P-3 SECOND MECHANICS SYSTEMS
Course Number: C-601-3534.
Location: Air Maintenance Training Detachment, Moffett Field, CA; Air Maintenance Training Detachment, Patuxent River, MD.
Length: 3 weeks (200 hours)
Exhibit Dates: 2/73-3/74.
Objectives: To train P-3 flight crew second mechanics to repair and service aircraft systems and subsystems.
Instruction: Lectures and practical exercises in electrical and related systems, power plant and related systems, and airframe systems of the P-3 aircraft.
Credit Recommendation: In the vocational certificate category, 3 semester hours in airframe and power plant systems (3/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in airframe and power plant systems (3/74).

NV-1704-0054
E-2A AIRCRAFT FAMILIARIZATION (PILOTS)
Course Number: C-00-3471.
Location: Air Maintenance Training Detachment, San Diego, CA.
Length: 2 weeks (240 hours)
Exhibit Dates: 7/74-3/74.
Objectives: To familiarize pilots and prospective pilots with the E-2A aircraft, and the function and operation of its systems.
Instruction: Lectures on, and practical exercises with, E-2A aircraft, including power plant and related systems, and airframe, hydraulics, environmental, and avionics systems.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in light aircraft familiarization (2/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in light aircraft familiarization (2/74).

NV-1704-0055
J-80-GE-10 ENGINE INTERMEDIATE MAINTENANCE
(J-80-GE-10 Intermediate Maintenance)
Course Number: C-601-3129.
Location: Air Maintenance Training Detachment, Miramar, CA; Air Maintenance Training Detachment, Oceana, VA; Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Cherry Point, NC.
Length: 3 weeks (120 hours)
Objectives: To train technicians to repair J-79 turbine engines.
Credit Recommendation: In the vocational certificate category, 3 semester hours in turbine engine repair (2/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in turbine engine repair (2/74).

NV-1704-0056
F-4B/J AIRFRAME AND HYDRAULIC SYSTEMS ORGANIZATIONAL MAINTENANCE
(F-4B/J Airframe and Hydraulic Systems Maintenance)
Course Number: C-602-3807.
Location: Air Maintenance Training Detachment, Miramar, CA; Air Maintenance Training Detachment, Oceana, VA; Air Maintenance Training Detachment, Cherry Point, NC.
Length: 3 weeks (120-136 hours)
Exhibit Dates: 7/74-3/74.
Objectives: To train maintenance personnel to repair F-4B/J aircraft.
Instruction: Lectures and practical exercises in F-4B/J maintenance procedures, including airframe construction, corrosion control, hydraulic and high-pressure pneumatic systems maintenance, and utility hy-
Credit Recommendation: In the vocational certificate category, 2 semester hours in airframe and hydraulic systems maintenance (2/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in airframe and hydraulic systems maintenance (2/74)

NV-1704-0057
UH-3C AIRFRAMES, HYDRAULIC, FLIGHT CONTROLS AND ROTOR SYSTEMS ORGANIZATIONAL MAINTENANCE
Course Number: C-602-3386.
Location: Air Maintenance Training Detachment, Imperial Beach, CA.
Length: 2 weeks (64 hours).
Exhibit Dates: 8/71-Present.
Objectives: To train maintenance personnel in the operation, maintenance, and servicing of UH-3C airframes, hydraulics, flight control and rotor systems, and troubleshooting.

Credit Recommendation: In the vocational certificate category, 2 semester hours in aircraft maintenance (2/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in aircraft maintenance (2/74).

NV-1704-0058
HH-2D/SH-2D AIRFRAMES, HYDRAULIC, FLIGHT CONTROLS, AND ROTOR SYSTEMS ORGANIZATIONAL MAINTENANCE
Course Number: C-602-3393.
Location: Air Maintenance Training Detachment, Imperial Beach, CA.
Length: 2 weeks (72 hours).
Exhibit Dates: 3/73-Present.
Objectives: To train enlisted personnel to operate HH-2D/SH-2D airframes, hydraulics, and flight control systems.

Instruction: Troubleshooting, repairing, and maintaining HH-2D/SH-2D systems.

Credit Recommendation: In the vocational certificate category, 2 semester hours in helicopter systems maintenance and repair (2/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in helicopter systems maintenance and repair (2/74).

NV-1704-0059
BASIC HELICOPTER, CLASS C
Course Number: C-600-2010.
Location: Air Technical Training Center, Memphis, TN.
Length: 6-8 weeks (236-312 hours).
Exhibit Dates: 10/65-Present.
Objectives: To train selected Navy and Marine Corps enlisted personnel to repair helicopters.

Instruction: Lectures and practical experiences in basic helicopter flight, turbine power plant and transmission, flight control systems, preflight and postflight inspections, troubleshooting, safety regulations, single- and tandem-rotor helicopters.

Credit Recommendation: In the vocational certificate category, 2 semester hours in basic helicopter theory and maintenance (12/68).

NV-1704-0060
CH-46A ROTORS AND RELATED SYSTEMS MAINTENANCE
Course Number: None.
Location: Air Maintenance Training Detachment, Jacksonville, NC; Air Maintenance Training Detachment, Santa Ana, CA.
Length: 3 weeks (112 hours).
Exhibit Dates: 1/68-Present.
Objectives: To train maintenance personnel in the mechanics of rotor systems.

Instruction: Lectures and practical exercises in organizational maintenance, troubleshooting, flight control, and maintenance of utility systems and components.

Credit Recommendation: In the vocational certificate category, 2 semester hours in rotor systems maintenance (2/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in rotor systems maintenance (2/74).

NV-1704-0061
UH-1A/B POWER PLANT, TRANSMISSION, AND RELATING SYSTEMS MAINTENANCE
Course Number: None.
Location: Air Maintenance Training Detachment, Lakehurst, NJ; Air Maintenance Training Detachment, Ream Field, CA.
Length: 3 weeks (104 hours).
Exhibit Dates: 1/68-Present.
Objectives: To provide maintenance personnel with training in the latest servicing and repair procedures for T-58 helicopters.

Instruction: Lectures and practical exercises in the maintenance of helicopter power plant, transmission, fuel, rotor, and related systems.

Credit Recommendation: In the vocational certificate category, 2 semester hours in rotorcraft turbine engine maintenance and repair (2/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in rotorcraft turbine engine maintenance and repair (2/74).

NV-1704-0062
H-53 ROTOR AND RELATED SYSTEMS ORGANIZATIONAL MAINTENANCE
Course Number: C-601-3441.
Location: Air Maintenance Training Detachment, Santa Ana, CA.
Length: 4 weeks (160 hours).
Exhibit Dates: 1/68-Present.
Objectives: To train enlisted personnel to repair the H-53 rotor system and its components.

Instruction: Lectures and practical exercises in rotor system management and maintenance.

Credit Recommendation: In the vocational certificate category, 3 semester hours in helicopter organizational maintenance (2/74).

NV-1704-0063
H-53 HYDRAULIC SYSTEMS ORGANIZATIONAL MAINTENANCE
Course Number: None.
Location: Air Maintenance Training Detachment, Santa Ana, CA.
Length: 3 weeks (112 hours).
Exhibit Dates: 1/68-Present.
Objectives: To train maintenance personnel in the latest maintenance and service procedures for H-53 hydraulic systems.

Instruction: Lectures and practical exercises in the fundamentals of operation and maintenance of the basic hydraulic, utility hydraulic, flight control hydraulic, rotor brake, rotor damper, cargo winch, and external systems.

Credit Recommendation: In the vocational certificate category, credit in CH-53 hydraulic system organizational maintenance on the basis of institutional evaluation (2/74); in the lower-division baccalaureate/associate degree category, credit in CH-53 hydraulic systems organizational maintenance on the basis of institutional evaluation (2/74).

NV-1704-0064
UH-1D AIRFRAME, HYDRAULICS AND FLIGHT CONTROLS
Course Number: None.
Location: Air Maintenance Training Detachment, Santa Ana, CA.
Length: 3 weeks (120 hours).
Exhibit Dates: 1/68-Present.
Objectives: To train maintenance personnel to repair and service UH-1D airframe, hydraulics, and flight control systems.

Instruction: Lectures and practical exercises in the maintenance, repair, and troubleshooting of airframe structure and power-transmission, hydraulic, and flight control systems.

Credit Recommendation: In the vocational certificate category, credit in aircraft, hydraulic, and flight control system maintenance on the basis of institutional evaluation (2/74); in the lower-division baccalaureate/associate degree category, credit in aircraft, hydraulic, and flight control system maintenance on the basis of institutional evaluation (2/74).

NV-1704-0065
A-4M AIRCRAFT MECHANICS
Course Number: C-600-3718.
Location: Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Beaufort, SC.
Length: 2 weeks (80 hours).
Exhibit Dates: 3/72-Present.
Objectives: To train aircraft maintenance personnel to perform organizational maintenance in the A-4M aircraft, including airframe systems, power plants and related systems, engine trim and inspection procedures.

Credit Recommendation: In the vocational certificate category, 1 semester hour in basic aircraft maintenance (2/74).

NV-1704-0066
S-3D/E AIRFRAMES AND HYDRAULICS SYSTEMS MAINTENANCE
Course Number: Not available.
Location: Air Maintenance Training Detachment, North Island, CA; Air Maintenance Training Detachment, Key West, FL.
Length: 2 weeks (80 hours).
Exhibit Dates: 1/67-Present.
Objectives: To provide maintenance personnel with instruction on the maintenance of S-3D/E airframe and hydraulic systems.

Instruction: Lectures and practical exercises in the operation of hydraulic power units, aligning gear, hydraulically operated 'flight controls, accessory systems, mainte-
Nurance of airframes, and inspection procedures.

Credit Recommendation: In the vocational certificate category, 2 semester hours in airframe and hydraulic fundamentals laboratory (3/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in airframe and hydraulic fundamentals laboratory (3/74).

NV-1704-0067
P-3 FLIGHT ENGINEERS OPERATIONAL MAINTENANCE, No. 3
Course Number: C-602-3745.
Location: Air Maintenance Training Detachment, Patuxent River, MD.
Length: 5 weeks (200 hours).
Credit: In the lower-division baccalaureate/associate degree category, 2 semester hours in electricity or electronics (3/74); in the upper-division baccalaureate category, 3 semester hours in electricity or electronics, and credit in electrical laboratory on the basis of institutional evaluation (3/74).

NV-1704-0068
1. AVIATION ELECTRICIAN'S MATE, CLASS A
   (Aviation Electrician's Mate I)
   (Aviation Electrician's Mate II)
   3. AVIATION ELECTRICIAN'S MATE I
   (Aviation Electrician's Mate II)
   (Aviation Electrician's Mate III)
   (Aviation Electrician's Mate IV)
   (Aviation Electrician's Mate V)
   (Aviation Electrician's Mate VI)
   (Aviation Electrician's Mate VII)
   (Aviation Electrician's Mate VIII)
   (Aviation Electrician's Mate IX)
   (Aviation Electrician's Mate X)
   (Aviation Electrician's Mate XI)
   (Aviation Electrician's Mate XII)
   (Aviation Electrician's Mate XIII)
   (Aviation Electrician's Mate XIV)
   (Aviation Electrician's Mate XV)
   (Aviation Electrician's Mate XVI)
   (Aviation Electrician's Mate XVII)
   (Aviation Electrician's Mate XVIII)
   (Aviation Electrician's Mate XIX)
   (Aviation Electrician's Mate XX)
   (Aviation Electrician's Mate XXI)
   (Aviation Electrician's Mate XXII)
   (Aviation Electrician's Mate XXIII)
   (Aviation Electrician's Mate XXIV)
   (Aviation Electrician's Mate XXV)
   (Aviation Electrician's Mate XXVI)
   (Aviation Electrician's Mate XXVII)
   (Aviation Electrician's Mate XXVIII)
   (Aviation Electrician's Mate XXIX)
   (Aviation Electrician's Mate XXX)
   (Aviation Electrician's Mate XXXI)
   (Aviation Electrician's Mate XXXII)
   (Aviation Electrician's Mate XXXIII)
   (Aviation Electrician's Mate XXXIV)
   (Aviation Electrician's Mate XXXV)
   (Aviation Electrician's Mate XXXVI)
   (Aviation Electrician's Mate XXXVII)
   (Aviation Electrician's Mate XXXVIII)
   (Aviation Electrician's Mate XXXIX)
   (Aviation Electrician's Mate XL)
   (Aviation Electrician's Mate XLI)
   (Aviation Electrician's Mate XLII)
   (Aviation Electrician's Mate XLIII)
   (Aviation Electrician's Mate XLIV)
   (Aviation Electrician's Mate XLV)
   (Aviation Electrician's Mate XLVI)
   (Aviation Electrician's Mate XLVII)
   (Aviation Electrician's Mate XLVIII)
   (Aviation Electrician's Mate XLIX)
   (Aviation Electrician's Mate L)
   (Aviation Electrician's Mate LI)
   (Aviation Electrician's Mate LII)
   (Aviation Electrician's Mate LIII)
   (Aviation Electrician's Mate LIV)
   (Aviation Electrician's Mate LV)
   (Aviation Electrician's Mate LVI)
   (Aviation Electrician's Mate LVII)
   (Aviation Electrician's Mate LVIII)
   (Aviation Electrician's Mate LIX)
   (Aviation Electrician's Mate LX)
   (Aviation Electrician's Mate LXI)
   (Aviation Electrician's Mate LXII)
   (Aviation Electrician's Mate LXIII)
   (Aviation Electrician's Mate LXIV)
   (Aviation Electrician's Mate LXV)
   (Aviation Electrician's Mate LXVI)
   (Aviation Electrician's Mate LXVII)
   (Aviation Electrician's Mate LXVIII)
   (Aviation Electrician's Mate LXIX)
   (Aviation Electrician's Mate LXX)
   (Aviation Electrician's Mate LXXI)
   (Aviation Electrician's Mate LXXII)
   (Aviation Electrician's Mate LXXIII)
   (Aviation Electrician's Mate LXXIV)
   (Aviation Electrician's Mate LXXV)
   (Aviation Electrician's Mate LXXVI)
   (Aviation Electrician's Mate LXXVII)
   (Aviation Electrician's Mate LXXVIII)
   (Aviation Electrician's Mate LXXIX)
   (Aviation Electrician's Mate LXXX)
   (Aviation Electrician's Mate LXXXI)
   (Aviation Electrician's Mate LXXXII)
   (Aviation Electrician's Mate LXXXIII)
   (Aviation Electrician's Mate LXXXIV)
   (Aviation Electrician's Mate LXXXV)
   (Aviation Electrician's Mate LXXXVI)
   (Aviation Electrician's Mate LXXXVII)
   (Aviation Electrician's Mate LXXXVIII)
   (Aviation Electrician's Mate LXXXIX)
   (Aviation Electrician's Mate LXXXX)
   (Aviation Electrician's Mate LXXXXI)
   (Aviation Electrician's Mate LXXXXII)
   (Aviation Electrician's Mate LXXXXIII)
   (Aviation Electrician's Mate LXXXXIV)
   (Aviation Electrician's Mate LXXXXV)
   (Aviation Electrician's Mate LXXXXVI)
   (Aviation Electrician's Mate LXXXXVII)
   (Aviation Electrician's Mate LXXXXVIII)
   (Aviation Electrician's Mate LXXXXIX)
   (Aviation Electrician's Mate LXXXXX)
   (Aviation Electrician's Mate LXXXXXI)
   (Aviation Electrician's Mate LXXXXXII)
   (Aviation Electrician's Mate LXXXXXIII)
   (Aviation Electrician's Mate LXXXXXIV)
   (Aviation Electrician's Mate LXXXXXV)
   (Aviation Electrician's Mate LXXXXXVI)
   (Aviation Electrician's Mate LXXXXXVII)
   (Aviation Electrician's Mate LXXXXXVIII)
   (Aviation Electrician's Mate LXXXXXIX)
   (Aviation Electrician's Mate LXXXXXX)
   (Aviation Electrician's Mate LXXXXXXI)
   (Aviation Electrician's Mate LXXXXXXII)
   (Aviation Electrician's Mate LXXXXXXIII)
   (Aviation Electrician's Mate LXXXXXXIV)
   (Aviation Electrician's Mate LXXXXXXV)
   (Aviation Electrician's Mate LXXXXXXVI)
   (Aviation Electrician's Mate LXXXXXXVII)
   (Aviation Electrician's Mate LXXXXXXVIII)
   (Aviation Electrician's Mate LXXXXXXIX)
   (Aviation Electrician's Mate LXXXXXXX)
   (Aviation Electrician's Mate LXXXXXXXI)
   (Aviation Electrician's Mate LXXXXXXXII)
   (Aviation Electrician's Mate LXXXXXXXIII)
   (Aviation Electrician's Mate LXXXXXXXIV)
   (Aviation Electrician's Mate LXXXXXXXV)
   (Aviation Electrician's Mate LXXXXXXXVI)
   (Aviation Electrician's Mate LXXXXXXXVII)
   (Aviation Electrician's Mate LXXXXXXXVIII)
   (Aviation Electrician's Mate LXXXXXXXIX)
   (Aviation Electrician's Mate LXXXXXXXX)
   (Aviation Electrician's Mate LXXXXXXXXI)
   (Aviation Electrician's Mate LXXXXXXXXII)
   (Aviation Electrician's Mate LXXXXXXXXIII)
   (Aviation Electrician's Mate LXXXXXXXXIV)
   (Aviation Electrician's Mate LXXXXXXXXV)
   (Aviation Electrician's Mate LXXXXXXXXVI)
   (Aviation Electrician's Mate LXXXXXXXXVII)
   (Aviation Electrician's Mate LXXXXXXXXVIII)
   (Aviation Electrician's Mate LXXXXXXXXIX)
   (Aviation Electrician's Mate LXXXXXXXXX)
   (Aviation Electrician's Mate LXXXXXXXXXI)
   (Aviation Electrician's Mate LXXXXXXXXXII)
   (Aviation Electrician's Mate LXXXXXXXXXIII)
   (Aviation Electrician's Mate LXXXXXXXXXIV)
   (Aviation Electrician's Mate LXXXXXXXXXV)
   (Aviation Electrician's Mate LXXXXXXXXXVI)
   (Aviation Electrician's Mate LXXXXXXXXXVII)
   (Aviation Electrician's Mate LXXXXXXXXXVIII)
   (Aviation Electrician's Mate LXXXXXXXXXIX)
   (Aviation Electrician's Mate LXXXXXXXXXX)
   (Aviation Electrician's Mate LXXXXXXXXXXI)
   (Aviation Electrician's Mate LXXXXXXXXXXII)
   (Aviation Electrician's Mate LXXXXXXXXXXIII)
   (Aviation Electrician's Mate LXXXXXXXXXXIV)
   (Aviation Electrician's Mate LXXXXXXXXXXV)
   (Aviation Electrician's Mate LXXXXXXXXXXVI)
   (Aviation Electrician's Mate LXXXXXXXXXXVII)
   (Aviation Electrician's Mate LXXXXXXXXXXVIII)
   (Aviation Electrician's Mate LXXXXXXXXXXIX)
   (Aviation Electrician's Mate LXXXXXXXXXXX)
   (Aviation Electrician's Mate LXXXXXXXXXXXI)
   (Aviation Electrician's Mate LXXXXXXXXXXXII)
   (Aviation Electrician's Mate LXXXXXXXXXXXIII)
   (Aviation Electrician's Mate LXXXXXXXXXXXIV)
   (Aviation Electrician's Mate LXXXXXXXXXXXV)
   (Aviation Electrician's Mate LXXXXXXXXXXXVI)
   (Aviation Electrician's Mate LXXXXXXXXXXXVII)
   (Aviation Electrician's Mate LXXXXXXXXXXXVIII)
   (Aviation Electrician's Mate LXXXXXXXXXXXIX)
   (Aviation Electrician's Mate LXXXXXXXXXX...
COURSE EXHIBITS

semester hour in electrical laboratory (3/74).

NV-1704-0074
F-4 COMMUNICATION NAVIGATION IDENTIFICATION (CINI) LINE TROUBLESHOOTING MAINTENANCE Course Number: Not available.
Location: Air Maintenance Training Detachment, Miramar, CA; Air Maintenance Training Detachment, Oceana, VA; Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Cherry Point, NC.
Length: 6 weeks (160 hours).
Exhibit Dates: 8/70-Present.
Objective: To train maintenance personnel to perform line maintenance on F-4J CINI systems.
Instruction: Lectures and laboratory exercises in communication, navigation, and identification systems familiarization; CINI organizational maintenance; and DECM organizational maintenance.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1704-0075
RA-5C COMMUNICATION NAVIGATION IDENTIFICATION (CINI) AND DECM ORGANIZATIONAL MAINTENANCE Course Number: Not available.
Location: Air Maintenance Training Detachment, Sanford, FL.
Length: 3 weeks (120 hours).
Exhibit Dates: 9/68-Present.
Objective: To train fleet maintenance personnel to maintain CINI and DECM systems and related test sets.
Instruction: Lectures and practical exercises in communication, navigation, and identification systems familiarization; CINI organizational maintenance; and DECM organizational maintenance.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1704-0076
F-4B COMMUNICATION NAVIGATION IDENTIFICATION (CINI) LINE TROUBLESHOOTING MAINTENANCE Course Number: Not available.
Location: Air Maintenance Training Detachment, Miramar, CA; Air Maintenance Training Detachment, Oceana, VA; Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Cherry Point, NC.
Length: 4 weeks (160 hours).
Exhibit Dates: 3/71-Present.
Objective: To train maintenance personnel to operate and maintain the F-4B CINI line systems.
Instruction: Lectures and practical exercises in the operation and maintenance of the F-4B CINI line systems, including block-diagram analysis, components, power supply, transceiver, navigation set components, and test equipment; and computer, basic IFF/SIF theory, associated transponder and altimeter sets, introduction to line maintenance applications, and system check-out.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1704-0077
CH-46A ELECTRICAL AND INSTRUMENT SYSTEMS Course Number: Not available.
Location: Air Maintenance Training Detachment, Jacksonville, NC; Air Maintenance Training Detachment, Santa Ana, CA.
Length: 4 weeks (160 hours).
Exhibit Dates: 7/70-Present.
Objective: To train maintenance personnel to operate and maintain the CH-46A electrical and instrument systems.
Instruction: Lectures and practical exercises in the operation and maintenance of the CH-46A electrical and instrument systems. Includes engine starting, auxiliary and hydraulic systems, utility and electrical systems, and navigation systems.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

Location: Air Maintenance Training Detachment, Lemoore, CA; Air Maintenance Training Detachment, Cecil Field, FL.
Length: 2 weeks (80 hours).
Exhibit Dates: 7/70-Present.
Objective: To train maintenance personnel to operate and maintain the electrical and instrument systems of the A-7E aircraft.
Instruction: Lectures and practical exercises in the operation and maintenance of the A-7E aircraft electrical and instrument systems.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electricity, 1 in electronic laboratory (4/ 74).

NV-1704-0081
E-2A AVIATION ELECTRICIAN ORGANIZATIONAL MAINTENANCE Course Number: Not available.
Location: Air Maintenance Training Detachment, North Island, CA.
Length: 4 weeks (160 hours).
Exhibit Dates: 4/68-Present.
Objective: To train aviation electricians to troubleshoot, repair, and maintain the electrical systems of the E-2 aircraft.
Instruction: Lectures and practical exercises in the troubleshooting, repair, and maintenance of the electrical systems of the E-2 aircraft, including AC and DC power distribution systems, motors and generators, low voltage circuitry, utility and environmental systems, flight control systems, engine electric systems, automatic flight control system operation, pitot system, maximum rudder system, air data computer, and compass and inertial navigation system.
Credit Recommendation: In the vocational certificate category, 3 semester hours in electricity or electronics (4/ 74); in the lower-division baccalaureate/associate degree category, 1 semester hour in electricity or electronics, and additional credit in electricity or electronics on the basis of institutional evaluation (4/74).

NV-1704-0082
SP-2H SYSTEMS FAMILIARIZATION, PLANE CAPTAINS Course Number: Not available.
Location: Air Maintenance Training Detachment, Jacksonville, FL.
Length: 5 weeks (192 hours).
Exhibit Dates: 2/68-Present.
Objective: To train plane captains to operate SP-2H aircraft systems.
Instruction: Lectures and practical exercises in the operation of the SP-2H aircraft systems, including DC electrical distribution system, power plants and related systems, aircraft electrical and instrument systems, armament systems, and armament systems operation.
Credit Recommendation: In the vocational certificate category, 4 semester hours in electricity or electronics (4/ 74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electrical laboratory (4/ 74).

NV-1704-0083
SH-3A ELECTRICAL SYSTEMS MAINTENANCE Course Number: Not available.
Location: Air Maintenance Training Detachment, Lemoore, CA; Air Maintenance Training Detachment, Cecil Field, FL.
Length: 2 weeks (80 hours).
Exhibit Dates: 7/70-Present.
Objective: To train maintenance personnel to maintain and operate the electrical systems of the SH-3A aircraft.
Instruction: Lectures and practical exercises in the operation and maintenance of the SH-3A aircraft electrical systems, automatic flight control system operation, pitot system, maximum rudder system, air data computer, and compass and inertial navigation system.
Credit Recommendation: In the vocational certificate category, 3 semester hours in electricity, 2 in electronic laboratory (4/ 74).
Objectives: To train maintenance personnel to maintain and operate electrical and instrumental systems of S-2D/E equipment.

Instructor: Lectures and practical exercises in the maintenance and operation of electrical and instrument systems of S-2D/E equipment, including components, operation, and troubleshooting of power supply, engine controls and accessories, structural control, heating and cooling, fuel control, and light and instrument systems.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electrical laboratory (4/74).

NV-1704-0087 AVIATION STRUCTURAL MECHANIC H (HYDRAULICS), CLASS B Course Number: C-602-3018 Location: Air Technical Training Center, Memphis, Tennessee, TN Length: 12-13 weeks (488-504 hours).

Exhibit Dates: 10/65-Present.

Objective: To train personnel to perform aviation hydraulic systems mechanics.

Instruction: Lectures and practical exercises in aircraft repair, including utilization and interpretation of schematic drawings, fundamentals of electricity, technical publications, maintenance management, inspection procedures, corrosion control, aircraft hydraulics, and related maintenance.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1704-0088 A-6A ELECTRICAL SYSTEMS MAINTENANCE Course Number: Not available.

Location: Air Maintenance Training Detachment, Oceana, VA, Air Maintenance Training Detachment, Whidbey Island, WA.

Length: 5 weeks (200 hours).

Exhibit Dates: 1/68-Present.

Objective: To train maintenance personnel with knowledge of A-6A aircraft to perform troubleshooting and repair of electrical and instrument systems of A-6A aircraft.

Instruction: Lectures and practical exercises in the inspection, operation, repair of electrical and instrument systems of A-6A aircraft, including description, operation and components of AC power supply and control, AC/DC power distribution, emergency electrical power, constant speed drive/starter and engine control, fuel, auxiliary instrument, lighting, and remote indication compass systems.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electricity or electronics laboratory (4/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in electrical or electronics laboratory (4/74).

NV-1704-0089 P-3C INTEGRATED ELECTRICAL SYSTEMS ORGANIZATIONAL MAINTENANCE Course Number: C-3571.

Location: Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA.

Length: 7 weeks (280 hours).

Exhibit Dates: 11/72-Present.

Objective: To train maintenance personnel who are familiar with P-3 aircraft systems (4/74).
Exhibit Dates: 10/67-Present.

Objectives: To train enlisted personnel to operate and maintain F-4B aircraft electrical systems.

Instructor: Lectures and practical exercises in the operation and maintenance of F-4B aircraft electrical systems, including functional analysis, systems integration, analysis and components of the automatic flight control system, air data computer set, loft bomb release computer set, AC and DC power compensator system, fuel system, and test equipment for electrical and instrument systems.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electrical laboratory (4/74).

NV-1704-0093
E-1A ELECTRICAL AND INSTRUMENTS

Course Number: Not available.
Location: Air Maintenance Training Detachment, North Island, CA.
Length: 3 weeks (120 hours)
Exhibit Dates: 1/68-0000.
Objectives: To train aviation electronics to troubleshoot, repair, and maintain E-2A aircraft electrical and instrument systems.

Instructor: Lectures and practical exercises in the troubleshooting, repair, and maintenance of electrical and instrument systems incorporated in E-2A aircraft, including AC and DC power systems, utility, environmental, instruments, and miscellaneous systems components and operation, flight controls and related systems, and engine electrical and related systems and subsystems.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electrical laboratory (4/74).

NV-1704-0094
F-4J ELECTRICAL SYSTEMS
- ORGANIZATIONAL MAINTENANCE

Course Number: C-602-3815.
Location: Air Maintenance Training Detachment, Oceana, VA; Air Maintenance Training Detachment, Cherry Point, NC.
Length: 7-9 weeks (280-376 hours).
Exhibit Dates: 10/67-0000.
Objectives: To train enlisted personnel to maintain the electrical systems of the F-4J aircraft.

Instructor: Lectures and practical exercises in the maintenance of the electrical systems in the F-4J aircraft, including functional analysis, operation, systems integration and planned maintenance procedures on the electrical and instrument systems, automatic flight control system, air data computer set, vertical flight reference set, attitude reference the bombing computer set, power generating system, approach power compensator system, and data link system.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1704-0095
OV-10A ELECTRICAL SYSTEMS
ORGANIZATIONAL MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, C. Pendleton, CA.
Length: 2 weeks (64 hours).
Exhibit Dates: 6/68-0000.
Objectives: To train maintenance personnel to operate, troubleshoot, and maintain electrical systems of the OV-10A aircraft.

Instructor: Lectures and practical exercises in the operation, troubleshooting, and maintenance of the electrical systems of the OV-10A aircraft, including power systems (sources and distribution), lighting systems, instrumentation, power plant electrical systems, hydraulic and control surface systems, and miscellaneous electrical systems.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1704-0096
A-1E AUTOMATIC STABILIZATION EQUIPMENT ORGANIZATIONAL MAINTENANCE

Course Number: C-601-3398.
Location: Air Maintenance Training Detachment, Key West, FL; Air Maintenance Training Detachment, Imperial, Beach, CA.
Length: 3 weeks (104-120 hours).
Exhibit Dates: 9/68-0000.
Objectives: To train maintenance personnel to maintain the SH-3 helicopter's automatic stabilization equipment.

Instructor: Lectures and practical exercises in the maintenance of the SH-3 helicopter's automatic stabilization equipment, including flight theory, flight controls, primary and auxiliary hydraulic systems and servos, power control, pitch channel (signal path, vertical gyros, monitor panel, lag-amplifier, and line test set), yaw channel and synchronization, collective channel, hover indicator, cyclic and collective coupler system and components, and troubleshooting and testing.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electrical laboratory (4/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in electrical laboratory (4/74).

NV-1704-0097
A-KA-6D ELECTRICAL POWER SYSTEMS INTERMEDIATE MAINTENANCE

Course Number: C-602-3752.
Location: Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Oceana, VA.
Length: 2 weeks (64 hours).
Exhibit Dates: 3/70-0000.
Objectives: To train maintenance personnel to test and repair the electrical power generating system of the A-KA-6D aircraft.

Instructor: Lectures and practical exercises in the testing and repair of the electrical power generating system of the A-KA-6D aircraft, including review of electrical theory, operation of AC power supply and control system components, emergency electrical power system, and troubleshooting procedures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1704-0098
A-1E BOMBING SYSTEM AN/AJB-3A AND REMOTE STANDBY INDICATOR SYSTEM ORGANIZATIONAL MAINTENANCE

Course Number: C-602-0050.
Location: Air Maintenance Training Detachment, Lemoore, CA; Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Beaufort, SC.
Length: 2 weeks (80 hours).
Exhibit Dates: 1/70-0000.
Objectives: To train maintenance personnel who are familiar with A-1 systems and transistor fundamentals to operate and maintain the AN/AJB-3A bombing system and the remote standby attitude-indicating systems.

Instructor: Lectures and practical exercises in the operation and maintenance of the AN/AJB-3A bombing system and the remote standby attitude-indicating systems, including operation of the displacement gyroscope, attitude-direction indicator, compass adapter, bomb release computer, and power supply, system analysis (circuits and channels), bore sighting and compass swinging (line test set, testing procedures and operation of the remote standby indicating system.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1704-0099
RA-5C ELECTRICAL AND INDICATING SYSTEMS (INTERMEDIATE MAINTENANCE)

Course Number: Not available.
Location: Air Maintenance Training Detachment, Sanford, FL.
Length: 6 weeks (240 hours).
Exhibit Dates: 9/67-0000.
Objectives: To train maintenance personnel who are familiar with RA-5C aircraft systems to operate and maintain the RA-5C electrical and indicating systems at the intermediate level.

Instructor: Lectures and practical exercises in the operation and maintenance of the RA-5C aircraft electrical and indicating systems, including power control, generators; transformers, DC power supply, emergency power, lighting and radome fold systems components, engine instruments and control systems; fuel, hydraulic, and pneumatic power systems, heating and ventilation, and pressurization and air-conditioning systems.

Credit Recommendation: In the vocational certificate category, 4 semester hours in electrical laboratory (4/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in electrical laboratory (4/74).

NV-1704-0100
A-6A ELECTRICAL SYSTEMS
- ORGANIZATIONAL MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Oceana, VA.
Length: 6 weeks (240 hours).
Exhibit Dates: 2/70-0000.
Objectives: To train maintenance personnel who have backgrounds in basic transistors to maintain, test, and troubleshoot the
A-6A electrical, instrument, and automatic flight control systems.

**Instruction:** Lectures and practical exercises in the maintenance, testing, and troubleshooting of the A-6A electrical, instrument, and automatic flight control systems, including power supply and control system components and operation (AC and DC systems), fuel management and indicating system, auxiliary systems components, operation and testing, aircraft instrument, environmental control, and compass systems; automatic flight principles, air data computer, block diagram, and operation, signal flow, interlocks and check-out procedures, and use of test equipment.

**Credit Recommendation:** In the vocational certificate category, 4 semester hours in electrical laboratory (4/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electrical laboratory (4/74).

---

**NV-1704-0101**

**P-3 INTEGRATED ELECTRICAL SYSTEM ORGANIZATIONAL MAINTENANCE**

**Course Number:** C-602-3535

**Location:** Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA.

**Length:** 7 weeks (280 hours).

**Exhibit Dates:** 11/72-Present.

**Objectives:** To train maintenance personnel who are familiar with P-3 aircraft systems and transistor fundamentals to operate, test, and maintain the P-3 integrated electrical system.

**Instruction:** Lectures and practical exercises in the operation, testing, and maintenance of the P-3 integrated electrical system, including power generation and distribution, control panel, automatic flight control system, attitude-heading reference system, navigational computer operation, instruments and hydraulics, fuel, oil, and propeller systems, and troubleshooting procedures.

**Credit Recommendation:** In the vocational certificate category, 4 semester hours in electrical laboratory (4/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in electrical laboratory (4/74).

---

**NV-1704-0102**

**A-4M ELECTRICAL SYSTEMS ORGANIZATIONAL MAINTENANCE**

**Course Number:** C-602-3737

**Location:** Air Maintenance Training Detachment, Beaufort, SC.

**Length:** 7 weeks (280 hours).

**Exhibit Dates:** 10/72-Present.

**Objectives:** To train maintenance personnel to test and maintain the A-4M aircraft.

**Instruction:** Lectures and practical exercises in the testing and maintenance of the A-4M aircraft, including electrical and instrument systems, automatic flight control system components and theory of operation, navigational computer components and theory of operation, electrical power system, utility circuits, and troubleshooting procedures.

**Credit Recommendation:** Credit is not recommended because of the military-specific nature of the course (4/74).

---

**NV-1704-0103**

**OV-10A FLIGHT CONTROL AND HYDRAULIC SYSTEMS ORGANIZATIONAL MAINTENANCE**

**Course Number:** C-602-3521

**Location:** Air Maintenance Training Detachment, Cp. Pendleton, CA.

**Length:** 2 weeks (80 hours).

**Exhibit Dates:** 2/69-Present.

**Objectives:** To train maintenance personnel to operate, troubleshoot, and maintain the flight control and hydraulic systems of the OV-10A aircraft at the intermediate level.

**Instruction:** Lectures and practical exercises in the operation, troubleshooting, and maintenance of the flight control and hydraulic systems of specific equipment, including various control systems operation and rigging, hydraulic power control, wheel brake system, and aircraft corrosion control.

**Credit Recommendation:** Credit is not recommended because of the specific nature of the course (4/74).

---

**NV-1704-0104**

**F/RF-4B AIRCRAFT ELECTRICAL SYSTEMS MAINTENANCE**

**Course Number:** Not available

**Location:** Air Maintenance Training Detachment, El Toro, CA.

**Length:** 3 weeks (120 hours)

**Exhibit Dates:** 1/68-Present.

**Objectives:** To train maintenance personnel to operate, test, and repair F-4 aircraft electrical systems.

**Instruction:** Lectures and practical exercises in the operation, testing, and repair of F-4 aircraft electrical systems, including AC and DC electrical generation systems, power control, circuit analysis, flight control, fuel and oxygen quantity gauging systems, air conditioning systems, test equipment, and troubleshooting techniques.

**Credit Recommendation:** In the vocational certificate category, 1 semester hour in electrical laboratory (4/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in electrical laboratory (4/74).

---

**NV-1704-0105**

**AH-1J ELECTRICAL ORGANIZATIONAL MAINTENANCE**

**Course Number:** C-602-3333

**Location:** Air Maintenance Training Detachment, C.p. Pendleton, CA.

**Length:** 2 weeks (80 hours).

**Exhibit Dates:** 11/72-Present.

**Objectives:** To train maintenance personnel to repair, check, and maintain the AH-1J electrical system.

**Instruction:** Lectures and practical exercises in the operation and maintenance of the AH-1J electrical system, including DC electrical systems, AC power supply, fuel system and instruments, warning and detection circuits, lighting circuits, and environmental control system.

**Credit Recommendation:** In the vocational certificate category, 4 semester hours in electrical laboratory (4/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electrical laboratory (4/74).

---

**NV-1704-0106**

**F/B-4J EGRESS AND ENVIRONMENTAL CONTROL SYSTEMS ORGANIZATIONAL MAINTENANCE**

**Course Number:** C-602-3806.

**Location:** Air Maintenance Training Detachment, Miramar, CA; Air Maintenance Training Detachment, Oceana, VA; Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Cherry Point, NC.

**Length:** 2 weeks (96 hours).

**Exhibit Dates:** 10/72-Present.

**Objectives:** To train maintenance personnel to maintain and service the egress and environmental control systems of the F-4B/J aircraft at the intermediate level.

**Instruction:** Lectures and practical exercises in the maintenance and environmental control systems of the F-4B/J aircraft, including egress equipment, ejection equipment, components and operation of the basic pneumatic and canopy system, equipment installation, bleed air system, pressurization, air conditioning systems components and operation, and troubleshooting procedures.

**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (4/74).

---

**NV-1704-0107**

**SP-2E SYSTEMS FAMILIARIZATION, PLANE CAPTAINS**

**Course Number:** Not available.

**Location:** Air Maintenance Training Detachment, Jacksonville, FL.

**Length:** 5 weeks (192 hours)

**Exhibit Dates:** 1/68-Present.

**Objectives:** To train plane captains to operate the SP-2E aircraft systems.

**Instruction:** Lectures and practical exercises in the operation of the SP-2E aircraft systems, including power plants and related systems breakdowns, hydraulics and airframes, power systems and components, flight control systems, electrical systems (including AC and DC power distribution and generator systems), propeller operation, aircraft instrumentation, armament system, and troubleshooting techniques.

**Credit Recommendation:** In the vocational certificate category, 4 semester hours in electrical laboratory (4/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electrical laboratory (4/74).

---

**NV-1704-0108**

**A-6A ELECTRICAL SYSTEMS INTERMEDIATE MAINTENANCE**

**Course Number:** Not available.

**Location:** Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Oceana, VA.

**Length:** 4 weeks (160 hours).

**Exhibit Dates:** 3/70-Present.

**Objectives:** To train maintenance personnel who have had previous training in transistor fundamentals to test, troubleshoot, and repair electrical and instrument systems of the A-6A aircraft at the intermediate level.

**Instruction:** Lectures and practical exercises in the testing, troubleshooting, and repair of the electrical and instrument systems of the A-6A aircraft, including electrical power systems, auxiliary electrical systems, constant speed drive/starter system operation, MA-1 compass system, and approach power compensator system operation and components.

**Credit Recommendation:** In the vocational certificate category, 1 semester hour in electrical laboratory (4/74).
NV-1704-0109
AVIATION SUPPORT EQUIPMENT GTCP-100 AND ENCLOSURES INTERMEDIATE MAINTENANCE
(Aviation Support Equipment GTCP-100 Engine Intermediate Maintenance)
Course Number: C-602-1212.
Location: Air Maintenance Training Detachment, Jacksonville, FL; Air Maintenance Training Detachment, North Island, CA.
Length: 2-3 weeks (80-120 hours).
Exhibit Dates: 9/70-Present.
Objectives: To train aviation support technicians to maintain GTCP-100 engines.
Instruction: Lectures and practical exercises in GTCP-100 engine maintenance, including engine description, cold-section theory, lubrication system, electrical system, fuel system, air control system, and test equipment operation.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1704-0110
AVIATION SUPPORT EQUIPMENT WEAPONS LOADERS HYDRAULIC SYSTEMS INTERMEDIATE LEVEL MAINTENANCE
Course Number: C-602-3216.
Location: Air Maintenance Training Detachment, Norfolk, VA; Air Maintenance Training Detachment, North Island, WA.
Length: 2 weeks (80 hours).
Objectives: To train aviation support equipment technicians to maintain weapons loaders hydraulic systems at the intermediate level.
Instruction: Lectures and practical exercises in the maintenance of weapons loaders hydraulic systems, including nomenclature, function, troubleshooting, and replacement of hydraulic components of weapons loaders.
Credit Recommendation: Insufficient data for evaluation (4/74).

NV-1704-0111
AVIATION SUPPORT EQUIPMENT TECHNICIAN, CLASS A (ELECTRICAL SPECIALTY)
Course Number: C-602-2019.
Location: Air Technical Training Center, Memphis, TN.
Objectives: To train enlisted personnel to maintain and repair aircraft support equipment.
Instruction: All Versions: Lectures and practical exercises in aircraft support equipment maintenance and repair, including aviation support equipment introduction, electrical and electronic fundamentals, generator and motor fundamentals, and electrical maintenance on aircraft support vehicles. Instruction 1 includes air-conditioning systems maintenance.
Credit Recommendation: Instruction 1: 6 semester hours in electromechanical technology (4/74). NV-1704-0112
AVIATION SUPPORT EQUIPMENT TECHNICIAN, CLASS A (HYDRAULIC SPECIALTY)
Course Number: Not available.
Location: Air Technical Training Center, Memphis, TN.
Length: 9-12 weeks (376-464 hours).
Exhibit Dates: 5/66-Present.
Objectives: To train enlisted personnel as aviation support equipment technicians.
Instruction: Lectures and practical exercises in aviation support equipment operation and maintenance, reciprocating engines and associated equipment, tune-up and inspection techniques, diesel engines and related auxiliary equipment, and compressor operation.
Credit Recommendation: In the vocational certificate category, 6 semester hours in aircraft support (5/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in aeronautical technology (5/74).

NV-1704-0113
AVIATION SUPPORT EQUIPMENT TECHNICIAN, CLASS A (MECHANICAL SPECIALTY)
Course Number: Not available.
Location: Air Technical Training Center, Memphis, TN.
Length: 9-12 weeks (376-464 hours).
Exhibit Dates: 5/66-Present.
Objectives: To train enlisted personnel to maintain aviation support equipment.
Instruction: Lectures and practical exercises in aviation support equipment maintenance and administration, including chassis maintenance and metal repair, frames, axles, and similar components, metal working, 'welding and painting, fluidic systems and brake systems maintenance; and pneumatic and cryogenic systems maintenance.
Credit Recommendation: In the vocational certificate category, 6 semester hours in aircraft support (5/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in aeronautical technology; as an elective in mechanical technology (5/74).

NV-1704-0114
SH-3A/D ELECTRICAL SYSTEMS ORGANIZATIONAL MAINTENANCE
Course Number: C-602-3397.
Location: Air Maintenance Training Detachment, Quonset Point, RI; Air Maintenance Training Detachment, Imperial Beach, CA.
Length: 4-5 weeks (144 hours).
Exhibit Dates: 8/71-Present.
Objectives: To train maintenance personnel to inspect the electrical systems of SH-3 helicopters.
Instruction: Lectures and practical exercises in the maintenance and repair of the electrical systems of SH-3 helicopters, including power supply system, power plant/main gearbox and related systems, miscellaneous and utility systems, rotor-acuating system, fuselage fuel systems, vertical-gyro operation, hydraulic systems, and automatic bladefold system.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electricity and electrical laboratory (6/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in electricity and electrical laboratory on the basis of institutional evaluation (6/74), in the upper-division baccalaureate/associate degree category, 3 semester hours in electricity and electrical laboratory on the basis of institutional evaluation (6/74).

NV-1704-0115
AIR INTERCEPT CONTROL (REQUALIFICATION), CLASS O/C
Course Number: C-2G-2022; C-221-2013.
Location: Air Technical Training Center, Glynco, GA.
Length: 2 weeks (80 hours).
Exhibit Dates: 7/71-Present.
Objectives: To requalify line officers and senior radarmen as air intercept controllers.
Instruction: Lectures and practical exercises in air intercept control procedures and techniques, including R/T procedures and brevet code, intercept theory, TACAN and broadcast control intercepts, Mk 10 IFF, SIF and AIMS system, lead collision intercept, SAR, control system, and weapons systems, forward quarter conversion intercept, lead pursuit intercept, actual air control, lead collision reattack intercept, and pattern intercept.
Credit Recommendation: In the vocational certificate category, 6 semester hours in air traffic control (6/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in air traffic control (6/74).

NV-1704-0116
AVIATION STRUCTURAL MECHANIC E (SAFETY EQUIPMENT), CLASS B
Course Number: C-602-2016.
Location: Air Technical Training Center, Memphis, Millington, TN.
Length: 10-11 weeks (404-420 hours).
Exhibit Dates: 10/65-Present.
Objectives: To train personnel to perform as aviation safety equipment mechanics.
Instruction: Lectures and practical exercises in aircraft repair, including utilization and interpretation of schematic drawings, fundamentals of electricity; technical publications, management, inspection procedures, corrosion control, aircraft coordination, air conditioning, and associated systems, oxygen, fire extinguishing, and life craft release systems; and egress systems.
Credit Recommendation: In the vocational certificate category, 8 semester hours in aircraft safety equipment mechanics (6/76); in the lower-division baccalaureate/associate degree category, 4 semester hours in aircraft safety equipment mechanics (6/76).

NV-1704-0117
AIR INTERCEPT CONTROL (SUPERVISOR), CLASS C/O
Course Number: C-2G-2021.
Location: Air Technical Training Center, Glynco, GA.
Length: 4 weeks (160 hours).
Exhibit Dates: 6/71-Present.
Objectives: To train line officers and radarmen as air intercept controllers.
Instruction: Lectures and practical exercises in air intercept control procedures and techniques, including air intercept control procedures and communications, aircraft operations and weapons systems, practical application of air intercept control procedures, synthetic air intercept control, actual air intercept control, supervision and instruction of air intercept controllers.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (6/74).

NV-1704-0118
A-6 PLANE CAPTAIN
Course Number: C-600-3761.
Location: Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Oceana, VA.
Length: 2 weeks (80 hours).
Objectives: To train pilots to ensure that mission related equipment is maintained and properly repaired.
Instructor: Lectures and practical exercises in the maintenance of the F-16 aircraft, including: engine systems, electrical systems, hydraulic systems, flight control systems, and armament systems.
Credit Recommendation: In the vocational certificate category, 4 semester hours in aviation maintenance (6/74).

NV-1704-0119
J5-J/2A/4A ENGINE INTERMEDIATE MAINTENANCE/COMPLETE ENGINE REPAIR
Course Number: Not available.
Location: Air Maintenance Training Detachment, Kingsville, TX; Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, El Toro, CA.
Length: 3 weeks (120 hours).
Objectives: To train personnel to maintain and repair the F-4B aircraft.
Instructor: Lectures and practical exercises in the maintenance of the F-4B aircraft, including: engine systems, electrical systems, hydraulic systems, flight control systems, and armament systems.
Credit Recommendation: In the vocational certificate category, 4 semester hours in intermediate engine maintenance (6/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in aircraft hydraulic systems maintenance (6/74).

NV-1704-0121
C/2A AIRCRAFT FAMILIARIZATION (PILOTS)
Course Number: C-00-3491.
Location: Air Maintenance Training Detachment, Cherry Point, NC.
Length: 2 weeks (64 hours).
Objectives: To train personnel to familiarize them with the C/2A aircraft.
Instructor: Lectures and practical exercises in the maintenance of the C/2A aircraft, including: engine systems, electrical systems, hydraulic systems, flight control systems, and armament systems.
Credit Recommendation: In the vocational certificate category, 2 semester hours in aircraft hydraulic systems maintenance (6/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in aircraft hydraulic systems maintenance (6/74).

NV-1704-0122
F/RB-4B STRUCTURES AND HYDRAULIC SYSTEMS MAINTENANCE
Course Number: Not available.
Location: Air Maintenance Training Detachment, El Toro, CA.
Length: 3 weeks (120 hours).
Objectives: To train personnel to familiarize them with the F/RB-4B aircraft.
Instructor: Lectures and practical exercises in the maintenance of the F/RB-4B aircraft, including: engine systems, electrical systems, hydraulic systems, flight control systems, and armament systems.
Credit Recommendation: In the vocational certificate category, 4 semester hours in intermediate engine maintenance (6/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in aircraft hydraulic systems maintenance (6/74).

NV-1704-0123
TF41-A/2 ENGINE INTERMEDIATE MAINTENANCE/COMPLETE ENGINE REPAIR
Course Number: C-601-3136.
Location: Air Maintenance Training Detachment, Cecil Field, FL.
Length: 4 weeks (160 hours).
Objectives: To train personnel to maintain and repair the TF41-A/2 engine.
Instructor: Lectures and practical exercises in the maintenance of the TF41-A/2 engine, including: engine systems, electrical systems, hydraulic systems, flight control systems, and armament systems.
Credit Recommendation: In the vocational certificate category, 4 semester hours in intermediate engine maintenance (6/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in intermediate engine maintenance (6/74).

NV-1704-0124
SH-3 AIRFRAME AND HYDRAULIC SYSTEMS MAINTENANCE
Course Number: D-603-0570.
Location: Air Maintenance Training Detachment, Key West, FL; Air Maintenance Training Detachment, Ream Field, CA.
Length: 4 weeks (120 hours).
Objectives: To train personnel in SH-3 airframe and hydraulic systems maintenance.
Instructor: Lectures and practical exercises in the maintenance of SH-3 airframe and hydraulic systems.
Credit Recommendation: In the vocational certificate category, 4 semester hours in helicopter system maintenance (6/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in helicopter system maintenance (6/74).

NV-1704-0125
KC-130F T-56-A-7 TURBOPROP ENGINE AND RELATED SYSTEMS ORGANIZATION, MAINTENANCE
(KC-130F T-56-A-7 Turboprop Engine and Related Systems Maintenance)
Course Number: Not available.
Location: Air Maintenance Training Detachment, El Toro, CA.
Length: 2 weeks (96 hours).
Objectives: To train personnel to repair T-56 turboprop engines and related systems.
Instructor: Lectures and practical exercises in the maintenance of T-56 turboprop engines and related systems.
Credit Recommendation: In the vocational certificate category, 2 semester hours in turboprop engine familiarization (6/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in turboprop engine familiarization (6/74).

NV-1704-0126
F-4B/J MAINTENANCE SUPERVISOR/FAMILIARIZATION
Course Number: C-600-3801.
Location: Air Maintenance Training Detachment, Miramar, CA; Air Maintenance Training Detachment, Oceana, VA; Air Maintenance Training Detachment, Cecil Field, FL; Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Cherry Point, NC.
Length: 4 weeks (160 hours).
Objectives: To train personnel to familiarize them with the F-4B/J aircraft and related systems.
Instructor: Lectures and practical exercises in the maintenance of the F-4B/J aircraft and related systems, including: engine systems, electrical systems, hydraulic systems, flight control systems, and armament systems.
Credit Recommendation: In the vocational certificate category, 4 semester hours in aircraft hydraulic systems maintenance (6/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in intermediate engine maintenance (6/74).
1-132 COURSE EXHIBITS

safety information, CNI, ECM, fuel, power plant, and related systems, electrical systems, internal/external armament control systems, and introduction to air-launched weapons

Credit Recommendation: In the vocational certificate category, 2 semester hours in aircraft, propulsion and related systems maintenance (6/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in aircraft and systems maintenance (6/74).

NV-1704-0127 C-2A POWER PLANT AND RELATED SYSTEMS ORGANIZATIONAL MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, North Field, CA.
Length: 3 weeks (120-128 hours).
Exhibit Dates: 11/67-Present.
Objectives: To train enlisted personnel to maintain and repair C-2A power plants and related systems.

Instruction: Lectures and practical exercises in the organizational maintenance of the C-2A power plant and related systems, including the T-56-A-8/3A engine, functions, operation, and maintenance of the C-2A power plant and the A441PN-248 propeller system and components

Credit Recommendation: In the vocational certificate category, 4 semester hours in aircraft, propulsion and related systems maintenance (6/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in aircraft and propeller maintenance (6/74).

NV-1704-0128 AVIATION STRUCTURAL MECHANIC H (HYDRAULICS) CLASS A

Course Number: C-602-2017.
Location: Air Technical Training Center, Memphis, TN.
Length: 7-10 weeks (280-400 hours).
Exhibit Dates: 5/56-Present.
Objectives: To train maintenance technicians to perform aircraft hydraulic structural systems.

Instruction: Lectures and practical exercises in aircraft hydraulic structural systems repair, including hydraulic principles, tubes and fittings, flexible hosed fittings, power system components, brakes, struts, shimmy dampers, valves, actuators, publications and systems.

Credit Recommendation: In the vocational certificate category, 6 semester hours in hydraulic structural repair (6/74), in the lower-division baccalaureate/associate degree category, 4 semester hours in hydraulic structural repair (6/74).

NV-1704-0129 A6A HYDRAULICS AND FLIGHT CONTROLS ORGANIZATIONAL MAINTENANCE (A-6 Flight Controls and Structures Organizational Level Maintenance)

Course Number: Not available.
Location: Air Maintenance Training Detachment, Whidby Island, WA, Air Maintenance Training Detachment, Oceana, VA.
Length: 3-4 weeks (120-160 hours).
Exhibit Dates: 11/67-12/68.
Objectives: To train maintenance personnel to maintain and repair hydraulic and flight control systems of the A-6A aircraft.

Instruction: Lectures and practical exercises in the operation and maintenance of the hydraulic and flight control system of the A-6A aircraft, including the requirements for daily, preflight, postflight, and periodic inspections and maintenance techniques, removal, installation, and troubleshooting of major components required for aircraft maintenance, including aircraft familiarization, hydraulic, flight control, slighting gear and related systems, and ground handling.

Credit Recommendation: In the vocational certificate category, 6 semester hours in systems maintenance (6/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in systems maintenance (6/74).

NV-1704-0130 AVIATION STRUCTURAL MECHANIC E (SAFETY EQUIPMENT) CLASS A

Course Number: C-602-2015.
Location: Air Technical Training Center, Memphis, TN.
Length: 9 weeks (348-368 hours).
Exhibit Dates: 9/65-Present.
Objectives: To train enlisted personnel to perform as aviation structural mechanics.

Instruction: Lectures and practical exercises in the functions of aviation structural mechanics, including fundamentals, familiarization, schematic interpretation, application of the materials and material management system, gaseous-oxygen systems, typical aircraft system, liquid oxygen systems, aircraft pressurization and air-conditioning systems, aircraft pressurization and air-conditioning systems, and auxiliary bleed air systems.

Credit Recommendation: In the vocational certificate category, 3 semester hours in aircraft safety equipment maintenance (6/74), in the lower-division baccalaureate/associate degree category, 6 semester hours in aircraft safety equipment mechanics (6/74).

NV-1704-0131 MARINE MECHANICAL SCHOOL, CLASS P

Course Number: Not available.
Location: Air Technical Training Center, Jacksonville, FL.
Length: 6 weeks (240 hours).
Exhibit Dates: 3/70-Present.
Objectives: To train personnel in basic mechanical and electrical maintenance techniques.

Instruction: Lectures and practical exercises in the duties of aviation structural mechanics, including AFCS maintenance, fuel system, main gear box; rotary and egress systems, auxiliary bleed air systems.

Credit Recommendation: In the vocational certificate category, 3 semester hours in aircraft structures shop (6/74); in the lower-division baccalaureate/associate degree category, 6 semester hours in aircraft structures shop (6/74).

NV-1704-0132 AVIATION STRUCTURAL MECHANIC S (STURCTURES) CLASS A

Course Number: C-603-2010.
Location: Air Technical Training Center, Memphis, TN.
Length: Version 1: 8 weeks (320 hours).
Version 2: 5 weeks (240 hours).
Version 3: 4 weeks (160 hours).
Exhibit Dates: 11/67-12/68.
Objectives: To train enlisted Navy and Marine Corps personnel with previous technical experience to perform as aviation structural mechanics (6/74), third class.

Instruction: Lectures and practical exercises in the duties of aviation structural mechanic S (structures), third class, including fundamentals, aircraft structural repair, welding, nonmetallic materials, airframes and power plant maintenance, and aircraft sheet metal.

Credit Recommendation: Version 1: In the vocational certificate category, 6 semester hours in aircraft structures shop (6/74); in the lower-division baccalaureate/associate degree category, 4 semester hours in aircraft structures shop (6/74); in the third division of the lower-division baccalaureate/associate degree category, 5 semester hours in aircraft structures shop (6/74).

NV-1704-0133 H-53 AUTOMATIC FLIGHT CONTROL SYSTEM ORGANIZATIONAL MAINTENANCE

Course Number: C-602-3443.
Location: Air Maintenance Training Detachment, Santa Ana, CA.
Length: 3 weeks (120 hours).
Exhibit Dates: 5/70-Present.
Objectives: To train maintenance personnel to maintain the H-53 automatic flight control system at the organizational maintenance level.

Instruction: Lectures and practical exercises in the organizational maintenance of the H-53 automatic flight control system, including AFCS maintenance, hydraulic control, stick trim system, power distribution and relay sequence, attitude-indicating system, block-diagram analysis, and line maintenance procedures.

Credit Recommendation: In the vocational certificate category, 3 semester hours in flight control system maintenance (6/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in flight control system maintenance (6/74).

NV-1704-0134 SH-3A POWER PLANTS AND RELATED SYSTEMS MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, Ream Field, CA; Air Maintenance Training Detachment, Key West, FL.
Length: 3 weeks (120 hours).
Exhibit Dates: 11/67-12/68.
Objectives: To train maintenance personnel to maintain and repair SH-3A helicopter power plants and related systems.

Instruction: Lectures and practical exercises on SH-3A power plants and related systems maintenance, including general information, familiarization, T56 engine, construction, systems, engine installation, operation and maintenance, fuel system, main gear box; rotary rudder drive, rotor-actuating mechanism, main rotor head assembly, and rotary rudder assembly.

Credit Recommendation: In the vocational certificate category, 2 semester hours in power plant maintenance laboratory (6/74); in the lower-division baccalaureate/associate degree category, 1 semester hour, in power plant maintenance laboratory (6/74).
NV-1704-0135
A-7A/B TF30-P-6/-408 POWER PLANTS AND RELATED SYSTEMS ORGANIZATIONAL MAINTENANCE
(A-7A/B Power Plant and Related Systems Organizational Maintenance)
Course Number: C-601-3781
Location: Air Maintenance Training Detachment, Lemoore, CA; Air Maintenance Training Detachment, Cecil Field, FL.
Length: 2 weeks (75-90 hours).
Exhibit Dates: 10/70-Present.
Objectives: To train experienced maintenance personnel in the maintenance, operation, and servicing of a A-7A/B power plants and related systems.
Instruction: Lectures and practical exercises in A-7A/B power plants and related systems organizational maintenance, including aircraft fuel systems, engine construction and systems, and propulsion system maintenance.
Credit Recommendation: In the vocational certificate category, 2 semester hours in power plant systems maintenance (6/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in power plant systems maintenance (6/74).

NV-1704-0136
H-4 STABILIZATION SYSTEMS
INTERMEDIATE MAINTENANCE
Course Number: C-601-3417
Location: Air Maintenance Training Detachment, New River, NC, Air Maintenance Training Detachment, Santa Ana, CA.
Length: 3 weeks (120 hours).
Exhibit Dates: 10/70-Present.
Objectives: To train experienced maintenance personnel in the maintenance and servicing of H-46 stabilization systems at the intermediate level.
Instruction: Lectures and practical exercises in the maintenance and servicing of H-46 stabilization systems, including stability augmentation system; automatic stabilization equipment, automatic speed trim system, and complete intermediate maintenance, troubleshooting, testing and repair.
Credit Recommendation: In the vocational certificate category, 4 semester hours in electrical and electromechanical systems (6/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in electrical and electromechanical systems (6/74).

NV-1704-0137
OV-1A T76-G-10/12 ENGINE INTERMEDIATE COMPLETE ENGINE REPAIR MAINTENANCE
Course Number: C-601-3222.
Location: Maintenance Training Detachment, New River, NC, Air Maintenance Training Detachment, Pendleton, CA.
Length: 3 weeks (136-hours).
Exhibit Dates: 8/69-Present.
Objectives: To train experienced personnel to repair the T76-G-10/12 engine.
Instruction: Lectures and practical exercises on the T76-G-10/12 engine, including intermediate/complete engine repair, engine systems, power management, propulsion systems, torque-sensing system, engine anti-icing system, fuel system, electrical system, propeller disassembly and assembly, propeller balancing, and inspection and testing.

NV-1704-0138
AVIATION SUPPORT EQUIPMENT TECHNICIAN HYDRAULICS AND STRUCTURES, CLASS A
Course Number: C-601-3386
Location: Air Technical Training Center, Memphis, TN.
Length: 9 weeks (313-376 hours).
Exhibit Dates: 1/71-Present.
Objectives: To train enlisted personnel with previous technical experience to perform as aviation support equipment technicians (hydraulics and structures).
Instruction: Lectures and practical exercises in aviation support equipment-maintenance (hydraulics and structures), including publications and maintenance organization, avionics support equipment fundamentals, materials, troubleshooting, chassis and brake maintenance, metalwork skills, welding, corrosion control, maintenance of fluid systems, servicing equipment, and line maintenance.
Credit Recommendation: In the vocational certificate category, 4 semester hours in chassis and metalworking shop, 3 in hydraulics and liquefied-gas laboratory (6/74); 3 in the lower-division baccalaureate/associate degree category, 3 semester hours in chassis and metalworking shop, 2 in hydraulics and liquefied-gas laboratory (6/74).

NV-1704-0139
SH-1D/H POWER PLANTS AND RELATED SYSTEMS ORGANIZATIONAL MAINTENANCE COURSE
Course Number: C-601-3399
Location: Air Maintenance Training Detachment, Quonset Point, RI, Air Maintenance Training Detachment, Imperial Beach, CA.
Length: 3 weeks (120 hours).
Exhibit Dates: 1/73-Present.
Objectives: To train maintenance personnel to maintain SH-3D and SH-3H aircraft power plants and related systems.
Topics include general information and theory of helicopter flight, power plant systems, rotors and related systems, inspections, and functional testing.
Credit Recommendation: In the vocational certificate category, 2 semester hours in power plant organizational maintenance (6/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in power plant organizational maintenance (6/74).

NV-1704-0140
A-7E POWERPLANT AND RELATED SYSTEMS ORGANIZATIONAL MAINTENANCE
Course Number: C-601-3782.
Location: Air Maintenance Training Detachment, Lemoore, CA, Air Maintenance Training Detachment, Cecil Field, FL.
Length: 4 weeks (144-180 hours).
Exhibit Dates: 9/72-Present.
Objectives: To train enlisted personnel to maintain and repair the A-7E power plant and related systems.
Instruction: Lectures and practical exercises in the maintenance, operation, and servicing of the A-7E power plant and related systems, and use of tools and special maintenance and test equipment related to organizational maintenance, including aircraft fuel systems, engine description and systems, propulsion system maintenance, engine maintenance, and practical training.
Credit Recommendation: In the vocational certificate category, 3 semester hours in power plant organizational maintenance (6/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in power plant organizational maintenance (6/74).

NV-1704-0141
UH-2C, HH-1C AND HH-1D POWER PLANTS AND RELATED SYSTEMS ORGANIZATIONAL MAINTENANCE
Course Number: C-601-3366
Location: Maintenance Training Detachment, Imperial Beach, CA.
Length: 3 weeks (96 hours).
Exhibit Dates: 2/73-Present.
Objectives: To train maintenance personnel to maintain helicopter power plants and related systems.
Instruction: Lectures and practical exercises in maintenance of UH-2C, HH-2C and HH-2D power plants and related systems.
Topics include familiarization with power plants and related systems, removal, inspection, and installation of power plants, and organizational maintenance of transmissions and drive shafts.
Credit Recommendation: In the vocational certificate category, 2 semester hours in helicopter power plant laboratory (6/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in helicopter power plant laboratory (6/74).

NV-1704-0142
AIRCRAFT MAINTENANCE OFFICERS, CLASS O
Course Number: C-4D-2010.
Location: Air Technical Training Center, Memphis, TN.
Exhibit Dates: 3: 12 weeks (480 hours).
Objectives: To train prospective squadron maintenance officers to organize, supervise, and administer aircraft maintenance departments.
Instruction: All Vocations: Lectures and practical exercises on organization, supervision and administration of aircraft maintenance departments, including avionics equipment and systems, maintenance and material management administration, airframe equipment and systems, publications, and maintenance organization management.
Version 2: Topics include armament equipment and systems.
Credit Recommendation: Version 1: In the vocational certificate category, 12 semester hours in aircraft maintenance management, 12 hours in aircraft systems (6/74); in the lower-division baccalaureate/associate degree category, 6 semester hours in aircraft maintenance management, 6 in aircraft systems (6/74); in the upper-division baccalaureate
COURSE EXHIBITS

C-1A HYDRAULICS/AIRFRAMES SYSTEM
ORGANIZATIONAL MAINTENANCE
(C-2A Hydraulics/Airframes System Maintenance)

Credit Number: C-601-2002-204.
Location: Air Maintenance, Training Detachment, North Island, CA.
Length: 3-4 weeks (109-120 hours).
Exhibit Dates: 9/67-Present.
Objectives: To train maintenance personnel on C-1A hydraulics and airframe systems at the organizational level.
Instruction: Lectures and practical exercises in maintenance of C-1A hydraulic and airframe systems. Topics include flight and combined-systems power sections and power control systems, utility systems, aligning gear, flight controls and structures operation, line maintenance, troubleshooting, servicing, and ground handling.
Credit Recommendation: In the vocational certificate category, 4 semester hours in aircraft systems maintenance (6/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in aircraft systems maintenance (6/74).

NV-1704-0143

SH-3A/G POWER PLANTS AND RELATED SYSTEMS ORGANIZATIONAL LEVEL MAINTENANCE

Course Number: C-601-3396.
Location: Air Maintenance Training Detachment, Key West, FL, Air Maintenance Training Detachment, Imperial Beach, CA.
Length: 3 weeks (120 hours).
Exhibit Dates: 1/73-Present.
Objectives: To train enlisted personnel to maintain SH-3A/G aircraft power plants and related systems.
Instruction: Lectures and practical exercises in the troubleshooting, maintenance, and repair of the SH-3A/G aircraft power plant and related systems. Topics include general information and theory of helicopter flight, power plant systems, rotors and related systems inspection requirements, and functional testing.
Credit Recommendation: In the vocational certificate category, 2 semester hours in power plant organizational maintenance (6/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in power plant organizational maintenance (6/74).

NV-1704-0144

H-3C HELICOPTER MAINTENANCE

Course Number: C-601-3445.
Location: Air Maintenance Training Detachment, Santa Ana, CA, Air Maintenance Training Detachment, Cherry Point, NC.
Length: 2 weeks (80 hours).
Exhibit Dates: 5/72-Present.
Objectives: To train maintenance technicians to maintain H-3C helicopters.
Instruction: Lectures and practical exercises in the maintenance of H-3C helicopters, including rotors and related systems, power plants, power control system, and fuel systems maintenance.
Credit Recommendation: In the vocational certificate category, 2 semester hours in helicopter maintenance fundamentals (6/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in helicopter maintenance fundamentals (6/74).

NV-1704-0145

AVIATION SUPPORT EQUIPMENT
TECHNICIAN MECHANICAL, CLASS A

Course Number: C-602-2024.
Location: Air Technical Training Center, Memphis, TN.
Length: 9 weeks (313-376 hours).
Exhibit Dates: 1/71-Present.
Objectives: To train ground service support technicians to maintain various types of ground support equipment.
Instruction: Lectures and practical exercises in the troubleshooting, maintenance, and repair of AD and TDAD power plant equipment, power plant familiarization, periodic inspections, power plant replacement, jet aircraft line operations, and fuel systems.
Credit Recommendation: In the vocational certificate category, 4 semester hours in aviation ground support equipment maintenance (6/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in aviation ground support equipment maintenance (6/74).

NV-1704-0146

SH-3A/G POWER PLANTS AND RELATED SYSTEMS ORGANIZATIONAL LEVEL MAINTENANCE

Course Number: C-601-3396.
Location: Air Maintenance Training Detachment, Quonset Point, RI, Air Maintenance Training Detachment, Imperial Beach, CA.
Length: 3 weeks (120 hours).
Exhibit Dates: 1/73-Present.
Objectives: To train enlisted personnel to maintain SH-3A/G aircraft power plants and related systems.
Instruction: Lectures and practical exercises in the troubleshooting, maintenance, and repair of the SH-3A/G aircraft power plant and related systems. Topics include general information and theory of helicopter flight, power plant systems, rotors and related systems inspection requirements, and functional testing.
Credit Recommendation: In the vocational certificate category, 2 semester hours in power plant organizational maintenance (6/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in power plant organizational maintenance (6/74).

NV-1704-0148

AVIATION MACHINIST'S MATE JET ENGINE, CLASS A

(Aviation Machinist's Mate J (Jet Engine), Class A)

Course Number: C-601-2012.
Version: 2.
Location: Air Technical Training Center, Memphis, TN.
Length: 7-8 weeks (264-304 hours).
Exhibit Dates: 5/66-Present.
Objectives: To train enlisted personnel with previous technical experience to repair reciprocating-engine aircraft.
Instruction: Lectures and practical exercises in reciprocating-engine repair, including fundamentals, power plants and line operations, power plant accessories, line operations and power plant maintenance, fuel metering, ignition, propellers, periodic inspections, and troubleshooting.
Credit Recommendation: In the vocational certificate category, 6 semester hours in basic reciprocating-engine overhaul (6/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in basic reciprocating-engine overhaul (6/74).

NV-1704-0149

AVIATION MACHINIST'S MATE RECIPROCATING, CLASS A

Course Number: Version 1: C-601-2012.
Version: 2: Not available.
Location: Air Technical Training Center, Memphis, TN.
Objectives: To train enlisted personnel with previous technical experience to repair reciprocating-engine aircraft.
Instruction: Lectures and practical exercises in reciprocating-engine repair, including fundamentals, power plants and line operations, power plant accessories, line operations and power plant maintenance, fuel metering, ignition, propellers, periodic inspections, and troubleshooting.
Credit Recommendation: In the vocational certificate category, 6 semester hours in basic reciprocating-engine overhaul (6/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in basic reciprocating-engine overhaul (6/74).

NV-1704-0150

T-55 L-13 ENGINE INTERMEDIATE MAINTENANCE/COMPLETE ENGINE REPAIR

Course Number: C-601-3343.
Location: Air Maintenance Training Detachment, Ellyson Field, FL.
Length: 2 weeks (80 hours).
Exhibit Dates: 3/73-Present.
Objectives: To train maintenance personnel in the intermediate maintenance and complete engine repair of the T55-L-13 shaft-turbine engine.
Instruction: Lectures and practical exercises on the intermediate maintenance and complete engine repair of the T55-L-13 shaft-turbine engine, including engine disassembly and inspection, overhaul, and reassembly; repair and installation of inlet
guide vane and compressor, and gas pro-
ducer and accessory repair and installation
Credit Recommendation: In the vocational
certificate category, 2 semester hours in air-
craft engine maintenance (6/74), in the
lower-division baccalaureate/associate
degree category, 1 semester hour in aircraft
turbine engine maintenance (6/74).

NV-1704-0151
E-2A POWER PLANT AND RELATED
SYSTEMS ORGANIZATIONAL MAINTENANCE
Credit Recommendation: In the vocational
certificate category, 2 semester hours in or-
ganizational maintenance (6/74); in the lower-
division baccalaureate/associate degree category, 1 semester hour in organi-
gzation maintenance (6/74).

NV-1704-0152
E-2A HYDRAULICS/AIRFRAMES SYSTEMS
ORGANIZATIONAL MAINTENANCE
Credit Recommendation: In the vocational
certificate category, 4 semester hours in or-
ganizational maintenance (6/74); in the lower-
division baccalaureate/associate degree category, 2 semester hours in or-
ganizational maintenance (6/74).

NV-1704-0153
A-H-J POWERTRAIN AND ROTORS
ORGANIZATIONAL MAINTENANCE
Credit Recommendation: In the vocational
certificate category, 4 semester hours in or-
ganizational maintenance (6/74); in the lower-
division baccalaureate/associate degree category, 2 semester hours in or-
ganizational maintenance (6/74).

NV-1704-0154
H-46 ROTORS AND RELATED SYSTEMS
ORGANIZATIONAL MAINTENANCE COURSES
Credit Recommendation: In the vocational
certificate category, 4 semester hours in or-
ganizational maintenance (6/74); in the lower-
division baccalaureate/associate degree category, 2 semester hours in or-
ganizational maintenance (6/74).

NV-1704-0155
E-2A HYDRAULICS/AIRFRAMES SYSTEMS
ORGANIZATIONAL MAINTENANCE (E-2A HYDRAULICS/AIRFRAMES SYSTEMS MAINTENANCE)
Credit Recommendation: In the vocational
certificate category, 4 semester hours in or-
ganizational maintenance (6/74); in the lower-
division baccalaureate/associate degree category, 2 semester hours in or-
ganizational maintenance (6/74).

NV-1704-0156
AIRCRAFT MAINTENANCE NONDESTRUCTIVE INSPECTION SCHOOL, CLASS C
Credit Recommendation: In the vocational
certificate category, 2 semester hours in non-
destructive inspection (6/74); in the lower-
division baccalaureate/associate degree category, 1 semester hour in non-
destructive inspection (6/74).

NV-1704-0157
AVIATION MECHANICAL FUNDAMENTALS, CLASS P
(Aviation Mechanical Fundamentals, Class A)
Credit Recommendation: In the vocational
certificate category, 14 semester hours in avia-
tion mechanical fundamentals; in the lower-
division baccalaureate/associate degree category, 6 semester hours in avia-
tion mechanical fundamentals (6/74).

NV-1704-0158
AVIATION MACHINIST'S MATE R
(RECIPROCATING), CLASS B
Course Number: C-601-2013
Location: Air Technical Training Center, Memphis, TN.
Length: 13-14 weeks (540-576 hours)
Exhibit Dates: 6/66-Present.
Objectives: To provide aviation machini-
st's mates with advanced training in recip-
rocating-engine repair.
Instruction: Lectures and practical exer-
cises on aircraft reciprocating power plants and related systems, including aircraft main-
tenance program, reciprocating power plants, ignition, fuel metering, propeller,
material control, maintenance management, quality control, magnetism, induction, cir-
cuit troubleshooting, supervision and main-
tenance, engine analyzers, and reversing hy-
dromatic propeller and systems.
Credit Recommendation: In the vocational
certificate category, 6 semester hours in aircraft main-
tenance management and reciprocating power plants (6/74); in the lower-
division baccalaureate/associate degree category, 4 semester hours in aircraft main-
tenance management and reciprocating power plants (6/74); in the upper-
division baccalaureate category, 2
1-136

COURSE EXHIBITS

semester hours in maintenance management (12/68).

NV-1704-0159
AVIATION MACHINIST'S MATE J (JET ENGINE), CLASS B
Course Number: C-601-2011.
Location: Air Technical Training School, Memphis, TN.
Length: 13-14 weeks (536-544 hours).
Exhibit Dates: 10/65—Present.
Objectives: To provide aviation machinist's mates with advanced training in jet engine maintenance.
Instruction: Lectures and practical exercises in the maintenance of aircraft turbine-type power plants and related systems, including advanced power plant fundamentals and auxiliary equipment, advanced turbojet power plants, advanced turbofan power plant, advanced turboprop power plant, naval aircraft maintenance program, 357 power plant, T56 power plant, and T79 power plant orientation.

Credit Recommendation: In the vocational certificate category, 8 semester hours in turbine engine maintenance (6/74); in the lower-division baccalaureate/associate degree category, 4 semester hours in turbine engine maintenance management (6/74); in the upper-division baccalaureate category, 2 semester hours in maintenance management (6/74); and 1 semester hour in aircraft hydraulic systems (6/74).

NV-1704-0162
AH-J POWER PLANT AND RELATED SYSTEMS ORGANIZATIONAL MAINTENANCE
Course Number: C-601-3351.
Location: Air Maintenance Training Detachment, Cape Canaveral, CA.
Length: 2 weeks (80 hours).
Exhibit Dates: 10/71—Present.
Objectives: To train maintenance personnel to maintain AH-J/7400 CP-400 power plant systems.
Instruction: Lectures and practical exercises in AH-J/7400 CP-400 power plant systems maintenance. Course includes turbine engine removal and installation, engine alignment, engine control systems, rigging, and fuel and oil systems.

Credit Recommendation: In the vocational certificate category, 2 semester hours in jet engine maintenance (6/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in jet engine maintenance (6/74).

NV-1704-0163
F-4 J57-P-16/20 INTERMEDIATE MAINTENANCE/COMPLETÉ ENGINE REPAIR (F-8 J57-P-16/20 Intermediate Maintenance)
Course Number: Not available.
Location: Air Maintenance Training Detachment, Jacksonville, FL.
Length: 3 weeks (112 hours).
Exhibit Dates: 3/66—Present.
Objectives: To train fleet aircraft maintenance personnel in J57-P-16/20 intermediate maintenance and complete engine repair.
Instruction: Lectures and practical exercises in J57-P-16/20 intermediate maintenance and complete engine repair, including disassembly, cleaning, inspection, minor repair, engine alignment and trim, engine trim procedures, and assembly.

Credit Recommendation: In the vocational certificate category, 2 semester hours in turbine engine maintenance (6/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in turbine engine maintenance (6/74).

NV-1704-0164
A-6A POWER PLANTS AND RELATED SYSTEMS ORGANIZATIONAL MAINTENANCE
Course Number: E-601-0610.
Location: Air Maintenance Training Detachment, Oceana, VA.
Length: 3 weeks (120 hours).
Exhibit Dates: E-601-0610.
Objectives: To train maintenance personnel to perform, inspect, and maintain A-6A aircraft power plants and related systems, including engine general description, periodic maintenance requirements program, power plants, engine operating limits and procedures, engine removal, engine trim procedure, constant speed drive/starter unit familiarization, and fuel system.

Credit Recommendation: In the vocational certificate category, 2 semester hours in turbine engine organizational maintenance (6/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in turbojet organizational maintenance (6/74).

NV-1704-0165
A-6A MAINTENANCE SUPERVISORS FAMILIARIZATION
Course Number: Not available.
Location: Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Oceana, VA.
Length: 3 weeks (120 hours).
Exhibit Dates: 1/66—Present.
Objectives: To train supervisory personnel in the A-6 weapons system.
Instruction: Lectures and practical exercises on the A-6 weapons system, including A-6 maintenance familiarization, hydraulic power and distribution, general electrical and electronics systems, A-6 weapons system familiarization, general avionics equipment and maintenance, power plants and fuel systems, and environmental system.

Credit Recommendation: In the vocational certificate category, 2 semester hours in aircraft systems laboratory (6/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in aircraft systems laboratory (6/74).

NV-1704-0166
RA-5C ARMAMENT INTERMEDIATE MAINTENANCE
Course Number: Not available.
Location: Air Maintenance Training Detachment, Sanford, FL.
Length: 3 weeks (120 hours).
Exhibit Dates: 1/68—Present.
Objectives: To train enlisted personnel to maintain the RA-5C armament system and its components.
Instruction: Lectures and practical exercises on the maintenance of the RA-5C armament system and its components. Course includes controls and indicators, external pylons, electrical systems, delivery modes, and booms, control systems.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (6/74).

NV-1704-0167
A-6A ARMAMENT SYSTEMS ORGANIZATIONAL MAINTENANCE
Course Number: E-646-0640.
Location: Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Oceana, VA.
Length: 3-4 weeks (120-160 hours).
Exhibit Dates: 1/66—Present.
Objectives: To train maintenance personnel to service and maintain A-6A armament systems.
Instruction: Lectures and practical exercises in maintenance and operation of A-6A armament systems, including the components and applicable support equipment for A-6A armament systems; inspection and safety procedures; shop repairs; assembly and test troubleshooting procedures.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics laboratory (6/74), in the lower-
organizational baccalaureate/associate degree category, 1 semester hour in electronics laboratory (6/74).

NV-1704-0168

H-53 POWER PLANTS AND RELATED SYSTEMS ORGANIZATIONAL MAINTENANCE

Course Number: Not available.

Location: Air Maintenance Training Detachment, Santa Ana, CA.

Length: 2 weeks (80 hours).

Exhibit Dates: 5/70-Present.

Objectives: To train maintenance personnel to maintain T-64-GE-6/6A engines and engine systems, aircraft fuel systems, and T-62T-12 engines and engine systems at the organizational level.

Instruction: Lectures and practical exercises in maintenance of T-64-GE-6/6A engines and engine systems, aircraft fuel systems, and T-62T-12 engines and engine systems. Course includes overall system operation, system troubleshooting, and use of special support equipment.

Credit Recommendation: In the vocational certificate category, 1 semester hour in power plant organizational maintenance (6/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in power plant organizational maintenance (6/74).

NV-1704-0169

T-3C POWER PLANTS AND RELATED SYSTEMS ORGANIZATIONAL MAINTENANCE

Course Number: C-601-3877; C-601-094.

Location: Air Maintenance Training Detachment, Meridian, MS.

Length: 2 weeks (80 hours).

Exhibit Dates: 5/70-Present.

Objectives: To train maintenance personnel to maintain and repair T-3C aircraft fuel systems and J58-GE-4 engines and related systems.

Instruction: Lectures and practical exercises in maintenance and repair of T-3C aircraft fuel systems and J58-GE-4 engines and related systems. Course includes inspection techniques, troubleshooting, engine limits and adjustments, and T3C system installation.

Credit Recommendation: In the vocational certificate category, 1 semester hour in power plant organizational maintenance (6/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in power plant organizational maintenance (6/74).

NV-1704-0170

A-4(532)-PA/A/SA) POWER PLANT AND RELATED SYSTEMS ORGANIZATIONAL MAINTENANCE

Course Number: C-601-3717.

Location: Air Maintenance Training Detachment, Lemoore, CA; Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Beaufort, SC.

Length: 2 weeks (64 hours).

Exhibit Dates: 4/73-Present.

Objectives: To train maintenance personnel to maintain and repair the A-4 power plant and related systems.

Instruction: Lectures and practical exercises on the A-4 power plant and related systems, including power plant system, J52 engine description, power plant maintenance, aircraft system, and engine maintenance and operation.

Credit Recommendation: In the vocational certificate category, 1 semester hour in power plant organizational maintenance (6/74).

NV-1704-0171

S-1D/E POWER PLANT AND RELATED SYSTEMS MAINTENANCE

Course Number: C-601-3611.

Location: Air Maintenance Training Detachment, Key West, FL; Air Maintenance Training Detachment, North Island, CA.

Length: 2 weeks (80 hours).

Exhibit Dates: 11/72-Present.

Objectives: To train maintenance personnel to maintain power plant and related systems of the S-2D/E aircraft at the intermediate and organizational maintenance levels.

Instruction: Lectures and practical exercises on the power plant and related systems of the S-2D/E aircraft at the intermediate and organizational maintenance levels.

Credit Recommendation: In the vocational certificate category, 1 semester hour in power plant organizational maintenance (6/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in power plant organizational maintenance (6/74).

NV-1704-0172

SH/HH-1D POWER PLANT AND RELATED SYSTEMS ORGANIZATIONAL MAINTENANCE

Course Number: C-601-3387.

Location: Air Maintenance Training Detachment, Lakehurst, NJ; Air Maintenance Training Detachment, Imperial Beach, CA.

Length: 2 weeks (80 hours).

Exhibit Dates: 4/73-Present.

Objectives: To train maintenance personnel to maintain SH/HH-2D power plant, transmission and fuel systems at the organizational level.

Instruction: Lectures and practical exercises in SH/HH-2D power plant, transmission and fuel systems maintenance.

Credit Recommendation: In the vocational certificate category, 1 semester hour in power plant organizational maintenance (6/74).

NV-1704-0173

A-7E ARMAMENT SYSTEM MAINTENANCE

Course Number: C-646-3787.

Location: Air Maintenance Training Detachment, Lemoore, CA; Air Maintenance Training Detachment, Cecil Field, FL.

Length: 2 weeks (64 hours).

Exhibit Dates: 5/71-Present.

Objectives: To train maintenance personnel to operate and maintain the A-7E armament system at the organizational level.

Instruction: Lectures and practical exercises in the maintenance and operation of the A-7E armament system. Course includes weapons release stations; release and control systems; and system checks and circuit analysis, use of specific test equipment, and troubleshooting procedures.

Credit Recommendation: In the vocational certificate category, 1 semester hour in the lower-division baccalaureate/associate degree category, 1 semester hour in electrical or electronic systems (6/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in power plant organizational maintenance (6/74).

NV-1704-0174

ENGINEER CLASS C, CONTROLLABLE PITCH PROPELLER

(Controllable Pitch Propeller, Class C)

Course Number: A-680-028.

Location: Service School Command, Great Lakes, IL.

Length: 4 weeks (126 hours).

Exhibit Dates: 11/65-Present.

Objectives: To train engineers and petty officers third class and above to test, adjust, diagnose, and correct malfunctions in controllable-pitch propeller systems.

Instruction: Lectures and practical exercises in testing, diagnosing, and correcting controllable-pitch propeller systems. Course includes advanced principles of hydraulics; installation, adjustment and prestart checks; operation, maintenance, and troubleshooting controllable-pitch propeller systems; servo-motor controls, electrohydraulic, electromechanical and pneumatic-hydraulic controls; principles of operation of pumps, valves, gages, and associated piping and tubing.

Credit Recommendation: In the vocational certificate category, 4 semester hours in mechanical technology (6/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in mechanical technology (6/74).

NV-1704-0175

UH-1N POWERTRAIN AND ROTORS ORGANIZATIONAL MAINTENANCE

Course Number: C-600-3355.

Location: Air Maintenance Training Detachment, Cp Pendleton, CA.

Length: 2 weeks (80 hours).

Exhibit Dates: 1/73-Present.

Objectives: To train personnel in the components and assemblies of power train/rotor systems.

Instruction: Lectures and practical exercises on the components and assemblies of power train/rotor systems, including helicopter, location, operation, removal, and installation, organizational maintenance, rotor systems, mast and transmission assembly, drive shafts, gear boxes, and flight control systems.

Credit Recommendation: In the vocational certificate category, 1 semester hour in power train and rotor organizational maintenance (6/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in power train and rotor organizational maintenance (6/74).

NV-1704-0176

UH-2C POWER PLANTS, FUEL, TRANSMISSIONS AND RELATED SYSTEMS ORGANIZATIONAL MAINTENANCE

Course Number: Not available.

Location: Air Maintenance Training Detachment, Imperial Beach, CA.

Length: 2 weeks (80 hours).

Exhibit Dates: 8/68-Present.

Objectives: To train maintenance personnel to maintain, operate, and service the UH-2C T58-GE-8B power plant, fuel, transmission, and related systems at the organizational level.

Instruction: Lectures and practical exercises in the maintenance, operation, and servicing of the UH-2C T58-GE-8B power plant, fuel, transmission, and related systems.

Credit Recommendation: In the vocational certificate category, 1 semester hour in power plant organizational maintenance (6/74); in the lower-division...
baccalaureate/associate degree category, 1 semester hour in power plant organizational maintenance (6/74).

NV-1704-0177
AVIATION STRUCTURAL MECHANIC S (Aviation Structural Mechanic S (Structures, Class B))

Course Number: C-603-2011
Location: Air Technical Training Center, Miami, FL.
Length: 13-14 weeks (540-556 hours).
Exhibit Dates: 10/65-Present.
Objectives: To train personnel to perform as aviation structural mechanics.

Instruction: Lectures and practical exercises in aircraft structural repair, including the introduction to electricity, circuits, and magnetism; orthographic and isometric drawings; sectional drawings; reading electronic systems, procurement of aircraft parts, maintenance and material control; introduction to aviation maintenance, maintenance planning; maintenance system; theory of corrosion and aircraft cleaning; aircraft rib repairs; and testing of metals.

Credit Recommendation: In the vocational certificate category, 10 semester hours in aircraft structures shop (6/74); in the lower-division baccalaureate/associate degree category, 6 semester hours in aircraft structures shop (6/74).

NV-1704-0178
C-121 ELECTRICAL SYSTEMS

Course Number: D-600-010
Location: Oceanographic Air Survey Unit, Patuxent River, MD.
Length: 3 weeks (90 hours).
Exhibit Dates: 12/66-12/68.
Objectives: To train aviation electricians to troubleshoot and repair the electrical systems of C-121 aircraft.

Instruction: Lectures and practical exercises in the electrical systems of C-121 aircraft, including AC and DC power systems, air conditioning and pressurization, fuel and oil systems, miscellaneous systems, Hamilton Standard propeller system, and Speyer engine analyzer.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (12/68).

NV-1704-0179
C-121 ELECTRONIC SYSTEMS

Course Number: D-600-011
Location: Oceanographic Air Survey Unit, Patuxent River, MD.
Length: 3 weeks (90 hours).
Exhibit Dates: 12/66-12/68.
Objectives: To train aviation electronics technicians in basic electronic components and systems of C-121 aircraft.

Instruction: Lectures and practical exercises in basic electronic components and systems of C-121 aircraft, including communications, navigation, and AN/APS-42 radar systems in the C-121J transport, communications, navigation, radar, IFF, and other associated equipment in EC-121K systems, and special EC-121 electronics configurations.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (12/68).

NV-1704-0180
F-4 POWER PLANTS AND RELATED SYSTEMS

Course Number: E-600-1910.
Location: Air Maintenance Training Detachment, Miramar, CA; Air Maintenance Training Detachment, Jacksonville, FL.
Length: 3 weeks (120 hours).
Exhibit Dates: 7/68-3/68.
Objectives: To train maintenance personnel to operate, service, and maintain F-4 power plants and related systems.

Instruction: Lectures and practical exercises in F-4 power plant and related systems operation, servicing, and maintenance, including fuel system components and location, venting and pressurization, aircraft refueling, fuel pumps, fuel control, and rigging; engine removal and installation of afterburners; periodic inspections, preservation and deprecration, and corrosion control; and pneumatic systems and starting systems.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (7/74).

NV-1704-0181
J33-P/6A/AA INTERMEDIATE MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, Los Angeles, CA; Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Oceana, VA; Air Maintenance Training Detachment, Whitby Island, WA; Air Maintenance Training Detachment, Cherry Point, NC.
Length: 3 weeks (120 hours).
Exhibit Dates: 10/67-Present.
Objectives: To train enlisted personnel to maintain the J35 jet engine.

Instruction: Lectures and practical exercises in the maintenance and repair, including engine introduction, repair and replacement of engine components, cold section disassembly for complete repair activity; hot section assembly; lubrication system, engine fuel system, electrical, ignition, and aircraft systems cleaning, inspection and repair; and assembly, test, and installation procedures.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (7/74).

NV-1704-0182
F/RF-B/1 POWER PLANT AND RELATED SYSTEMS MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, Miramar, CA; Air Maintenance Training Detachment, Oceana, VA; Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Whitby Island, WA.
Length: 3 weeks (104 hours).
Exhibit Dates: 3/68-3/68.
Objectives: To train maintenance personnel to maintain J-79-GE-8/10 power plant systems and F/RF-B/1 fuel systems.

Instruction: Lectures and practical exercises in J-79-GE-8/10 power plant systems and the F/RF-B/1 fuel systems maintenance, troubleshooting, and servicing, including personnel, aircraft, and equipment safety; system description and operation; fuel system maintenance; power plant, engine description, fuel system, nozzle system, ignition, lubrication, air induction, and forward cockpit; and aircraft and engine-related systems components description, maintenance, and troubleshooting.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (7/74).

NV-1704-0183
AIRCRAFT LAUNCH AND RECOVERY EQUIPMENT MAINTENANCE OFFICER (C-7/11 CATAPULT), CLASS O

Course Number: Not available.
Location: Air Technical Training Center, Lakehurst, NJ.
Length: 9 weeks (368 hours).
Exhibit Dates: 10/70-Present.
Objectives: To train selected commissioned officers to operate, inspect, and maintain the C-7/11 catapults and Mark 7 arresting gear and barricades.

Instruction: Lectures and practical exercises in the operation, maintenance, and inspection of the C-7/11 catapults and Mark 7 arresting gear and barricades. Topics include fundamentals, description of aircraft launching equipment and aircraft recovery equipment, and aircraft launching and recovery procedures.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (7/74).

NV-1704-0184
AIRCRAFT LAUNCH AND RECOVERY, EQUIPMENT MAINTENANCE OFFICER (C-7/11 CATAPULT), CLASS O

Course Number: C-2G-210.
Location: Air Technical Training Center, Lakehurst, NJ.
Length: 4 weeks (120-160 hours).
Exhibit Dates: 10/70-Present.
Objectives: To train officers in aircraft launch and recovery operations and procedures.

Instruction: Lectures and practical exercises in aircraft launch and recovery operations and procedures, including equipment familiarization, operations, aircraft launch and recovery equipment, catapults and arresting gear, steam catapults, and associated equipment, arresting gear, aircraft launch and recovery procedures, aircraft launching buillets, launching procedures, recovery operations, and functions of V-2 division officer.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/74).

NV-1704-0185
A-4 INTEGRATED ELECTRICAL SYSTEMS

ORGANIZATIONAL MAINTENANCE

Course Number: C-602-3728.
Location: Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Beaufort, SC.
Length: 6 weeks (248 hours).
Exhibit Dates: 2/73-Present.
Objectives: To train enlisted personnel to maintain A-4 aircraft electrical systems.

Instruction: Lectures and practical exercises in A-4 electrical systems and the maintenance of A-4 aircraft.
electrical systems, including electrical and instrument systems, system integration, functional analysis, all-attitude and low-altitude control system, remote standby attitude indication system, automatic flight control system, navigational computer, and planned maintenance procedures.

Credit Recommendation: In the vocational certificate category, 4 semester hours in electrical laboratory (4/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electrical laboratory (4/74).

NV-1704-0186
AVIATION FUEL SYSTEMS, CLASS C
Course Number: C-821-2011
Location: Air Technical Training Center, Lakehurst, NJ; Air Technical Training Center, Philadelphia, PA
Length: 5 weeks (200 hours).
Exhibit Dates: 5/70-6/70.
Objectives: To train selected enlisted personnel to operate and maintain aviation fuel systems.

Instruction: Lectures and practical exercises in aviation fuel systems operation and maintenance, including fuel quality control and portable equipment, store-based refueling equipment, low-capacity gasoline system and inert-gas producer, and the JP-5 fuel system.

Credit Recommendation: In the vocational certificate category, 3 semester hours in aviation technology baccalaureate/associate degree category, 3 semester hours in aviation technology (7/74).

NV-1704-0187
AIRCRAFT LAUNCH AND RECOVERY EQUIPMENT C-13 AND C-13 MOD 1 CATAPILOTS, CLASS C
(Aircraft Launch and Recovery Equipment C-13 Catapult, Class C)
Course Number: C-680-2011
Location: Air Technical Training Center, Lakehurst, NJ
Length: 9 weeks (352 hours).
Exhibit Dates: 8/70-1/73
Objectives: To train personnel in the operation, inspection, and maintenance of C-13 catapults and associated equipment, Mark 7 Mods 1, 2, and 3 arresting gear and barricade equipment.

Instruction: Lectures and practical exercises in aircraft launch and recovery equipment (C-13 and C-13 Mod 1 catapults), class C, including basic information relative to catapult and arresting gear, specific aircraft launching equipment, basic information relative to all-seaing catapults, steam systems, launching engine system, retraction engine system, bridle-tensioning system, control system, associated equipment, bridle-arrestor, barricade, and operation of catapult, aircraft recovery equipment, and shore-based arresting gear.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/74).

NV-1704-0188
F/R-F/RF-4B/J + J79-GE-6/10 POWER PLANT ORGANIZATIONAL MAINTENANCE
Course Number: Not available
Location: Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Cherry Point, NC
Length: 2 weeks (96 hours).
Exhibit Dates: 7/71-7/71.
Objectives: To train maintenance personnel in the lower-division baccalaureate/associate degree category, 2 semester hours in electrical laboratory (4/74).

Instruction: Lectures and practical exercises in the maintenance and repair of the F/R-F/RF-4B/J aircraft's airframe and hydraulic systems, including structural repairs, flight controls, landing gear, and steering systems.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in aircraft structural repair and hydraulics (7/74).

NV-1704-0192
F/R-F/RF-4B/J AIRCRAFT MECHANIC ORGANIZATIONAL MAINTENANCE
Course Number: C-600-3819
Location: Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Cherry Point, NC
Length: 2 weeks (64-75 hours).
Exhibit Dates: 7/71-7/71.
Objectives: To train maintenance personnel to maintain F/R-F/RF-4B/J aircraft and J79-GE-6/10 engines at the organizational level.

Instruction: Lectures and practical exercises in the maintenance of F/R-F/RF-4B/J aircraft and J79-GE-6/10 engines, including armament, hydraulics, and airframes, fuel and refuel, and pressurization and vent systems; survival equipment, fuel transfer, basic engine description, power transfer, basic engine description; power transfer, basic engine description, power transfer, basic engine description, power transfer.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in aircraft maintenance (7/74).

NV-1704-0193
KC-130F PROPELLER ORGANIZATIONAL MAINTENANCE
Course Number: Not available
Location: Air Maintenance Training Detachment, El Toro, CA
Length: 2 weeks (64 hours).
Exhibit Dates: 1/70-1/70.
Objectives: To train maintenance personnel to operate, test, maintain, and repair the propeller of the KC-130 aircraft.

Instruction: Lectures and practical exercises in the operation, testing, maintenance, and repair of the propeller of the KC-130 aircraft, including component assembly and disassembly for the Hamilton Standard 54-660 propeller, electrical control system, pressure and other testing procedures, and installation and adjustment procedures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/74).

NV-1704-0194
H-46 HYDRAULIC SYSTEM ORGANIZATIONAL MAINTENANCE
Course Number: C-602-3416
Location: Air Maintenance Training Detachment, New River, NC; Air Maintenance Training Detachment, Santa Ana, CA
Length: 2 weeks (64-80 hours).
Exhibit Dates: 8/70-8/70.
Objectives: To train maintenance personnel to maintain H-46 hydraulic systems.

Instruction: Lectures and practical exercises in the maintenance of H-46 hydraulic systems, including wheel brake, flight control, and utility hydraulic systems components and operation.

Credit Recommendation: In the vocational certificate category, 2 semester hours in aircraft hydraulic laboratory (6/75); in the lower-division baccalaureate/associate degree category, 1 semester hour in aircraft hydraulic laboratory (6/75).
NV-1704-0195
E-1B AIRFRAME AND HYDRAULIC SYSTEMS
ORGANIZATIONAL MAINTENANCE
Course Number: Not available.
Location: Air Maintenance Training Detachment, Whidbey Island, WA.
Length: 3 weeks (120 hours).
Exhibit Dates: 3/68-7/69.
Objectives: To train maintenance personnel to operate and maintain the E-1B aircraft.

NV-1704-0198
A-3 S-5 AUTO PILOT MAINTENANCE
Course Number: C-602-3704.
Location: Air Maintenance Training Detachment, Whidbey Island, WA.
Length: 1 week (40 hours).
Exhibit Dates: 3/68-7/69.
Objectives: To train maintenance personnel to operate and maintain the S-5 autopilot.

NV-1704-0200
AIRCRAFT LAUNCH AND RECOVERY EQUIPMENT MAINTENANCE OFFICER (C-13 CATAPULT), CLASS O
Course Number: Not available.
Location: Air Technical Training Center, Lakehurst, NJ.
Length: 12 weeks (360 hours).
Exhibit Dates: 10/70-Present.
Objectives: To train officers to operate, inspect, and maintain the C-13 catapults and Mark 7 arresting gear and barricades.

NV-1704-0201
F/RF-IB J79-GE-6/8A COLD SECTION REPAIR
Course Number: Not available.
Location: Air Maintenance Training Detachment, El Toro, CA.
Length: 3 weeks (120 hours).
Exhibit Dates: 3/68-Present.
Objectives: To train maintenance personnel in intermediate cold-section repair.

NV-1704-0202
F/RF-IB J79-GE-6/8A HOT SECTION AND RELATED SYSTEMS INTERMEDIATE MAINTENANCE
Course Number: Not available.
Location: Air Maintenance Training Detachment, El Toro, CA.
Length: 4 weeks (160 hours).
Exhibit Dates: 3/68-Present.
Objectives: To train maintenance personnel in intermediate maintenance on the F/RF-IB J79-GE-6/8A hot section and related systems.

NV-1704-0203
A-7E C-1815 ARMAMENT STATION CONTROL UNIT INTERMEDIATE MAINTENANCE
Course Number: C-646-3788.
Location: Air Maintenance Training Detachment, Lemoore, CA.
Length: 2 weeks (92 hours).
Exhibit Dates: 9/72-Present.
Objectives: To train aviation personnel to maintain C-1815 armament station control units.

NV-1704-0204
UH-1N POWER PACKAGE
ORGANIZATIONAL MAINTENANCE
Course Number: C-600-3357.
Location: Air Maintenance Training Detachment, Pemberton, CA.
Length: 2 weeks (80 hours).
Exhibit Dates: 10/72-Present.
Objectives: To train maintenance personnel to maintain the UH-1N power package.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/74).

NV-1704-0199
AVIATION FUEL SYSTEMS, CLASS C
Course Number: Not available.
Location: Air Technical Training Center, Lakehurst, NJ.
Length: 3 weeks (120 hours).
Exhibit Dates: 10/70-Present.
Objectives: To train personnel to operate and maintain aviation fuel systems, including shore-based refueling equipment, fuel quality control and portable equipment, aviation gasoline/JP-5 fuel systems, operation of the aviation fuel systems, administrative and safety precautions, pumps and filters, and purifiers and fueling stations.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/74).

Location: Air Maintenance Training Detachment, Norfolk, VA.
Length: 2 weeks (80 hours).
Exhibit Dates: 9/72-Present.
Objectives: To train maintenance personnel to maintain the F/RF-IB J79-GE-6/8A hot section and related systems.

Instruction: Lectures and practical exercises in the maintenance of the F/RF-IB J79-GE-6/8A hot section and related systems. Course includes inspection, disassembly, cleaning, minor repair, and assembly techniques and procedures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (8/74).

NV-1704-0205
HH-2D/SH-2D AUTOMATIC STABILIZATION EQUIPMENT INTERMEDIATE MAINTENANCE
Course Number: C-602-3391.
Location: AFP Maintenance Training Detachment, Lakehurst, NJ.
Length: 2 weeks (92 hours).
Exhibit Dates: 8/73-Present.
Objectives: To train enlisted personnel to maintain and test the automatic stabilization equipment in HH-2D/SH-2D helicopters.

Instruction: Theoretical and practical training on gyro, accelerometer, synchro, amplifier, mod-demod, and synchronizer systems.
Credit Recommendation: In the vocational certificate category, 2 semester hours in aircraft electronic maintenance (6/75), and in the lower-division baccalaureate/associate degree category, 1 semester hour in aircraft electronic maintenance laboratory (6/75).

 NV-1704-0206
P-3 STRUCTURES, HYDRAULIC POWER AND FLIGHT CONTROLS ORGANIZATIONAL MAINTENANCE
Course Number: C-603-351
Location: Air Maintenance Training Detachment, Potomac River, MD, Air Maintenance Training Detachment, Moffett Field, CA.
Length: 4 weeks (120 hours).
Exhibit Dates: 5/73-Present.
Objectives: To provide personnel with the knowledge and skills required to perform maintenance and repair of the P-3 aircraft structures, hydraulic, and flight control systems.

 NV-1704-0207
UH-1 ELECTRICAL SYSTEMS ORGANIZATIONAL MAINTENANCE
Course Number: C-602-3354
Location: Air Maintenance Training Detachment, Ct. Pendleton, CA.
Length: 2 weeks (80 hours).
Exhibit Dates: 8/73-5/74.
Objectives: To train maintenance technicians in the maintenance and repair of the UH-1N helicopter electrical systems.
Instruction: In DC power distribution, AC power systems, batteries, wiring diagrams, and warning circuits.

 NV-1704-0208
1. AIRCREW SURVIVAL EQUIPMENTMAN, CLASS C7
2. ADVANCED AIRCREW SURVIVAL EQUIPMENTMAN
(Aircrrew Survival Equipmentman J School, Class B)
Course Number: C-602-2011
Location: Air Technical Training Center, Lackhurst, NJ.
Objectives: To provide personnel with the comprehensive theoretical, practical, and administrative background necessary to perform duties in operating squadrons.
Instruction: Lectures and practical exercises in aircraft survival and material management; major and minor repairs on sewing machines, liquid oxygen: rigid seat survival seats and oxygen systems test stands; oxygen regulators; and advanced parachutes.
Credit Recommendation: In the vocational certificate category, 2 semester hours in industrial management, 5 in aeronautical, and 1 in sewing machine repair and operation (5/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in industrial management and in aeronautical (5/74).

 NV-1704-0209
F-14A ENVIRONMENTAL/ESCAPE SYSTEM SPECIALIST (CREW LEADER) ORGANIZATIONAL MAINTENANCE
Course Number: C-602-3899.
Location: Air Maintenance Training Detachment, Miramar, CA.
Length: 4 weeks (175 hours).
Exhibit Dates: 9/73-Present.
Objectives: To train technicians as supervisory personnel in the maintenance and operation of F-14 aircraft environmental/escape systems.
Instruction: In pneumatics, pressurization, air conditioning and refrigeration, high pressure air and liquid principles, liquid oxygen phenomena, and pressure suit operation.
Credit Recommendation: In the vocational certificate category, 3 semester hours in aircraft pressurization and air conditioning, systems maintenance (6/75), in the lower-division baccalaureate/associate degree category, 2 semester hours in aircraft pressurization and air conditioning systems maintenance (6/75).

 NV-1704-0210
F-14A ENVIRONMENTAL AND ESCAPE SYSTEMS TECHNICIAN (CREW MEMBER) ORGANIZATIONAL MAINTENANCE
Course Number: C-602-3899.
Location: Air Maintenance Training Detachment, Miramar, CA.
Length: 3-4 weeks (140 hours).
Exhibit Dates: 4/73-Present.
Objectives: To train technicians in the maintenance and operation of F-14 aircraft environmental/escape systems.
Instruction: In pneumatics, pyrotechnic components, pressurization systems, air conditioning, liquid oxygen handling, and servicing.
Credit Recommendation: In the vocational certificate category, 2 semester hours in aircraft pressurization and air conditioning systems maintenance (6/75); in the lower-division baccalaureate/associate degree category, 1 semester hour in aircraft pressurization and air conditioning systems maintenance (6/75).

 NV-1704-0211
F-14A ORGANIZATIONAL MAINTENANCE SUPERVISOR'S FAMILIARIZATION
Course Number: C-000-3896.
Location: Air Maintenance Training Detachment, Miramar, CA.
Length: 2 weeks (70 hours).
Exhibit Dates: 8/73-Present.
Objectives: To train supervisory personnel in the evaluation and assignment of maintenance tasks relating to the F-14 aircraft.
Instruction: Limited instruction on basic aircraft topics including electrical, hydraulic, flight control, power plant, avionics, and weapons systems.
Credit Recommendation: In the vocational certificate category, 2 semester hours in general aircraft maintenance (6/75).

 NV-1704-0212
F-14A POWER PLANT AND RELATED SYSTEM ORGANIZATIONAL MAINTENANCE SUPERVISOR'S FAMILIARIZATION
Course Number: C-601-3896.
Location: Air Maintenance Training Detachment, Miramar, CA.
Length: 3 weeks (105 hours).
Exhibit Dates: 8/73-Present.
Objectives: To train enlisted personnel to perform organizational level maintenance on the F-14 aircraft fuel system and power plant components.
Instruction: Instruction in fuel systems, including tanks, plumbing, pumps, vents, pressurization, electrical caution and warning systems, and in power plant topics including starting and ignition systems, lubrication, control rigging, and troubleshooting.
Credit Recommendation: In the vocational certificate category, 2 semester hours in aircraft fuel systems and turbine engine maintenance (6/75); in the lower-division baccalaureate/associate degree category, 1 semester hour in aircraft fuel systems and turbine engine maintenance (6/75).

 NV-1704-0213
FIRST TOUR PILOT F-14C COMMUNICATIONS OPERATOR
Course Number: D-2D-0011
Location: Fleet Airborne Electronics Training Unit, Atlantic, Norfolk, VA.
Length: 2 weeks (67 hours).
Objectives: To train first tour pilots to qualify as airborne communications operators.
Instruction: Classroom instruction in basic communications, message preparation, theory of radio wave propagation and antenna characteristics, and operation of aircraft communications systems.
Credit Recommendation: In the vocational certificate category, 2 semester hours in communications (6/75).

 NV-1704-0214
F-14 WEAPONS SYSTEM TECHNICIAN ORGANIZATIONAL MAINTENANCE
Course Number: C-112-3896.
Location: Air Maintenance Training Detachment, Miramar, CA.
Length: 7 weeks (250 hours).
Exhibit Dates: 11/73-Present.
Objectives: To train enlisted personnel to maintain specific weapons systems on the F-14 aircraft.
Instruction: Instruction in system functional operation, checkout procedures, test equipment utilization, and safety procedures. Emphasis is placed on data processing, data links, transmitters, receivers, pulse techniques, and missile guidance fundamentals.
Credit Recommendation: In the vocational certificate category, 4 semester hours in aviation electronics laboratory (6/75); in the lower-division baccalaureate/associate degree category, 2 semester hours in aviation electronics laboratory (6/75).

 NV-1704-0215
F-14A AIRFRAME AND HYDRAULIC SYSTEMS SPECIALIST (CREW LEADER) ORGANIZATIONAL MAINTENANCE
Course Number: C-602-3900.
Location: Air Maintenance Training Detachment, Miramar, CA.
COURSE EXHIBITS

Length: 3-4 weeks (140 hours)

Exhibit Dates: 9/73-Present

Objectives: To train personnel in the operation and maintenance of the F-14 aircraft hydraulic system and related subsystems.

Instruction: Instruction in hydraulic principles, and equipment and specific training in systems and components of the F-14 aircraft hydraulic system.

Credit Recommendation: In the vocational certificate category, 2 semester hours in aircraft hydraulic systems maintenance (6/75), in the lower-division baccalaureate/associate degree category, 1 semester hour in aircraft hydraulic systems maintenance (6/75).

NV-1704-0216

F-14A AIRFRAME AND HYDRAULIC SYSTEMS TECHNICIAN (CREW MEMBER) ORGANIZATIONAL MAINTENANCE

Course Number: C-602-3901

Location: Air Maintenance Training Detachment, Miramar, CA.

Length: 3 weeks (122 hours)

Exhibit Dates: 7/73-Present

Objectives: To train enlisted personnel in the operation and maintenance of the F-14 hydraulic system and related subsystems.

Instruction: Instruction in hydraulic principles, and equipment and specific training in systems and components of the F-14 aircraft hydraulic system.

Credit Recommendation: In the vocational certificate category, 2 semester hours in aircraft hydraulic systems maintenance (6/75), in the lower-division baccalaureate/associate degree category, 1 semester hour in aircraft hydraulic systems maintenance (6/75).

NV-1704-0217

F-14A COMMUNICATIONS, NAVIGATION/DISPLAYS, ELECTRONIC WARFARE ORGANIZATIONAL MAINTENANCE TECHNICIAN

Course Number: C-102-3896

Location: Air Maintenance Training Detachment, Miramar, CA.

Length: 5 weeks (196 hours)

Exhibit Dates: 11/73-Present

Objectives: To train enlisted personnel in the maintenance of the communications, navigation, and electronic warfare systems on the F-14 aircraft.

Instruction: Specialized instruction in radar beacon systems, UHF communications, navigation subsystems, and electronic warfare systems.

Credit Recommendation: In the vocational certificate category, 4 semester hours in aircraft communications, navigation, and electronic warfare systems maintenance (6/75), in the lower-division baccalaureate/associate degree category, 2 semester hours in aircraft communications, navigation, and electronic warfare systems maintenance (6/75).

NV-1704-0218

F-14A ELECTRICAL SYSTEMS TECHNICIAN (CREW MEMBER) ORGANIZATIONAL MAINTENANCE

Course Number: C-602-3897

Location: Air Maintenance Training Detachment, Miramar, CA.

Length: 3-4 weeks (160 hours)

Exhibit Dates: 5/73-Present

Objectives: To train enlisted personnel in the maintenance of electrical systems on the F-14 aircraft.

Instruction: Lectures and practical exercises on applicable test equipment, publications, and safety procedures. Specific topics include circuit theory of power supply, lighting, safety, armament, and control assemblies.

Credit Recommendation: In the vocational certificate category, 3 semester hours in aircraft electrical repair and maintenance (6/75), in the lower-division baccalaureate/associate degree category, 1 semester hour in aircraft electrical repair and maintenance (6/75).

NV-1704-0219

NAVAL FLIGHT OFFICER PIC COMMUNICATIONS OPERATOR

Course Number: D-2D-0012

Location: Fleet Airborne Electronics Training Unit; Atlantic, Norfolk, VA.

Length: 4 weeks (134 hours)

Exhibit Dates: 4/68-Present

Objectives: To train flight officers (non-pilots) to be airborne communications officers.

Instruction: Lectures and practical exercises in basic communications, teletype operation, message preparation, theory of radio wave propagation and antenna characteristics, and operation of aircraft communications equipment.

Credit Recommendation: In the vocational certificate category, 3 semester hours in communications (6/75).

NV-1704-0220

AIR CONTROLMAN—CARRIER AIR TRAFFIC CONTROL CENTER UTILIZATION—OPERATOR

Course Number: K-222-0051

Location: Fleet Combat Direction Systems Training Center, Pacific, San Diego, CA.

Length: 5 weeks (140 hours)

Exhibit Dates: 7/74-Present

Objectives: To train enlisted personnel to perform various aircraft operations duties aboard aircraft carriers.

Instruction: Lectures and practical exercises in aircraft carrier organization and administration; shipboard aircraft handling; and shipboard flight operations and associated electronic equipment, including IFF, radar, and communications.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (6/75).

NV-1704-0221

F-14 ARMAMENT SYSTEMS MAINTENANCE TECHNICIAN (CREW MEMBER) ORGANIZATIONAL MAINTENANCE

Course Number: C-646-3896

Location: Air Maintenance Training Detachment, Miramar, CA.

Length: 3 weeks (105 hours)

Exhibit Dates: 11/73-Present

Objectives: To train enlisted personnel in the loading, servicing, and maintenance of the F-14 weapons system.

Instruction: Practical exercises in weapons loading, safety procedures, and use of specialized equipment peculiar to the F-14 weapons system.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (6/75).

NV-1704-0222

EA-6B J-52-P-408 POWER PLANTS AND RELATED SYSTEMS ORGANIZATIONAL MAINTENANCE

Course Number: C-601-3762

Location: Air Maintenance Training Detachment, Whidbey Island, WA.

Length: 2 weeks (80 hours)

Exhibit Dates: 5/73-Present

Objectives: To train enlisted personnel to maintain the hydraulic system on the EA-6B aircraft.

Instruction: Lectures and practical exercises in the maintenance of all hydraulic systems and components of the EA-6B aircraft including the use of test equipment and troubleshooting procedures.

Credit Recommendation: In the vocational certificate category, 2 semester hours in aircraft hydraulic systems maintenance (6/75), in the lower-division baccalaureate/associate degree category, 1 semester hour in aircraft hydraulic systems maintenance (6/75).

NV-1704-0223

EA-6B HYDRAULICS AND FLIGHT CONTROL ORGANIZATIONAL MAINTENANCE

Course Number: C-602-3779

Location: Air Maintenance Training Detachment, Whidbey Island, WA.

Length: 2 weeks (80 hours)

Exhibit Dates: 5/73-Present

Objectives: To train enlisted personnel to maintain the hydraulic system on the EA-6B aircraft.

Instruction: Lectures and practical exercises in the maintenance of all hydraulic systems and components of the EA-6B aircraft including the use of test equipment and troubleshooting procedures.

Credit Recommendation: In the vocational certificate category, 2 semester hours in aircraft hydraulic systems maintenance (6/75), in the lower-division baccalaureate/associate degree category, 1 semester hour in aircraft hydraulic systems maintenance (6/75).

NV-1704-0224

E-2B/C-2A AVIATION ELECTRICIAN ORGANIZATION MAINTENANCE

Course Number: C-602-3479

Location: Air Maintenance Training Detachment, North Island, CA.

Length: 4 weeks (118 hours)

Exhibit Dates: 5/73-Present

Objectives: To train enlisted personnel to maintain the electrical system on the E-2B/C-2A aircraft.

Instruction: Lectures and practical exercises in AC/DC power systems, de-icing, pressurization, air conditioning, and instrument and automatic flight control systems.

Credit Recommendation: In the vocational certificate category, 2 semester hours in aircraft electrical systems maintenance (6/75), in the lower-division baccalaureate/associate degree category, 1 semester hour in aircraft electrical systems maintenance (6/75).

NV-1704-0225

E-2B ATDS OPERATOR (NAVAL FLIGHT OFFICER)

Course Number: D-2D-0016

Location: Carrier Airborne Early Warning Training Squadron 20, Norfolk, VA.

Length: 16 weeks (173 hours)

Exhibit Dates: 5/74-Present

Objectives: To provide advanced training for flight officers (non-pilots) in the air-
borne tactical data system incorporated in the E-2B aircraft.

Instruction: Instruction includes ground training on weapon system operation and flight training in the utilization of the weapon system.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (6/75).

NV-1704-0226

E-2 AIRBORNE TACTICAL DATA SYSTEMS (E-2B Naval Flight Officer)

Course Number: E-2D-0017

Location: Carrier Airborne Early Warning Training Squadron 110, North Island, CA.

Length: 20-30 weeks

Exhibit Dates: 1/73-Present.

Objectives: To prepare flight officers (non-pilots) and student flight officers for duty in the E-2B airborne tactical data system.

Instruction: Student flight officers complete 10 weeks of air intercept control training and are designated as Air Intercept Controllers before entering the final 20 weeks of training. Classroom and flight training includes laboratory and exercise simulation in tactical data system operation, air intercept control displays; and interpretation of intercept and tracking displays.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (6/75).

NV-1704-0227

E-2 POWER PLANTS AND RELATED SYSTEMS ORGANIZATIONAL MAINTENANCE

Course Number: C-601-14

Location: Air Maintenance Training Detachment, Norfolk, VA.

Length: 2 weeks (80 hours).

Exhibit Dates: 1/73-Present.

Objectives: To train enlisted personnel in the maintenance procedures for the R-1820-82A reciprocating engine.

Instruction: Lectures and practical exercises in maintenance techniques used on reciprocating engines, including removal and installation, operation, checks, troubleshooting, and related systems (external oil, propeller, fuel, carburetor, ignition) maintenance.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics laboratory (6/75).

NV-1704-0228

AVIONICS REPAIRMAN, CLASS C

Course Number: C-100-14

Location: Air Technical Training Center, Memphis, TN.

Length: 5 weeks (167 hours).

Exhibit Dates: 11/73-Present.

Objectives: To provide basic avionics/electronics organizational maintenance training to selected Marine Corps personnel so that they may assume the duties of an Avionics Repairman in an Organizational Maintenance Activity (OMA).

Instruction: Lectures and practical exercises to include instruction in aircraft electronic systems, soldering, cable fabrication, test equipment, electrical systems, electrical/electronic components, and repair aviation systems.

Credit Recommendation: In the vocational certificate category, 4 semester hours in basic avionics/electronics (6/75).

NV-1704-0229

AN/AVM-11 (V) HEAD UP DISPLAY TEST SET INTERMEDIATE MAINTENANCE

Course Number: C-104-3784, C-150-3785

Location: Air Maintenance Training Detachment, Mira Mar, CA; Air Maintenance Training Detachment, Cecil Field, FL.

Length: 12 weeks (480 hours).

Exhibit Dates: 7/73-Present.

Objectives: To provide instruction in the calibration and maintenance of a specific electronic test set.

Instruction: Lectures and practical exercises in troubleshooting, circuit analysis, and repair, maintenance, and calibration of the AN/AVM-11 (V) HUD test set. Instruction covers service unit analysis, control unit analysis, line switch unit, and general and special purpose functional test units.

Credit Recommendation: In the vocational certificate category, 6 semester hours in advanced avionics maintenance (6/75).

NV-1704-0230

AN/ASH-10 (V) FLIGHT RECORDER-LOCATOR SYSTEM INTERMEDIATE MAINTENANCE

Course Number: C-102-3601

Location: Air Maintenance Training Detachment, Norfolk, VA.

Length: 3 weeks (120 hours).

Exhibit Dates: 7/73-Present.

Objectives: To provide instruction in the maintenance of flight recorder-locator systems to include analysis of the system, subsystems, and repairable components.

Instruction: Practical application of learned procedures for checkout, adjustment, troubleshooting, and repair of electronic systems and circuits, including battery charger, signal data sound recorder, digital/analog converters, encoders, and microphones.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronic flight recorder maintenance (6/75).

NV-1704-0231

F-4J AN/AWG-10 MISSILE CONTROL SYSTEM (ENLISTED) FAMILIARIZATION

Course Number: C-211-012

Location: Air Maintenance Training Detachment, Miramar, CA; Air Maintenance Training Detachment, Oceana, VA; Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Chery Point, NC.

Length: 12 weeks (80 hours).

Exhibit Dates: 12/69-Present.

Objectives: To provide enlisted personnel with familiarization with the F-4J missile control system.

Instruction: Lectures and practical exercises in the operation and testing of an aircraft missile control system.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/75).

NV-1704-0232

E-2B WEAPON SYSTEM TRAINER (WST)

Course Number: E-2D-0202

Location: Carrier Airborne Early Warning Training Squadron 110, Miramar, CA.

Length: 5 weeks (152 hours).

Exhibit Dates: 1/70-Present.

Objectives: To train personnel to utilize the full capabilities of the E-2B weapon system.

Instruction: Lectures and practical exercises in introduction to simulator; use of laboratory instruments including scope comports, data entry systems and intercept control displays; and interpretation of intercept and tracking displays.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (6/75).

NV-1704-0233

E-1B NAVAL FLIGHT OFFICER AND AIRCREWMAN

Course Number: D-2D-0017, D-221-0016

Location: Carrier Airborne Early Warning Training Squadron 120, Norfolk, VA.

Length: 16 weeks (200 hours).

Exhibit Dates: 7/56-7/65.

Objectives: To train personnel to operate and maintain the APS-82 radar and associated systems and to perform any E-1B mission.

Instruction: Lectures and practical exercises to include E-1B avionics systems and maintenance and troubleshooting procedures on specialized electronic systems.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics (6/75).

NV-1704-0234

1. AIRCREW SURVIVAL EQUIPMENTMAN, CLASS A1

2. BASIC AIRCREW SURVIVAL EQUIPMENTMAN

(Aircrew Survival Equipmentman, Class A)

(Parachute Rigger, Class A)

3. PARACHUTE RIGGER (MAINTENANCE)

Course Number: Version 1: C-162-2010.


Location: Air Technical Training Center, Lakelhurst, NJ.


Objectives: To provide the basic skills and knowledge necessary to maintain survival equipment and associated machinery.

Instruction: All Versions: Classroom instruction in the operation and maintenance of aircraft, oxygen, and carbon dioxide systems and survival equipment. Version 1: Topics include aviation fundamentals; basic and advanced parachute skills and techniques; and sewing machine and fabric work involving machine operation, fabric layout, and sewing projects.

Credit Recommendation: Version 1: In the vocational certificate category, 5 semester hours in aeronautical technology and 2 in sewing and machinery (5/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in aeronautical
NY-1704-0235
H-53 ELECTRICAL AND INSTRUMENT SYSTEMS ORGANIZATIONAL MAINTENANCE

Course Number: C-602-2444.
Location: Air Maintenance Training Detachment, Santa Ana, CA.
Length: 2 weeks (80 hours).
Exhibit Dates: 5/70-Present.
Objective: To provide instruction in the organizational level maintenance of electrical and instrument systems of the H-53 aircraft.

Instruction: Practical application of H-53 systems familiarization topics and transistor fundamentals in the operation, maintenance, and servicing of the aircraft electrical and instrument systems.

Credit Recommendation: In the vocational certificate category, 2 semester hours in aircraft electrical and instrument systems maintenance (6/75).

NY-1704-0236
H-53 ELECTRICAL AND INSTRUMENTS - INTERMEDIATE MAINTENANCE

Course Number: C-602-2444.
Location: Air Maintenance Training Detachment, Santa Ana, CA.
Length: 2 weeks (80 hours).
Exhibit Dates: 5/70-Present.
Objective: To train personnel in the operating, servicing, and maintenance of the H-53 aircraft instruments system.

Instruction: Lectures and practical exercises in the application of transistor fundamentals to power systems, light systems, instruments, heaters, and controllers. Topics include block diagram description and troubleshooting.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electrical and instrument maintenance (6/75).

NY-1704-0237
G-10 AIRCRAFT MECHANIC
ORGANIZATIONAL MAINTENANCE

Course Number: C-600-3502.
Location: Air Maintenance Training Detachment, El Toro, CA.
Length: 4 weeks (160 hours).
Exhibit Dates: 8/73-Present.
Objective: To provide instruction in the organizational level maintenance of the Lockheed C-130 turbo-prop (heavy transport) aircraft.

Instruction: Classroom and practical instruction in the latest maintenance techniques, modifications and alterations, systems operation, and servicing of the aircraft.

Credit Recommendation: In the vocational certificate category, 3 semester hours in advanced aircraft maintenance and repair (6/75).

NY-1704-0238
AVIATION MACHINIST'S MATE H (HELICOPTER), CLASS A

Course Number: Not available.
Location: Air Technical Training Center, Memphis, TN.
Length: 12 weeks (464 hours).
Exhibit Dates: 10/56-12/68.
Objective: To train selected Marine Corps personnel to maintain and repair helicopters.

Instruction: Lectures and practical exercises in the maintenance and mechanics of helicopters, to include power plant and line operation; fuel metering, ignition, rotor transmission, and flight control familiarization, function, operation, replacement, inspection, and servicing.

Credit Recommendation: In the vocational certificate category, 18 semester hours in helicopter mechanics (6/74); in the lower-division baccalaureate/associate degree category, 9 semester hours in helicopter mechanics (6/74).

NY-1704-0239
AVIATION STRUCTURAL MECHANIC, CLASS B

Course Number: None.
Location: Air Technical Training Center, Memphis, Millington, TN.
Length: 26-28 weeks (960-1040 hours).
Exhibit Dates: 9/77-10/65.
Objective: To train personnel to perform as aviation structural mechanisms.

Instruction: Lectures and practical exercises in fundamentals of mathematics and electricity, publications and reports, utilization and interpretation of schematic drawings, aircraft metals, welding, non-metallic materials, aircraft hydraulics, and airframes and operational maintenance.

Credit Recommendation: In the vocational certificate category, 18 semester hours in aircraft structural mechanics (6/75); in the lower-division baccalaureate/associate degree category, 9 semester hours in aircraft structural mechanics (6/75).

NY-1706-0001
CALCULATOR REPAIR CLASS C
(Instrumentman (Calculator Repair), Class C)

Course Number: A-670-0013.
Location: Service Schools Command, Great Lakes, IL.
Length: 18 weeks (555 hours).
Exhibit Dates: 2/70-Present.
Objective: To train petty officers to test, repair, overhaul, and maintain Friden, Marchant, and Monroe calculators.

Instruction: Lectures and practical exercises in the testing, repair, overhaul, and maintenance of Friden, Marchant, and Monroe calculators.

Credit Recommendation: In the vocational certificate category, 10 semester hours in aircraft electrical and instrument systems maintenance (6/75).

NY-1706-0002
TELETYPewriter TT-299 B/UG WATCHSTANDERS REFRESHER MAINTENANCE

Course Number: L-160-0111.
Location: Submarine Training Facility, Pearl Harbor, HI.
Length: 3 weeks (90 hours).
Exhibit Dates: 12/69-Present.

Objective: To train enlisted personnel to maintain and repair the TT-299 B/UG teletypewriter set.

Instruction: Lectures and practical exercises in the maintenance and repair of the TT-299 B/UG teletypewriter set. Course includes a detailed study of the electrical and mechanical features of the TT-299 B/UG teletypewriter and comprehensive coverage of typewriter maintenance.

Credit Recommendation: In the vocational certificate category, 3 semester hours in typewriter repair (6/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in typewriter repair (6/74).

NY-1706-0003
ADVANCED OFFICE MACHINE REPAIR, CLASS C

Course Number: A-670-0027.
Location: Instrumentman Class C School, Great Lakes, IL.
Length: 25 weeks (780 hours).
Exhibit Dates: 6/72-6/77.
Objective: To train personnel to maintain and repair office machines.

Instruction: Lectures and practical exercises in identifying, testing, diagnosing, repairing, overhauling, and adjusting specific types of adding machines, electric typewriters, and calculators.

Credit Recommendation: In the vocational certificate category, 10 semester hours in office machine maintenance (6/75); in the lower-division baccalaureate/associate degree category, 4 semester hours in office machine maintenance (6/75).

NY-1708-0001
RIVER ASSAULT CRAFT TRAINING

Course Number: H-000-1500, H-000-1500.
Location: Inshore Operations Training Center, Vallejo, CA.
Length: 11 weeks (805 hours).
Exhibit Dates: 4/69-Present.
Objective: To provide officers and enlisted personnel with the knowledge and skills necessary to perform river assault craft operations.

Instruction: Lectures and practical exercises in river assault craft operations, including navigation, boat-handling techniques, damage control and salvage, swimming, in-water survival training, gunnery and small arms operation, tactics, and countermine activity.

Credit Recommendation: In the vocational certificate category, 4 semester hours in transportation (6/74).

NY-1708-0002
LANDING CRAFT BEACH AND SURF SALVAGE

Course Number: G-2E-6310, H-2E-5318, H-000-318.
Location: Amphibious School, San Diego, CA.
Length: 2 weeks (80 hours).
Exhibit Dates: 11/72-Present.
Objective: To provide naval personnel qualified as second class swimmers with specialized training in the techniques and procedures of amphibious boat salvage operations.

Instruction: Lectures and practical work in light-tow and heavy salvage boats; performance of salvage operations on broadside and stranded boats in and beyond the surf line, emergency ramp-raising procedures; minor repair techniques.
Credit Recommendation: In the vocational certificate category, 3 semester hours in transportation or salvage operations (2/74).

NV-1708-0003
ADVANCED SUBMARINE QUARTERMASTER SCHOOL
Course Number: F-772-011
Location: Submarine School, Groton, CT
Length: 3 weeks (100 hours)
Exhibit Dates: 4/68-Present
Objectives: To teach rated quartermasters with a minimum of one year in rate the classroom elements of the professional requirements of submarine piloting and navigation.

Instruction: Consists of piloting and anchoring techniques; determination of lines, familiarity with compass, including causes, kinds, significance of, and compensation for, compass error, computation of sunrise, sunset, moonrise, and moonset; determination of lines of position by celestial observation.

Credit Recommendation: In the vocational certificate category, 3 semester hours in transportation (2/74).

NV-1708-0004
BASIC QUARTERMASTER, ENLISTED
Course Number: J-772-620
Location: Fleet Training Center, Newport, R.I.
Length: 5 weeks (163 hours)
Exhibit Dates: 7/68-Present
Objectives: To train enlisted personnel in the basic principles and techniques of water navigation.

Instruction: Lectures and practical exercises in shipboard duties of the quartermaster and in navigation fundamentals, including nautical charts and chart projections, fundamentals of plotting, operation of magnetic and gyro compasses; the lateral buoy system, operation of various navigational instruments and tides, currents, and weather.

Credit Recommendation: In the vocational certificate category, 3 semester hours in transportation (2/74).

NV-1708-0005
ASSAULT SHIELD SCHOOL
Course Number: K-772-2101
Location: Fleet Training Center, San Diego, CA.
Length: 4 weeks (115 hours)
Exhibit Dates: 1/71-Present
Objectives: To provide enlisted personnel with the knowledge of navigation required to qualify them to perform as quartermasters of the watch.

Instruction: Lectures and practical exercises in basic navigation, including nautical charts, navigation publications, tides, and currents; weather, plotting and calculation, and use of various navigational aids.

Credit Recommendation: In the vocational certificate category, 3 semester hours in transportation (2/74).

NV-1708-0006
ASSAULT BOAT COXSWAIN
Course Number: H-813-5316; Q-062-6358; G-813-6358
Location: Naval Amphibious School, San Diego, CA; Naval Amphibious School, Norfolk, VA
Length: 3 weeks (106-121 hours)
Exhibit Dates: 1/67-Present

Objectives: To provide enlisted personnel with a basic knowledge of boat handling and assault boat operations.

Instruction: Lectures and practical demonstrations in basic boat-handling procedures, landing craft operations, assault boat operations, tactics and hand signals, ship-to-shore communications, and navigational aids.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (2/74).

NV-1708-0007
SHIPLOADING AND STOWAGE
Course Number: A-8C-0013
Location: Naval Supply Center, Oakland, CA.
Length: 2 weeks (64 hours)
Exhibit Dates: 3/71-Present
Objectives: To train enlisted personnel to load, stow, and discharge cargo and to supervise others engaged in this activity.

Instruction: Lectures and practical exercises in the techniques of loading, stowing, and discharging cargo and in the supervision of such activities. Course includes cargo stowage, stevedoring, safety in cargo operations, stability in shipping, and preplanning ship's cargo.

Credit Recommendation: In the vocational certificate category, 2 semester hours in shiploading and stowage (7/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in shiploading and stowage (7/74).

NV-1709-0001
PHOTOGRAPHER'S MATE SCHOOL
CLASS A, BASIC
PHOTOGRAPHER'S MATE SCHOOL
CLASS A
PHOTOGRAPHER'S MATE A (AERIAL CAMERAMAN)
(Photographer's Mate G (Cameraman))
Course Number: NV-1709-0001
Location: Naval Technical Training Center, Corry Station, Pensacola, FL
Objectives: To provide personnel with a basic knowledge of the photographic work performed in the Navy, including photographic principles, camera operation, black and white, color photography, color photography in small, medium, and large format cameras; color slide and print photography, including exposure, camera operation, photographic chemistry, and laboratory procedures, motion picture photography, including exposure, camera operation, and laboratory procedures, and a study of photography, camera operation, laboratory operations, color photography, including techniques for both color prints and color transparencies.

Credit Recommendation: In the vocational certificate category, 6 semester hours in photography (12/73), in the lower-division baccalaureate/associate degree category, 3 semester hours in photography (12/73), in the upper-division baccalaureate/associate degree category, 3 semester hours in photography (12/68).

NV-1709-0002
PHOTOGRAPHER'S MATE SCHOOL
CLASS B
Course Number: None
Location: Naval Air Technical Training Unit, Pensacola, FL
Objectives: To provide selected enlisted trainees with the knowledge necessary to perform the duties of senior photographers, including operation and maintenance of service-type still, aerial, motion picture cameras and related equipment, and the production of photographs for public information purposes.

Instruction: Lectures and practical experiences in general photography, including administrative and organization of Navy photography, photographic science, and photography in small, medium, and large format cameras; color slide and print photography; public affairs photography, including aircraft, reproduction, planning, and utilization of military-oriented missions, motion picture photo.
I-146

EXHIBIT COURSES

ography, including fundamentals, technologies, and equipment orientation.

Credit Recommendation: Version 1: In the vocational certificate category, 6 semester hours in photography (12/73); in the lower-division baccalaureate category, 2 semester hours in photography (12/73); in the upper-division baccalaureate category, 3 semester hours in photography (12/73); in the upper-division baccalaureate category, 2 semester hours in photography (12/73); in the upper-division baccalaureate category, 5 semester hours in photography (12/68)

NV-1709-0004

1 Photographic Reconciliation Officer, Class O
2 Photographic Reconciliation Officers, Class O
3 Photographic Reconciliation Officers, Class O
4 Photographic Reconciliation Officers, Class O

Course Number: Version 1: D-28-10 Version 2: None Version 3: None Version 4: None

Location: Naval Air Technical Training Unit, Pensacola, FL

Length: Version 1: 2 weeks (152 hours) Version 2: 2 weeks (98 hours) Version 3: 2 weeks (840 hours)


Objectives: To provide officers with an understanding of the capabilities of the RA-5C aircraft, basic intelligence gathering concepts, photographic interpretation station, computer programs related to photographic interpretation.

Credit Recommendation: In the vocational certificate category, 1 semester hour in photographic interpretation (12/73)

NV-1709-0005

Special Photographic Course for Non-Navy Photographic Personnel, Class C

Course Number: None

Location: Naval Air Technical Training Unit, Pensacola, FL

Length: Version 1: 2 weeks (120 hours) Version 2: 1 week (56 hours)

Exhibit Dates: Version 1: 2/66-12/68

Objectives: To provide trainees with the knowledge and skills of basic photography, including selected cameras, darkroom layout, and processing and exposure techniques.

Instruction: To accomplish the objectives the trainee must develop skills in the use of the Leica camera and its accessories, acquire an understanding of the principles of physics as related to photography, have a working knowledge of exposures for natural and artificial light using black and white and color film, and apply skillfully advanced techniques for small negatives, black and white and color reversal film. Studies also include darkroom layout, equipment planning, negative filing, and computer oriented studies in aerial cameras for the production of oblique and vertical photographs, stereopticons, and overlapping single- and multi-strip mosaics.

Credit Recommendation: In the vocational certificate category, 3 semester hours in photography (12/73); in the lower-division baccalaureate/associate degree category, 3 semester hours in photography (12/73); in the upper-division baccalaureate category, 5 semester hours in photography (12/68)

NV-1709-0006

IOIC Photography Interpretation Officer Course Number: D-3A-010

Location: Reconnaissance Attack Squadron Three, Albany, GA

Length: 5 weeks (200 hours)

Exhibit Dates: 5/69-Present

Objectives: To provide officers with an understanding of the capabilities of the Inte- grated Operational Intelligence Center (IOIC), and to qualify them to interpret, analyze, and report photographic missions through the use of a computer-oriented photographic station within the IOIC area aboard attack aircraft carriers.

Instruction: In the IOIC concept, multiple sensor capabilities of the RA-5C aircraft, basic intelligence-gathering concepts, photographic interpretation station, computer programs related to photographic interpretation.

Credit Recommendation: In the vocational certificate category, 1 semester hour in photographic interpretation (12/73)

NV-1709-0007

IOIC Photography Interpretation Officer Course Number: D-30-015

Location: Reconnaissance Attack Squadron Three, Albany, GA

Length: 9 weeks (348 hours)

Exhibit Dates: 5/69-Present

Objectives: To provide personnel with an understanding of the capabilities of the Inte- grated Operational Intelligence Center (IOIC), and to qualify them to interpret, analyze, and report aerial photographic missions through the use of a computer-oriented photographic station within the IOIC area aboard attack aircraft carriers.

Instruction: IOIC concepts, multiple sensor capabilities of the RA-5C aircraft, basic intelligence-gathering concepts, operation of the computer-oriented photographic station, computer programs related to photographic interpretation.

Credit Recommendation: In the vocational certificate category, 2 semester hours in photographic interpretation (12/73); in the upper-division baccalaureate category, 3 semester hours in photographic interpretation (12/68)

NV-1709-0008

Photography and Motion Picture Photography Course Number: D-150-014

Location: Naval Intelligence Processing System Training Facility, Albany, GA

Length: Self-paced 6 weeks (218 hours)

Exhibit Dates: 5/69-Present

Objectives: To provide officers with specialized training which will enable them to efficiently process and reproduce photographic intelligence collected by RA-5C aircraft.

Instruction: Familiarization with current fleet photographic operations and procedures, basic photographic quality control techniques, operation and maintenance of continuous processing equipment, tone reproduction techniques.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (12/73)

NV-1709-0009

1. Motion Picture School, Class C (Motion Picture Cameraman)
2. Motion Picture School, Class C

Course Number: All Versions, C-400-2010

Version 1: C-400-12

Location: Naval Technical Training Center, Corry Station, Pensacola, FL

Length: Version 1, Self-paced 11-12 weeks (440 hours) Version 2, 10-11 weeks (424-468 hours)


Objectives: To provide students with the skills of motion picture filming and editing, as well as an understanding of the theory and practice of processing, printing, and sound-recording for motion picture film, and to familiarize the student with related underwater motion picture photography, television applications.

Instruction: In Version 1, the course uses modular, self-paced, individualized instruction as the primary instructional method. Course topics cover photographic laboratory supervisory skills and advanced techniques in photography, advanced motion picture shooting techniques, studio production, double system sound, sound documentary production, and television production. In Version 2: Phase I, students take a basic film craft class that is a product of experiences in film continuity, composition, assembly and editing techniques, special effects, and screen direction, studies in camera mechanism, optics, and maintenance, as well as film exposure, lens setting, filter theory, and reversal film usage. Phase II prepares students for Phase III, the experience with Arriflex and Mitchell cameras will be applied to advanced lighting techniques, story development, script writing, and production planning. Production and post-production editing, as well as color film techniques and theory. Phase III Studies in high-speed, underwater, and aerial photography, as well as sound theory for single and double system production.

Credit Recommendation: Version 1: In the upper-division baccalaureate category, 4 semester hours in cinematography or motion picture photography (1/77). Version 2: In the vocational certificate category, 3 semester hours in motion picture photography (12/73); in the upper-division baccalaureate/associate degree category, 3 semester hours in motion picture photography (12/73).

NV-1709-0010

Still Documentary Photography Course Number: C-400-2022

Location: Naval Technical Training Center, Corry Station, Pensacola, FL

Length: Self-paced 6 weeks (218 hours)

Exhibit Dates: 10/76-Present
Objectives: To provide training or updating of skills in producing picture stories for media release and the production of audio-visual slide presentations to support written presentations.

Instruction: The course uses modular self-paced individualized instruction as the primary instructional method. Course topics cover photographic laboratory supervision; documentary news photography, including caption writing, feature picture, basic news writing, spot news, layout and page makeup, picture story, and picture essay, and media selection, including presentation objectives analysis, audience analysis, content outline development, presentation method, storyboard development, master script, visual and narrative production, assemblage and programming, general interest slide show, and multi-media presentation.

Credit Recommendation: In the upper-division baccalaureate category, 2 semester hours in photographic laboratory supervision; 2 semester hours in photojournalism or audio-visual (1/77)

NV-1709-0011

TACTICAL PHOTOGRAPHIC INTERPRETATION
Course Number: None
Location: Photographic Interpretation Center, Washington, DC
Length: 11 weeks (312 hours)
Exhibit Dates: 1/54-12/68
Objectives: To train enlisted personnel to interpret aerial photographs for military purposes.

Instruction: Lectures and practical exercises in tactical photographic interpretation. Course includes required orientation of cameras and other equipment, mathematics, map and chart reading, and identification exercises of tactical or military items on aerial photographs.

Credit Recommendation: In the vocational certificate category, 3 semester hours in photographic interpretation (7/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in photographic interpretation (7/74); in the upper-division baccalaureate category, 3 semester hours in photographic interpretation (12/68).

NV-1709-0012

STRATEGIC PHOTOGRAPHIC INTERPRETATION
Course Number: None
Location: Photographic Interpretation Center, Washington, DC
Length: 10 weeks (288 hours)
Exhibit Dates: 1/54-12/68
Objectives: To train enlisted personnel to interpret aerial photographs.

Instruction: Lectures and practical exercises in strategic photographic interpretation. Course includes photogeometrics, map and related mathematics, stereocomparator, and more extensive analysis and interpretation of aerial photographs for targeting purposes.

Credit Recommendation: In the vocational certificate category, 3 semester hours in photographic interpretation (7/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in photographic interpretation (7/74); in the upper-division baccalaureate category, 3 semester hours in photographic interpretation (12/68).

NV-1709-0013

JIOC PHOTOGRAPHIC PROCESSING OFFICER
Course Number: D-7F-010.

Location: Reconnaissance Attack Squadron Three, Albany, GA
Length: 4 weeks (160 hours)
Exhibit Dates: 5/69-Present
Objectives: To train officers to supervise a photographic laboratory.

Instruction: Lectures and practical exercises in IOIC photographic system orientation, photographic processing control, including sensitometry and densitometry, processing and support equipment, printing, equipment maintenance, and applications to fleet operations.

Credit Recommendation: In the vocational certificate category, 2 semester hours in photographic processing or photofinishing on the basis of institutional evaluation (7/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in photographic processing or photofinishing on the basis of institutional evaluation (7/74); in the upper-division baccalaureate category, 2 semester hours in photographic processing or photofinishing on the basis of institutional evaluation (7/74).

NV-1709-0014

METRICAL PHOTOGRAPHIC INTERPRETATION
Course Number: None
Location: Photographic Interpretation Center, Washington, DC
Length: 14 weeks (401 hours)
Exhibit Dates: 1/54-12/68
Objectives: To train enlisted personnel to interpret aerial photographs.

Instruction: Lectures and practical exercises in aerial photographic interpretation, including map orientation, appropriate mathematics, position determination, reconnaissance surveying, map and chart projections, photogeometrics, stereocomparator, cartography, and trinemetron mapping.

Credit Recommendation: In the vocational certificate category, 3 semester hours in photographic interpretation (7/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in photographic interpretation (7/74); in the upper-division baccalaureate category, 3 semester hours in photographic interpretation (7/74); in the upper-division baccalaureate category, 4 semester hours in photographic interpretation (12/68).

NV-1709-0015

RADAR (TARGET) INTELLIGENCE
Course Number: Not available
Location: Photographic Interpretation Center, Washington, DC
Length: 11 weeks (440 hours)
Exhibit Dates: 1/54-12/68
Objectives: To train enlisted personnel to interpret radar scope images and aerial photographs.

Instruction: Lectures and practical exercises in photographic analyzing for building density, height, types of structures, principles of radar reflection, distortion, and interpretation, and radar scope photographic interpretation and plotting.

Credit Recommendation: In the vocational certificate category, 2 semester hours in photographic interpretation (7/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in photographic interpretation (7/74); in the upper-division baccalaureate category, 4 semester hours in photographic interpretation (12/68).

NV-1709-0016

MEDICAL PHOTOGRAPHIC TECHNIC
(Medical Photographic Technician, Class C)
Course Number: B-400-10
Location: Naval Medical School, Bethesda, MD
Length: 24-26 weeks (900-1120 hours)
Exhibit Dates: 1/55-Present
Objectives: To train enlisted personnel to take, process, and print black and white and color still and motion pictures relating to scientific, clinical, surgical, and pathological fields.

Instruction: Lectures and practical exercises in medical photography, including basic principles of photography, camera operation, optics, light meters, filters, film processing and darkroom procedures for both black and white and color films, photo copying, slide duplication and mounting, slide projection, medical-related photographic techniques, infrared and ultraviolet, photomicrography, cinematography, and motion picture projection.

Credit Recommendation: In the vocational certificate category, 4 semester hours in photography, in the lower-division baccalaureate/associate degree category, 4 semester hours in photography, 4 in medical photography (7/74), in the lower-division baccalaureate/associate degree category, 4 semester hours in photography, 4 in medical photography (7/74), in the upper-division baccalaureate category, 4 semester hours in photography, 12 in medical photography (12/68).

NV-1709-0017

ILLUSTRATIVE PHOTOGRAPHY C1
Course Number: C-400-2021
Location: Naval Technical Training Center, Corry Station, Pensacola, FL
Length: Self-paced 8 weeks (212 hours)
Exhibit Dates: 10/76-Present
Objectives: To provide training or skill updating in the areas of macrophotography and illustrative, architectural, and portrait photography.

Instruction: The course uses modular self-paced, individualized instruction as the primary instructional method. Course topics cover photographic laboratory supervision, illustrative photography, including the Kodak Ektomatic print processor, macrophotography, composition, architectural photography, and studio lighting/portraiture.

Credit Recommendation: In the upper-division baccalaureate category, 2 semester hours in photography (studio/architectural/portraiture) (1/77).

NV-1709-0018

PHOTOGRAPHIC LABORATORY TECHNICIAN
Course Number: C-400-2020
Location: Naval Technical Training Center, Corry Station, Pensacola, FL
Length: Self-paced 8 weeks (213 hours)
Exhibit Dates: 10/76-Present
Objectives: To provide initial journeyman training on skills updating in color printing and processing, printing and processing machinery operation, and chemical process quality control.

Instruction: The course uses modular self-paced, individualized instruction as the primary instructional method. Course topics cover photographic laboratory supervision, photographic support equipment familiarization, including sensitometry and chemical process effects and uniformity, chemical monitoring and process control, replenis-
COURSE EXHIBITS

ment rates, statistical and measurements, evaluation, graphs, and data analysis and color processing, including the master print, basket printing, visual evaluations, off-ends and on-ends spot evaluations, and calculation and indexing of color analyzer.

Credit Recommendation: In the upper-di
cision baccalaureate category, 2 semester hours in photography or photograp

NV-1710-0001

1 BOILER TECHNICIAN, CLASS A1 (600

PSI)

2 BOILER TECHNICIAN, CLASS A1 (720

PSI)

3. BOILERMEN, CLASS A

Course Number: A-651-0010

Location: Service School Command, Great Lakes, IL.


12/73.

Objectives: To train enlisted personnel to operate, maintain, and repair marine boilers, pumps, and associated machinery.

Instruction: All Versions: Lectures and practical exercises in the operation, inspection, repair, and maintenance of marine boilers, fuel oil auxiliary equipment, and water systems, including basic principles and design of marine boilers, pumps, and associated machinery.

Credit Recommendation: In the lower-division baccalaureate category, 2 semester hours as technical elective in the operation, inspection, and repair of marine boilers, pumps, and associated machinery.

NV-1710-0002

BOILERMAN ENLISTED MAINTENANCE

Course Number: A-651-017

Location: Destroyer School, Newport, RI.

Length: 4 weeks (120 hours).

Exhibit Dates: 12/69-Present

Objectives: To train enlisted personnel to operate, inspect, and repair boilers.

Instruction: Lectures and practical exercises in the operation, inspection, and repair of boilers, including cleaning and overhaul procedures, steam cycle and theory, safety valves, fuel oil service pump, forced-draft blowers, burners and air registers, regulators and indicators, pumps and blowers, calibration, patching, and packing and gaskets.

Credit Recommendation: Insufficient data for evaluation (4/74).

NV-1710-0003

PRESSURE- AND BOILER, CLASS C

Course Number: A-651-0014.

Location: Boilermaker School, Philadelphia, PA.

Length: 6 weeks (180 hours).

Exhibit Dates: 11/72-Present.

Objectives: To train enlisted personnel who have had training in automatic boiler controls to perform as pressure-fired boiler men.

Instruction: Lectures and practical exercises in the operation, maintenance, and repair of pressure-fired boilers, including boiler design and components, supercharger and feed system, automatic combustion and fuel controls, component calibration, boiler steam and operation, and local control of boilers.

Credit Recommendation: In the vocational certificate category, 3 semester hours in boiler operation and repair on the basis of institutional evaluation (4/74).

NV-1710-0005

CATAPULT, ARRESTING GEAR, AND VISUAL LANDING AIDS CVA (C-7-11 CATAPULTS), CLASS C

(Catapult, Arresting Gear, and Visual Landing Aids (C-7-11 Catapults and Mk-7 Arresting Gear), Class C)

Course Number: Not available.


Length: 9 weeks (352-360 hours).

Exhibit Dates: 1/66-Present.

Objectives: To train personnel in the operation, inspection, maintenance, and repair of C-7 and C-11 catapults and related equipment, Mk-7 arresting gear and barricades, visual landing aids (Fresnel Lens OLS MK VI and Manual Meatball) and shore-based arresting gear.

Instruction: Lectures and practical exercises in the operation, inspection, maintenance, and repair of C-7 and C-11 catapults and related equipment, basic information relating to catapults, arresting gear and visual landing aids, steam catapults, steam system, C/11 Mod 1, launching engine, retraction and tensioning engine, bridge tension system, control system, bridge arrestor engine and associated equipment, miscellaneous information and safety precautions, shore-based arresting gear, and Mk-7 arresting gear, Fresnel Lens MK VI and Manual Meatball.

Credit Recommendation: In the vocational certificate category, 2 semester hours as general elective in mechanical programs (4/74).

NV-1710-0006

CATAPULT, ARRESTING GEAR AND VISUAL LANDING AIDS CVA (C-13 CATAPULTS), CLASS C

(Catapult, Arresting Gear and Visual Landing Aids (C-13 Catapults and Mk-7 Arresting Gear), Class C)

Course Number: Not available.

Location: Air Technical Training Center, Lakehurst, NJ.

Length: 3 weeks (112 hours).

Exhibit Dates: 8/68-Present.

Objectives: To train enlisted personnel to operate, inspect, and maintain the CVA catapult's steam and drain systems and related components.

Instruction: Lectures and practical exercises in the operation, inspection, and maintenance of CVA catapult's steam and drain systems and related components, including fundamentals of steam catapults, types of steam catapults, system components, and operational procedures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1710-0007

CVS CATAPULT, ARRESTING GEAR, AND VISUAL LANDING AIDS, CLASS C.

Course Number: Not available.

Location: Air Technical Training Unit, Philadelphia, PA.

Length: 5 weeks (192 hours).

Exhibit Dates: 10/65-12/68.

Objectives: To train enlisted personnel to operate, inspect, and maintain H-4 catapults and related equipment, Mk 5 arresting gear and barricades, Mk 1 Mod 1 and Mk 6 Mod 1 visual landing aids, and shore-based arresting gear.

Instruction: Lectures and practical exercises in the operation, inspection, maintenance, and repair of H-4 catapults and related equipment, Mk 5 arresting gear and barricades, Mk 1 Mod 1 and Mk 6 Mod 1 visual landing aids, and shore-based arresting gear, including principles and design of catapults, components, operational, launching, and recovery systems, control panel operation, description and nomenclature of hydropneumatic and steam catapults.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1710-0008

CVA CATAPULT STEAM AND DRAIN SYSTEM, CLASS C

Course Number: Not available.

Location: Air Technical Training Center, Lakehurst, NJ.

Length: 3 weeks (112 hours).

Exhibit Dates: 8/68-Present.

Objectives: To train enlisted personnel to operate, inspect, and maintain the CVA catapult's steam and drain systems and related components.

Instruction: Lectures and practical exercises in the operation, inspection, and maintenance of CVA catapult's steam and drain systems and related components, including fundamentals of steam catapults, types of steam catapults, system components, and operational procedures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1710-0009

CATAPULT AND ARRESTING GEAR, CLASS C

Course Number: Not available.

Location: Air Technical Training Unit, Philadelphia, PA.

Length: 11 weeks (440 hours).

Exhibit Dates: 9/56-12/68.

Objectives: To train enlisted personnel to operate, inspect, and maintain C-13 catapults and related equipment, Mk 5 and Mk 7 arresting gear, and barricades.

Instruction: Lectures and practical exercises in the operation, maintenance, and repair of H-4, H-5, and C-11 catapults and related equipment, Mk 5 arresting gear and barricades, Mk 1 Mod 1 and Mk 6 Mod 1 visual landing aids, and shore-based arresting gear.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1710-0010  
CVA CATAPULT ELECTRICIAN, CLASS C  
Course Number: C-680-2013  
Location: Air Technical Training Center, Lakehurst, NJ.  
Length: 2 weeks (80 hours).  
Exhibit Dates: 4/71-Present  
Objectives: To train enlisted personnel who have backgrounds in electronics to operate and maintain CVA catapult electrical systems and related components.

Instruction: Lectures and practical exercises in the operation and maintenance of CVA catapult electrical systems and related components, including engine systems, retract and tension system, and control system; fault finding and repair of steam catapults, circuits, and electrical components in catapult control (motor relays, synchronizers, indicators, sequence of operation); valve control; and catapult maintenance.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1710-0011  
AUTOMATIC COMBUSTION CONTROL MAINTENANCE  
Course Number: A-651-021  
Location: Destroyer School, Newport, RI.  
Length: 3 weeks (90 hours).  
Exhibit Dates: 1/69-Present  
Objectives: To train enlisted personnel to maintain automatic combustion control equipment in boilers.

Instruction: Lectures and practical exercises in the maintenance of automatic combustion control equipment in boilers, including sensing elements, boiler and machinery dynamics, modes of control, measuring principles, calibration, signal tracing, component operation, and troubleshooting procedures.

Credit Recommendation: Insufficient data for evaluation (3/74).

NV-1710-0012  
ENGINEERING WATCH OFFICER  
Course Number: G-4H-6919, G-651-6919.  
Location: Amphibious Base, Little Creek, VA.  
Length: 2 weeks (60 hours).  
Exhibit Dates: 10/72-Present  
Objectives: To train officers to be engineering watch officers on amphibious ships.

Instruction: Lectures on the operation of steam and diesel boilers, AC-DC generator systems, switchboard controls, electrical safety precautions, electromechanical systems operation, auxiliary equipment operation, and engineering administration.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1710-0013  
PROSPECTIVE ENGINEERING OFFICER  
Course Number: A-4H-0024.  
Location: Development and Training Center, San Diego, CA.  
Length: 4 weeks (140 hours).  
Exhibit Dates: 1/70-Present  
Objectives: To train officers to operate and maintain steam-powered ship engine room equipment.

Instruction: Lectures and practical exercises in boilers and associated equipment; operation and maintenance, including steam systems, turbines, electrical systems, evaporators, refrigeration, water pumps and valves, boiler controls, feed pump controls, recirculation valves, hydropumps, governors, and casualty control operations.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (4/74).

NV-1710-0014  
MARINE CORPS SHORT AIRFIELD FOR TACTICAL SUPPORT, CLASS C  
Course Number: Not available.  
Location: Air Technical Training Center, Lakehurst, NJ.  
Length: 3 weeks (200 hours).  
Exhibit Dates: 9/65-Present  
Objectives: To train enlisted personnel to install, inspect, operate, and maintain SATS launching and recovery equipment.

Instruction: Lectures and practical exercises in installation, inspection, operation, and maintenance of equipment, including runway matting, generators, air compressors, cranes, fork lifts, anchors, and special tools, recovery equipment, including arresting gear, SATS barriers, launch equipment, including catapult systems, and control systems; and operational procedures and field operations.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (4/74).

NV-1710-0015  
STANDARD TENSIONED REPLENISHMENT ALONGSIDE METHODS (STREAM) REPLENISHMENT (UNREP) Rigging Procedures  
Course Number: A-551-0025  
Location: Naval Schools Command, Treasure Island, CA.  
Length: 3 weeks (95-105 hours).  
Exhibit Dates: 1/70-Present  
Objectives: To train enlisted personnel to operate a raw-tensioned, high-level replenishment system.

Instruction: Lectures and practical exercises in raw-tensioned, high-line system operation, including standard method of replenishment, preventative maintenance, maintenance of station components, safety precautions, and emergency breakaway procedures.

Credit Recommendation: Credit is recommended in the vocational certificate category, 6 semester hours in heavy construction equipment (7/76), in the lower-division baccalaureate/associate degree category, 2 semester hours in construction/civil technology (7/76).

Version 2: In the lower-division baccalaureate/associate degree category, 6 semester hours in heavy construction program, 3 in civil technology program (4/74).

NV-1710-0016  
UNREP HYDRAULIC AND MECHANICAL COMPONENT MAINTENANCE  
(SENDING UNITS)  
Course Number: A-551-0027.  
Location: Naval Schools Command, Treasure Island, CA.  
Length: 10 weeks (300 hours).  
Exhibit Dates: 1/70-Present  
Objectives: To train enlisted personnel to maintain the UNREP system's hydraulic and mechanical components.

Instruction: Lectures and practical exercises in basic electricity; basic hydraulics, winches, circuit analyzers, sealing materials and gauges; circulatory systems, actuators, pumps, valves, and controls; hydraulic power unit, transfer head ram tensioner, multidirectional fork truck, and seal transmissions operation; and cargo and personnel transfer equipment.

Credit Recommendation: Credit is recommended in the vocational certificate category, 3 semester hours as an elective in industrial or mechanical technology (4/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in industrial or mechanical technology (4/74).

NV-1710-0017  
EQUIPMENT OPERATORS, CLASS A (EOA*)  
Course Number: All Versions: A-730-0010.  
Version 2: A-730-0012  
Location: All Versions: Construction Training Center, Port Hueneme, CA; Construction Training Center, Gulfport, MS.  
Version 2: Construction School, Davisonville, RI.  
Length: Version 1: 9 weeks (261 hours).  
Version 2: 12 weeks (360 hours).  
Objectives: To train enlisted personnel to operate, adjust, and service heavy construction equipment.

Instruction: Lectures and practical exercises in automotive vehicle, front-end loader, forklift, grader, and crawler tractor operation, adjustment, and servicing, including internal-combustion engine; basic principles, fuels and lubricants, earthwork fundamentals, equipment production; haul- ing, loading, and lifting equipment adjustment, operation, and servicing; and soil compactors, crawler tractors, and tractor-drawn scrapers operation.

Credit Recommendation: Version 1: In the vocational certificate category, 6 semester hours in heavy construction equipment (7/76), in the lower-division baccalaureate/associate degree category, 2 semester hours in construction/civil technology (7/76).

Version 2: In the lower-division baccalaureate/associate degree category, 6 semester hours in heavy construction program, 3 in civil technology program (4/74).

NV-1710-0018  
1. EQUIPMENT OPERATOR, CLASS J (EQC**)  
2. EQUIPMENT OPERATOR, CLASS B (EQC**)  
Course Number: A-730-0011.  
Location: Construction Training Center, Port Hueneme, CA; Construction Training Center, Gulfport, MS.  
Length: Version 1: 16 weeks (489 hours).  
Version 2: 16-18 weeks (480-540 hours).  
Exhibit Dates: Version 1: 9/75-Present.  
Objectives: To train equipment operators to supervise personnel in construction, earth moving, road building, rock crushing, and asphalt mixing and paving operations.

Instruction: Version 1: Instruction includes soil identification, earthwork computations; operation of rock crushers, asphalt plants and pavers, operation and maintenance of cranes, crawlers, wheel tractors, and scrapers; and roadway foundations. Version 2: Lectures and practical exercises in instrucional techniques, job planning, dispatching, records and reports; and earth moving, road building, rock crushing, and asphalt mixing and paving equipment operation, maintenance, safety procedures, adjustments, and repairs; and graders, crawlers, tractors, scrapers, and cranes.

Credit Recommendation: Version 1: In the lower-division baccalaureate/associate degree category, 6 semester hours in heavy construction program, 3 in civil technology program (4/74).
degree category, 5 semester hours in high-
weight construction or civil technology (7/76). Version 2: In the lower-
division baccalaureate/associate degree category, 6 semester hours in heavy construction and heavy equipment (4/74).

NV-1710-0019
1200 PSI MAIN PROPULSION ASSISTANT
Course Number: A-4H-021
Location: Destroyer School, Newport, RI.
Length: 12 weeks (360 hours).
Exhibit Dates: 7/69-Present.
Objectives: To train enlisted personnel to repair boilers.
Instruction: Lectures and practical exercises in boiler principles and construction, fuel oil systems, air and drain systems, turbine plants, distilling plants, boiler laboratory, auxiliary steam systems, engineering management, and boiler maintenance and repair procedures.
Credit Recommendation: Insufficient data for evaluation (4/74).

NV-1710-0020
1200 PSI ENLISTED MAINTENANCE
Course Number: A-651-020.
Location: Destroyer School, Newport, RI.
Length: 5 weeks (150 hours).
Exhibit Dates: 7/69-Present.
Objectives: To train enlisted personnel to inspect and maintain boilers.
Instruction: Lectures and practical exercises in boiler inspection and maintenance, including steam theory, boiler overhaul, boiler water and fire control, turbinovacuum, lubrication, and precision tools operation, fuel oil heaters and coolers, and valve and pump repair.
Credit Recommendation: Insufficient data for evaluation (4/74).

NV-1710-0021
1200 PSI BT ORIENTATION/OPERATION
Course Number: A-651-0037.
Location: Boilermaker School, San Diego, CA.
Length: 3-4 weeks (106-140 hours).
Exhibit Dates: 11/72-Present.
Objectives: To train enlisted personnel to operate shipboard boilers and associated equipment.
Instruction: Lectures and practical exercises in boiler construction and operation, fireroom procedures, damage control, lighting off and securing main boilers, and underway watch standing and casualty control.
Credit Recommendation: In the vocational certificate category, 1 semester hour as an elective in building maintenance (9/77).

NV-1710-0022
1200 PSI PROSPECTIVE ENGINEERING OFFICER
Course Number: A-4H-020.
Location: Destroyer School, Newport, RI.
Length: 4 weeks (120 hours).
Exhibit Dates: 12/69-Present.
Objectives: To train enlisted personnel to inspect and maintain boilers and related systems.
Instruction: Lectures and practical exercises in boiler inspection and maintenance of boilers and related systems, including component and system analysis, modes of control and control loops, measuring principles, and electrical and propulsion casualty control.
Credit Recommendation: Insufficient data for evaluation (4/74).

NV-1710-0023
1. LST 1179/1182 CLASS CONTROLLABLE PITCH PROPELLER AND PROPULSION CONTROL SYSTEM, CLASS CI
2. ENGINEERING, CLASS C, LST 1179 CLASS CONTROLLABLE PITCH PROPELLER AND PROPULSION CONTROL SYSTEM
Course Number: A-652-0035.
Location: Propulsion Engineering School, Great Lakes, IL.
Objectives: To train enlisted personnel who have taken a basic engineerman course to operate, maintain, and troubleshoot variable-pitch ship propellers and associated control equipment.
Instruction: Lectures and practical exercises in the operation, maintenance, and troubleshooting of variable-pitch ship propellers and associated control equipment, including introduction to hydraulics and pneumatics, analysis of various circuits, component testing and troubleshooting of specific variable-pitch propellers and associated controls.
Credit Recommendation: Version I: In the lower-division baccalaureate/associate degree category, 2 semester hours as an elective in automotive/mechanical technology (9/77). Version 2: In the vocational certificate category, 2 semester hours as an elective in mechanical technology (4/74); in the lower-division baccalaureate/associate degree category, 1 semester hour as an elective in mechanical technology (4/74).

NV-1710-0024
STEAM COMPONENTS (ENLISTED)
Course Number: F-000-035.
Location: Naval Submarine School, Groton, CT.
Length: 4 weeks (60 hours).
Exhibit Dates: 11/72-Present.
Objectives: To train enlisted personnel to operate, inspect, and maintain steam equipment.
Instruction: Lectures and practical exercises in the operation and maintenance of steam components, including instruction on steam reducing valves, steam traps, refractory gaskets, manual valves, high- and low-level control systems, steam generator relief and pilot automatic drain valves, hydrostatic testing, feed water control valves, steam generator cutout valve, condenser repair, steam root valve manifold, and steam generator sight glasses.
Credit Recommendation: In the vocational certificate category, 1 semester hour as an elective in building maintenance (4/74).

NV-1710-0025
SUBMARINE LOW PRESSURE AND VAPOR COMPRESSION DISTILLING UNITS, ENLISTED
Course Number: F-652-026.
Location: Submarine School, Groton, CT.
Length: 2 weeks (60 hours).
Exhibit Dates: 11/72-Present.
Objectives: To train enlisted personnel to operate, maintain, and repair low-pressure and vapor compression distilling units.
Instruction: Lectures and practical exercises in the operation, maintenance, and repair of low-pressure and vapor pressure distilling units, including operation and troubleshooting of low-pressure distilling steam systems, valves and meters, pumps, traps, condensers, gages, and compressors, and similar components of the vapor pressure distilling system.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1710-0026
ORDNANCE HANDLING EQUIPMENT INTERMEDIATE MAINTENANCE
Course Number: C-646-3119.
Location: Air Maintenance Training Detachment, Jacksonville, FL, Air Maintenance Training Detachment, Norfolk, VA; Air Maintenance Training Detachment, Alameda, CA, Air Maintenance Training Detachment, North Island, CA.
Length: 3 weeks (120 hours).
Exhibit Dates: 8/71-Present.
Objectives: To train enlisted personnel to maintain ordnance-handling equipment at the intermediate level.
Instruction: Lectures and practical exercises in the maintenance of ordnance-handling equipment, including operation, servicing, and inspection of specific skids, bomb hoists, and bomb trucks.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (4/74).

NV-1710-0027
UTILITIESMAN, SHORE BASED BOILER CONTROLS, CLASS CI
Course Number: C-651-0035.
Location: Construction Training Center, Gulfport, MS; Construction Training Center, Port Hueneme, CA.
Length: 7 weeks (222 hours).
Exhibit Dates: 11/72-Present.
Objectives: To provide the enlisted technician with advanced technical skills and knowledge in electrical and pneumatic control systems components, safety switches, and testing meters to troubleshoot, repair, operate, and maintain steam heating boilers.
Instruction: Lectures and practical exercises in boiler equipment fittings and controls, basic electricity, electrical circuits, automatic and pneumatic controls.
Credit Recommendation: Recommended because (if the limited technical nature of the course) (4/74).

NV-1710-0029
CATAPULT, ARRESTING GEAR AND VISUAL LANDING AIDS (CVS) (H-8 CATAPULTS AND MK-5 ARRESTING GEAR)
Course Number: Not available.
Location: Air Technical Training Center, Lakehurst, NJ.
Length: 4 weeks (176 hours).
Exhibit Dates: 11/69-Present.
Objectives: To train enlisted personnel to operate, inspect, and maintain H-8 catapults and related equipment, Mk-5 arresting gear and barricades, and specific visual landing aids and shore-based arresting gear.
Instruction: Lectures and practical exercises in the operation, inspection, and maintenance of H-8 catapults and related equipment, Mk-5 arresting gear and barricades, and specific visual landing aids and shore-based arresting gear.

175
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (5/74).

NV-1710-0030
LAUNCHER TECHNICIAN (TENDER)
Course Number: A-733-0017
Location: Guided Missiles School, Dam Neck, VA.
Length: 2 weeks (72 hours)
Exhibit Dates: 1/75-Present.
Objectives: To train launch technicians in the operation and maintenance of fleet ballistic missile submarine tenders, and missile-handling equipment.

Instruction: Lectures and practical exercises on the operation and maintenance of the missile-handling equipment found on fleet ballistic missile submarine tenders, including basic theory of handling equipment, Mk5 and 50, description of the mechanical and electrical characteristics of handling equipment, preventive and corrective maintenance procedures, advanced theory of handling equipment Mk5 and 50, logic elements used for control and sequencing of equipment for the Westinghouse most units (Mks 1 and 2), and their functional operation.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/74).

NV-1710-0031
600 BT MAINTENANCE
Course Number: A-651-0023
Location: Development and Training Center, San Diego, CA.
Length: 3 weeks (105 hours)
Exhibit Dates: 11/72-Present.

Objectives: To train personnel to perform as boiler technicians.

Instruction: Lectures and practical exercises in the repair and maintenance of marine boilers and associated equipment, including operation and maintenance of the 1200 PSI boilers and associated auxiliary machinery, and minor repair of hydraulic, pneumatic, and electrical equipment used with automatic combustion control boards; test, transfer, and inventory of fuels and water, and maintenance and repair of boiler auxiliary machinery.

Credit Recommendation: In the vocational certificate category, 10 semester hours in building engineering, building maintenance, or industrial technology (5/74).

NV-1710-0032
1200 PSI BT MAINTENANCE (BOILERMAN)
Course Number: A-651-0031.
Location: Boilerman School, San Diego, CA.
Length: 8 weeks (280 hours)
Exhibit Dates: 11/72-Present.

Objectives: To train rated boiler technicians to maintain the 1200 PSI boilers and associated auxiliary machinery.

Instruction: Lectures and practical exercises in maintenance and repair of boilers and associated auxiliary machinery, including basic theory of handling equipment, Mk5 and 50, description of the mechanical and electrical characteristics of handling equipment, preventive and corrective maintenance procedures, advanced theory of handling equipment Mk5 and 50, logic elements used for control and sequencing of equipment for the Westinghouse most units (Mks 1 and 2), and their functional operation.

Credit Recommendation: In the vocational certificate category, 2 semester hours in building engineering or building maintenance (5/74).

NV-1710-0033
BOILERMAN, CLASS B
Course Number: A-651-0011; A-651-0011.
Location: Boilerman School, Philadelphia, PA.
Length: 15-22 weeks (450-660 hours)
Exhibit Dates: 1/54-Present.

Objectives: To train personnel to perform as boiler technicians.

Instruction: Lectures and practical exercises in the operation and maintenance of marine boilers and associated equipment, including operation and maintenance of the 1200 PSI boilers and associated auxiliary machinery, and minor repair of hydraulic, pneumatic, and electrical equipment used with automatic combustion control boards; test, transfer, and inventory of fuels and water, and maintenance and repair of boiler auxiliary machinery.

Credit Recommendation: In the vocational certificate category, 5 semester hours in building engineering, building maintenance, or industrial technology (5/74).

NV-1710-0034
BUILDER/HEAVY CONSTRUCTION TECHNICIAN, CLASS C
(But/on Heavy Construction)
Course Number: A-710-0018.
Location: All Versions. Construction Training Center, Port Hueneme, CA, Construction Training Center, Gulfport, MS; Construction School, Davisville, RI.
Length: 13-14 weeks (391-421 hours)
Exhibit Dates: 11/60-Present.

Objectives: To train personnel to perform as builder mechanics.

Instruction: Lectures and practical exercises in building construction, including tools, piles, and pile driving methods; waterfront structures; trestle construction; railroad-track maintenance and repair; wood towers; and planning and estimating.

Credit Recommendation: In the vocational certificate category, 2 semester hours in building engineering or building maintenance (5/74).

NV-1710-0035
CONSTRUCTION MECHANIC, CLASS A
(CM"A")
Course Number: A-610-0002

Credit Recommendation: In the vocational certificate category, 5 semester hours in industrial technology or building maintenance or building engineering (5/74), in the lower-division baccalaureate/associate degree category, 5 semester hours in industrial technology, or 5 in building maintenance or building engineering (5/74).

NV-1710-0036
UTILITIESMAN, CLASS J (UT"J")
(Utilitiesman, Class B)
Course Number: A-720-0013.
Location: Construction Training Center, Port Hueneme, CA; Construction Training Center, Gulfport, MS.
Length: 14-15 weeks (420-450 hours)
Exhibit Dates: 11/60-Present.

Objectives: To train enlisted personnel to repair and maintain utility systems.

Instruction: Lectures and practical exercises in utility systems maintenance and repair, including plumbing, sewage disposal, blueprint reading, boilers, refrigeration, pumps, compressors, air conditioning, water supply, and water treatment.

Credit Recommendation: In the vocational certificate category, 9 semester hours in utilities maintenance and repair (7/76), in the lower-division baccalaureate/associate degree category, 4 semester hours in utilities maintenance and repair (7/76), in the upper-division baccalaureate category, 2 semester hours in utilities maintenance and repair (7/76).

NV-1710-0037
EQUIPMENT OPERATORS GRADEWORK, CLASS C
(EQO"C" Gradework)
Course Number: A-710-0019.
Location: Construction Training Center, Port Hueneme, CA; Construction Training Center, Gulfport, MS.
Length: 6 weeks (180 hours)
Exhibit Dates: 10/71-Present.

Objectives: To train noncommissioned officers, to supervise everyday operations according to specifications, mass diagrams, and construction schedules, and to prepare estimates.

Instruction: Lectures and practical exercises in equipment supervision, including gradework principles, surveys, maps, mass diagram preparation, drainage, soil compaction and stabilization, estimating, planning, equipment operation, and field projects.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in civil technology (7/76); in the upper-division baccalaureate category, 2 semester hours in civil or construction engineering (7/76).
COURSE EXHIBITS

NV-1710-0038

**Builder/Masonry, Class C**

(BU "C" Masonry)

Course Number: A-710-0017

Location: Construction Training Center, Port Hueneme, CA; Construction Training Center, Gulfport, MS.

Length: 5 weeks (154 hours)

Exhibit Dates: 1/72-Present

Objectives: To train noncommissioned officers in masonry techniques and in supervision and training of masonry crews.

Instruction: Lectures and practical exercises in masonry and masonry crew training and supervision, including properties and processing of aggregates, brick and block laying, and properties, stone and tile setting, plastering, design and sketch preparation, planning, and manpower and materials estimating.

Credit Recommendation: In the vocational certificate category, 4 semester hours in construction (7/76).

NV-1710-0039

Shipboard Thermal Insulation (Lagging)

Course Number: F-000-0076, F-000-076

Location: Fleet Ballistic Missile Submarine Training Center, Charleston, SC

Length: 2-3 weeks (76-90 hours)

Exhibit Dates: 9/71-Present

Objectives: To train personnel to remove, repair, and install shipboard insulation and lagging.

Instruction: Lectures and practical exercises in shipboard insulation and lagging installation, including heat insulation materials; types of insulation and lagging materials used in nuclear and non-nuclear systems; and installation of insulation on piping components, ducts, and hulls.

Credit Recommendation: In the vocational certificate category, 2 semester hours in thermal insulation (5/74).

NV-1710-0040

**Builder/Concrete, Class C**

(BU "C" Concrete)

Course Number: A-730-0020

Location: Construction Training Center, Port Hueneme, CA; Construction Training Center, Gulfport, MS.

Length: 7 weeks (216 hours)

Exhibit Dates: 10/71-Present

Objectives: To train noncommissioned officers in the use of concrete.

Instruction: Lectures and practical exercises in concrete use, mixing, and handling, including applied mathematics, plans and specifications; concrete ingredients, design and control of concrete mix, prestress concrete, reinforcement, joints and batch plants, placing, finishing and curing concrete, decorative concrete, road and airfield paving, concrete-block and pipe plants; and control and estimating.

Credit Recommendation: In the vocational certificate category, 5 semester hours in construction (7/76); in the lower-division baccalaureate/associate degree category, 4 semester hours in concrete mixing, placing, and use of (7/76).

NV-1710-0041

**Shipfitters, Class A** - **Pipefitters**

Course Number: Not available

Location: Training Center, San Diego, CA.

Length: 12 weeks (360 hours)

Exhibit Dates: 5/63-12/68

Objectives: To train enlisted personnel to be pipefitters.

Instruction: Lectures and practical exercises in pipefittings, including shipfitter responsibilities, mathematics, blueprint reading, shipfitter working drawings and symbols, tools and materials, metallurgy, welding, brazing and soldering, coppertinning, and pipefitting.

Credit Recommendation: In the vocational certificate category, 2 semester hours in pipelining (5/74).

NV-1710-0042

**Builder, Class J** - **BU "J"**

Course Number: A-710-0011; A-710-0014

Location: Construction Training Center, Port Hueneme, CA; Construction Training Center, Gulfport, MS; Construction School, Davison, MI.

Length: 12-17 weeks (480-554 hours)

Exhibit Dates: 10/70-Present

Objectives: To train petty officers to supervise builders.

Instruction: Lectures and practical exercises in builder supervision, including mathematics, shop management, light frame construction, masonry, masonry, plastering, ceramic tile, advance-base and waterproofing, and project planning.

Credit Recommendation: In the vocational certificate category, 8 semester hours in general construction (7/76); in the lower-division baccalaureate/associate degree category, 5 semester hours in general contracting (7/76).

NV-1710-0043

**Equipment Operators/Crushing and Screening Plant Operations, Class C**

(EO "C" Crushing and Screening Operators)

Course Number: A-730-0018

Location: Construction Training Center, Port Hueneme, CA.

Length: 2 weeks (63 hours)

Exhibit Dates: 1/72-Present

Objectives: To train enlisted personnel to operate, adjust, and service portable rock-crushing and screening equipment.

Instruction: Lectures and practical exercises in rock-crushing and screening equipment operation, adjustment, and servicing, including belt conveyors, assembling and operating the plant, and lubrication, maintenance, and adjustments necessary for production of different sizes of aggregates as required for construction projects.

Credit Recommendation: In the vocational certificate category, 1 semester hour in construction (7/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in construction (7/74).

NV-1710-0044

**Plate Welders, Class C**

Course Number: A-701-0025

Location: Training Center, San Diego, CA.

Length: 10 weeks (300 hours)

Exhibit Dates: 7/70-Present

Objectives: To train enlisted personnel to weld various structures and hulls.

Instruction: Lectures and practical exercises in welding, including manual metal arc welds on steel plate, metal inert-gas welds on aluminum plate, both types of welds on ferrous and nonferrous metal plate, gas, tungsten-arc welding, and use of a variety of electrodes in both overhead and vertical positions.

Credit Recommendation: In the vocational certificate category, 3 semester hours in welding (5/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in welding (5/74).

NV-1710-0045

**Stainless Steel Welding**

Requalification - Phase I - Enlisted

Course Number: F-701-015

Location: Submarine School, Groton, CT.

Length: 3 weeks (90 hours)

Exhibit Dates: 7/67-12/71

Objectives: To train stainless steel welders to make limited emergency welds on reactor plant systems.

Instruction: Lectures and practical exercises in welding of reactor plant systems, including fillet welds on paddle wheel, carbon steel and specialty pipe welding in horizontal and vertical positions, and identification of welding defects using liquid dye penetrant methods of inspection.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/74).

NV-1710-0046

**Welding for Nuclear Power Plant Operators, Course V**

Course Number: F-701-010, A-701-014, A-701-015

Location: Submarine School, San Diego, CA; Welding School, Class C, San Diego, CA.

Length: 16 weeks (464 hours)

Exhibit Dates: 1/63-12/70

Objectives: To provide enlisted personnel with training in arc and oxyacetylene welding.

Instruction: Lectures and practical exercises in welding for use by nuclear-power plant operators. Topics include principles of manually shielded metal and arc welding; arc welding of the root pass in welding grooves using "EB" inserts; shielded metal arc welding using W-7A electrodes; materials and processes used in nuclear power plant welding; preparation and inspection of welded joints; welding in fixed position; restricted access in confined spaces; and oxyacetylene torch brazing and cutting.

Credit Recommendation: In the vocational certificate category, 6 semester hours in arc welding (5/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in arc welding (5/74).

NV-1710-0047

**Stainless Steel Welding**

Requalification

(Maintenance of Welding Qualifications)

Course Number: L-701-0014, L-701-014

Location: Fleet Submarine Training Facility, Pearl Harbor, HI; Fleet Submarine Training Facility, Groton, CT.

Length: 3-4 weeks (84-160 hours)

Exhibit Dates: 12/69-Present

Objectives: To train enlisted personnel to perform as stainless steel welders.

Instruction: Lectures and practical exercises in stainless-steel welding. Course includes preparation and inspection of welded joints, manually shielded metal arc welding using the W-4 and W-7A coated electrodes, manual metal-arc tungsten-arc welding of the root pass in welding grooves using a consumable insert, and a qualifications test.
Credit Recommendation: In the vocational certificate category, 2 semester hours in welding (5/74).

**NV-1710-0048**
STAINLESS STEEL WELDING REQUALIFICATION—PHASE III (ENLISTED)

Course Number: P-701-016
Location: Submarine School, Groton, CT
Length: 3 weeks (90 hours).
Exhibit Dates: 1/67-12/68.

Objectives: To requalify enlisted personnel who were once qualified as stainless steel welders to work in a limited capacity on welds in a reactor plant system.

Instruction: Lectures and practical exercises in stainless steel welding. Topics include fillet welds on paddle wheel and curved surfaces; welding using the manual arc process in horizontal, vertical, and restricted fixed positions; welding, inspecting, and grinding carbon steel rocket sleeves, and tets; and identifying welding defects utilizing liquid dye penetrant methods of inspection.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/74)

**NV-1710-0049**
PRESSURE HULL WELDERS

Course Number: A-701-0029
Location: Service School Command, San Diego, CA
Length: 2 weeks (60 hours).
Exhibit Dates: 11/70-Present.

Objectives: To train enlisted personnel to perform manual metal arc welds on carbon steel or austenitic steel plate.

Instruction: Lectures and practical exercises in the metal arc welding of steel alloy and austeniic steel plate in fixed-overhead and vertical positions, and the general properties and characteristics of hull plate.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/74)

**NV-1710-0050**
PIPE WELDERS

Course Number: A-701-0026
Location: Welding School, Class C, San Diego, CA
Length: 4 weeks (120 hours).
Exhibit Dates: 8/70-Present.

Objectives: To train enlisted personnel to perform manual metal arc welds on carbon steel or copper-nickel pipe.

Instruction: Lectures and practical exercises in manual metal arc welds on carbon steel pipe in fixed-restricted and horizontal positions and in manual metal arc welds on copper-nickel pipe using copper-nickel electrodes in fixed-restricted and horizontal positions.

Credit Recommendation: In the vocational certificate category, 1 semester hour in pipe welding (5/74).

**NV-1710-0051**
HIGH PRESSURE PIPE WELDERS

Course Number: A-701-0027
Location: Welding School, Class C, San Diego, CA
Length: 4 weeks (120 hours).
Exhibit Dates: 8/70-Present.

Objectives: To train enlisted personnel to perform manual metal arc welds on carbon-molybdenum high-pressure piping systems.

Instruction: Lectures and practical exercises in high-pressure pipe welding. Course includes manual metal arc welding of steel pipe with carbon-molybdenum electrodes; manual metal arc welding of steel pipe with chrome-molybdenum electrodes; and gas tungsten arc welding of carbon steel pipe with root inserts.

Credit Recommendation: In the vocational certificate category, 1 semester hour in pipe welding (5/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in pipe welding (5/74).

**NV-1710-0052**
FUEL GAS WELDERS

Course Number: A-701-0024
Location: Welding Class C School, San Diego, CA
Length: 4 weeks (120 hours).
Exhibit Dates: 6-70-Present.

Objectives: To train enlisted personnel to perform silver brazing of ferrous and nonferrous piping systems and structural baffle welding and gas welding in ferrous and nonferrous metals.

Instruction: Lectures and practical exercises in specialty skills developed in fuel-gas welding of stainless steel in the flat position; fuel gas welding and brazing with brass; hard-surfacing mild steel by the gas-fuel process; and techniques of safety and inspection using bronze fittings and couplings with copper, copper-nickel, brass, and steel pipe in fixed-restricted horizontal and vertical positions.

Credit Recommendation: In the vocational certificate category, 1 semester hour in pipe welding (5/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in pipe welding (5/74).

**NV-1710-0053**
STEELWORKER/WELDING CERTIFICATION, CLASS C (SWC-Welding Certification)

Course Number: A-701-0038
Location: Construction Training Center, Port Hueneme, CA; Construction Training Center, Gulfport, MS
Length: 4 weeks (120 hours).
Exhibit Dates: 11/63-12/68.

Objectives: To provide enlisted personnel with training in arc and gas welding.

Instruction: Lectures and practical exercises in welding procedures. Course includes welding safety policies and attitudes; flat and vertical welding positions; theories and techniques of welding fixed-position pipe; oxyacetylene welding theory and techniques in vertical and overhead positions; theory and techniques of inert gas-shielded metal arc welding in vertical and overhead positions with aluminum.

Credit Recommendation: In the vocational certificate category, 2 semester hours in welding (7/76); in the lower-division baccalaureate/associate degree category, 1 semester hour in welding (7/76).

**NV-1710-0054**
INTERMEDIATE WELDING (Welding Course I)

Course Number: Not available.
Location: Welding School, Class C, San Diego, CA.
Length: 12 weeks (360-390 hours).
Exhibit Dates: 11/63-12/68.

Objectives: To train enlisted personnel to weld and braze ship structures and piping.

Instruction: Lectures and practical exercises in welding. Course includes introduction to oxyacetylene welding; oxyacetylene welding of mild steel; brazing; hard-surfacing; tungsten inert-gas arc welding (T.I.G.); shielded inert-gas metal-arc welding of aluminum (M.I.G.); introduction to metal-arc welding of mild steel with welder, with MIL-7018 low-hydrogen electrodes, and with MIL-310 15/16 chromium-nickel steel electrodes; and hard-surfacing mild steel by the metal-arc process.

Credit Recommendation: In the vocational certificate category, 3 semester hours in welding (5/74); in the lower-division baccalaureate/associate degree category, 6 semester hours in welding (5/74).

**NV-1710-0055**
ADVANCED WELDING (Welding Course II)

Course Number: Not available.
Location: Welding School, Class C, San Diego, CA.
Length: 5 weeks (240 hours).
Exhibit Dates: 11/63-12/68.

Objectives: To train enlisted personnel as welders.

Instruction: Lectures and practical exercises in advanced welding techniques. Course includes welding stainless steel pipe with carbon-molybdenum electrodes; welding steel pipe with chrome-molybdenum electrodes; welding steel pipe with chrome-nickel electrodes; introduction to hull welding; welding high-tensile stainless steel pipe with low-hydrogen electrodes; welding heavy hull plate with low-hydrogen electrodes; arc-gouging; welding austenite-chromium electrodes, welding copper-nickel alloy (70-30) with copper-nickel electrodes; and shielded metal-arc welding of aluminum (M.I.G.).

Credit Recommendation: In the vocational certificate category, 2 semester hours in welding/metallurgy (5/74); in the upper-division baccalaureate/associate degree category, 1 semester hour in welding/metallurgy (5/74).

**NV-1710-0056**
AUTOMATED PROPULSION SYSTEM OPERATOR, CLASS C

Course Number: A-651-0036.
Location: Service School Command, San Diego, CA.
Length: 4 weeks (180 hours).
Exhibit Dates: 1/71-Present.

Objectives: To train enlisted personnel in automated propulsion system controls and in engineering plant concepts, with particular emphasis on propulsion systems, throttle-control, and plant surveillance.

Instruction: Lectures and practical exercises in automated propulsion system controls and in engineering plant concepts. Course includes analog systems, pneumatic analog system functions, digital systems, Bailey 760 system, input and output control signals and devices, practical use of schematics and flow charts, central operations system design, engine room console, bridge console, and plant operations.

Credit Recommendation: In the vocational certificate category, 3 semester hours as a technical elective in mechanical maintenance (7/74); in the lower-division baccalaureate/associate degree category, 3 semester hours as a technical elective in mechanical maintenance (7/74).

114 Length: 4 weeks (120 hours).
Exhibit Dates: 11/63-12/68.

Objectives: To train enlisted personnel to perform manual metal arc welds on carbon steel or copper-nickel pipe.

Instruction: Lectures and practical exercises in manual metal arc welds on carbon steel pipe in fixed-restricted vertical and horizontal positions and in manual metal arc welds on copper-nickel pipe using copper-nickel electrodes in fixed-restricted vertical and horizontal positions.

Credit Recommendation: In the vocational certificate category, 1 semester hour in pipe welding (5/74).
COURSE EXHIBITS

NV-1710-0057

PROPELLION SHAFT COMPONENTS
Course Number: A-651-0061, F-000-040, L-661-020
Location: Fleet Ballistic Missile Submarine Training Center, Charleston, SC; Fleet Submarine Training Facility, Pearl Harbor, HI; Naval Submarine School, Groton, CT
Length: 9 weeks (325 hours)
Exhibit Dates: 11/66-Present
Objectives: To train enlisted personnel to maintain the propulsion shaft components found in guided and powered submarines.
Instruction: Lectures and practical exercises in the maintenance of propulsion shaft components. Course includes principles of operation, theory, construction, and practical training in the repair of propulsion shaft components.
Credit Recommendation: In the vocational certificate category. 1 semester hour as an elective in mechanical or industrial programs (7/74), in the lower-division baccalaureate/associate degree category. 1 semester hour as an elective in mechanical or industrial programs (7/74).

NV-1710-0058

OFFICER DAMAGE CONTROL
Course Number: Not available
Location: Damage Control Training Center, Philadelphia, PA; Naval Schools Command, Treasure Island, CA
Length: 4-6 weeks (120 hours)
Exhibit Dates: 1965-12/66
Objectives: To train enlisted personnel to perform as damage control assistants.
Instruction: Lectures and practical exercises in the duties and skills necessary to perform as a damage control assistant. Course includes hull design and construction, emergency communication systems, damage identification and control, and repair procedures.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/74).

NV-1710-0059

ENGINEER OFFICER: AMPHIBIOUS SHIP
Course Number: G-4H-6190
Location: Amphibious School, Norfolk, VA
Length: 4-6 weeks (160-240 hours)
Exhibit Dates: 1/70-Present
Objectives: To train officers as amphibious ship engineering officers.
Instruction: Lectures and practical exercises in the duties of amphibious ship engineering officers, including boiler maintenance, steam and diesel propulsion, ship engineering organization, auxiliary machinery, electrical power distribution and equipment, and basic electrical principles and applications to shipboard equipment.
Credit Recommendation: Credit is not recommended because of the technical nature of the course (7/74).

NV-1710-0060

MACHINIST'S MATE EXAMINED
Maintenance
Course Number: A-651-016
Location: Destroyer School, Newport, RI
Length: 9 weeks (240 hours)
Exhibit Dates: 1/69-Present
Objectives: To train personnel to perform as machinist's mates.
Instruction: Lectures and practical exercises in the duties and skills necessary to perform as machinist's mates. Course includes hand tools, precision tools, steam theory and cycle, feed booster pump and system, main pump and system, and boiler construction and operation.
Credit Recommendation: Insufficient data for evaluation (7/74).

NV-1710-0061

MARINE AIRCRAFT LAUNCH AND RECOVERY EQUIPMENT, CLASS A
Course Number: C-680-2015
Location: Air Technical Training Center, Lackhurst, NJ
Length: 8 weeks (320 hours)
Exhibit Dates: 11/72-Present
Objectives: To train enlisted personnel to operate and maintain aircraft launching and recovery equipment.
Instruction: Lectures and practical exercises in aircraft launching and recovery equipment operation and maintenance, including survival and emergency equipment, heavy equipment, and arresting gear.
Credit Recommendation: In the vocational certificate category. 6 semester hours in heavy equipment technology (7/74), in the lower-division baccalaureate/associate degree category. 3 semester hours in heavy equipment technology (7/74).

NV-1710-0062

EQUIPMENT OPERATORS/ASPHALT PAVING AND PLANT OPERATION, CLASS C
Course Number: A-730-0017
Location: Construction Training Center, Gulfport, MS, Construction Training Center, Port Hueneme, CA
Length: 7 weeks (210 hours)
Exhibit Dates: 1/70-Present
Objectives: To train personnel in the operating techniques and supervisory skills required for asphalt paving and plant operation.
Instruction: Lectures and practical exercises in asphalt paving and plant operation, including plant components, plant disassembly, plant erection, asphalt construction materials, designing hot asphalt mixes, production equipment, placing equipment, protective coatings, producing and laying asphalt, and pavement failure and repair.
Credit Recommendation: In the vocational certificate category. 4 semester hours in asphalt paving construction (7/76).

NV-1710-0063

BUILDERS, CLASS A (BU'A')
Course Number: A-710-0010
Location: Construction Training Center, Port Hueneme, CA; Construction Training Center, Davyville, RI
Length: 9-12 weeks (280-370 hours)
Exhibit Dates: 3/66-Present
Objectives: To train personnel as builders.
Instruction: Lectures and practical exercises in the duties of builders, including hand tools and portable machinery, construction methods, blueprint reading, woodworking and millwork, construction carpentry, concrete, concrete finishing and masonry construction, roofing, plumbing, glazing, and construction tile, and field and waterfront structures.
Credit Recommendation: In the vocational certificate category. 8 semester hours in construction technology (7/74), in the lower-division baccalaureate/associate degree category. 2 semester hours in construction technology (7/76).

NV-1710-0064

EQUIPMENT OPERATORS/BLASTING AND RECOVERY EQUIPMENT, CLASS A
(EOS-C) BLASTING AND QUARRY OPERATIONS
Course Number: A-730-0019, A-710-012
Location: Construction Training Center, Port Hueneme, CA
Length: 14-15 weeks (420-450 hours)
Exhibit Dates: 2/65-Present
Objectives: To train personnel in the maintenance, repair, and overhaul of automotive materials and parts.
Instruction: Lectures and practical exercises in the repair and maintenance of construction vehicles and parts, including forklifts, refrigeration units, trucks, and mobile power equipment, and automotive chassis and power trains.
Credit Recommendation: In the vocational certificate category. 9 semester hours in construction equipment repair foremanship (7/76).

NV-1710-0066

MARINE GAS TURBINE BASIC, CLASS C
(Construction Mechanic, Class B)
Course Number: A-610-0011, A-610-0015
Location: Construction Training Center, Gulfport, MS; Construction Training Center, Port Hueneme, CA
Length: 6 weeks (180 hours)
Exhibit Dates: 6/72-Present
Objectives: To train personnel in gas turbine mechanics, including gas turbine basic, gas turbine advanced, gas turbine accessories, gas turbine maintenance, and gas turbine repair.
Instruction: Lectures and practical exercises in the theory, operation, and characteristics of gas turbine engines, assemblies, sub-assemblies, and component parts.
Credit Recommendation: In the vocational certificate category. 1 semester hour in gas turbine engines (6/72).

NV-1710-0067

CONSTRUCTION MECHANIC, CLASS C (CM-J')
Course Number: A-652-0027
Location: Propulsion Engineering School, Great Lakes, IL
Length: 6 weeks (213 hours)
Exhibit Dates: 2/65-Present
Objectives: To train personnel in the maintenance and repair of construction vehicles and equipment.
Instruction: Lectures and practical exercises in the repair and maintenance of construction vehicles and equipment, including forklifts, refrigeration units, trucks, and mobile power equipment.
Credit Recommendation: In the vocational certificate category. 1 semester hour in construction equipment repair foremanship (7/76).

NV-1710-0068

1. MARINE GAS TURBINE BASIC, CLASS C
2. ENGINEERING, CLASS C. MARINE GAS TURBINE BASIC
Course Number: A-652-0027
Location: Propulsion Engineering School, Great Lakes, IL
Length: 6 weeks (213 hours)
Exhibit Dates: 2/65-Present
Objectives: To train personnel in the repair and maintenance of construction vehicles and equipment.
Instruction: Lectures and practical exercises in the repair and maintenance of construction vehicles and equipment, including forklifts, refrigeration units, trucks, and mobile power equipment.
Credit Recommendation: In the vocational certificate category. 1 semester hour in construction equipment repair foremanship (7/76).
NV-1710-0067

**SOLAR T-10205-11A SATURN ENGINE**

Course Number: A-652-0068
Location: Submarine Training Center, Charleston, SC
Length: 3 weeks (85 hours)
Exhibit Dates: 8/73-Present.

Objectives: To upgrade the knowledge and skills of petty officers with Gas Turbine System Technician ratings for more effective performance of duties.

Instruction: Lectures, practical exercises in operating, testing, adjusting, and diagnosing and repairing malfunctions in the Solar Saturn gas turbine engine. Credit Recommendation: Credit is not recommended because of the refresh nature of the course (9/77).

NV-1710-0068

**STEEL WORKER, MAINTENANCE WELDING TECHNIQUES, CLASS C (SWC) Maintenance Welding)**

Course Number: A-701-0037
Location: Construction Training Center, Port Hueneme, CA; Construction Training Center, Gulfport, MS
Length: 4-5 weeks (120-150 hours)
Exhibit Dates: 7/73-Present.

Objectives: To provide instruction in the repair of machinery by welding.

Instruction: Lectures and practical exercises in welding consumables, applied welding, metallurgy, and general and high strength brazing of steel, heat treatment of metals and silver brazing of steel, welding processes and silver brazing of stainless steel, welding of stainless steel, welding of stainless steel, welding of stainless steel, and arc welding of maintenance and gas tungsten arc in maintenance welding. Credit Recommendation: In the vocational certificate category, 3 semester hours in advanced welding (7/76), in the lower-division baccalaureate/associate degree category, 3 semester hours in advanced welding (7/76).

NV-1710-0069

**NUCLEAR POWER PLANT COMPONENTS WELDER, CLASS C**

Course Number: A-701-0028
Location: Welding School, San Diego, CA
Length: 14 weeks (447 hours)
Exhibit Dates: 10/73-Present.

Objectives: To train petty officers to weld reactor coolant and associated systems in a nuclear power plant.

Instruction: Topics include introduction to nuclear power plant components, welding, welding of stainless steel, pipe butt and socket joint types, and upper seal weld of a beveled canopy.

Credit Recommendation: In the vocational certificate category, 6 semester hours in advanced or specialized welding (6/75); in the lower-division baccalaureate/associate degree category, 3 semester hours in advanced or specialized welding (6/75).

NV-1710-0070

**GENERAL PUMP MAINTENANCE**

Course Number: F-000-0045; F-000-0045
Location: Submarine School, Groton, New London, CT; Fleet Ballistic Missile Submarine Training Center, Charleston, SC; Submarine Training Center, Pacific, Pearl Harbor, HI.
Length: 2-3 weeks (60-105 hours)
Exhibit Dates: 9/66-Present.

Objectives: To train personnel to recognize, operate, maintain, and repair various types of liquid pumps and their components.

Instruction: Lectures and practical exercises in pump classification and application and shaft seals, couplings, valves, and other pump components and their maintenance.

Credit Recommendation: In the vocational certificate category, 2 semester hours in construction equipment (pump maintenance) (7/74).

NV-1710-0071

**AIRCRAFT LAUNCH AND RECOVERY EQUIPMENT (C-7/11 CATAPULT), CLASS C**

Course Number: None
Location: Air Technical Training Center, Lakehurst, NJ
Length: 9 weeks (352 hours)
Exhibit Dates: 10/72-Present.

Objectives: To train selected personnel in the operation, inspection, and maintenance of C-7/11 catapults and related equipment.

Instruction: Lectures and practical exercises in the basic fundamentals, description, operation, function, and location of the C-7/11 catapults, Mk-7 arresting gear baffle components, and systems to include the steam system, mechanical system, hydraulic system, control system familiarization, operation, replacement, servicing, and repair and maintenance.

Credit Recommendation: In the vocational certificate category, 6 semester hours in steam systems and hydromechanical systems (6/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in steam systems and hydromechanical systems (6/74).

NV-1710-0072

**STEAM PLANT AUTOMATIC CONTROLS MAINTENANCE (GENERAL REGULATOR)**

Course Number: A-651-0039, A-651-0040
Location: Development and Training Center, San Diego, CA; Boiler Technician School, Philadelphia, PA
Length: 6 weeks (210 hours)
Exhibit Dates: 11/72-Present.

Objectives: To train petty officers to perform their duties and to supervise personnel in steam plant operation.

Instruction: Classroom and practical instruction in the operation and maintenance of high pressure steam systems using the Hagan Automatic Control system, including safety controls and feed pumps.

Credit Recommendation: In the vocational certificate category, 2 semester hours in building maintenance and engineering (6/75).

NV-1710-0073

**STEAM PLANT AUTOMATIC CONTROLS MAINTENANCE (HAGAN)**

Course Number: A-651-0002
Location: Boiler Technician School, Philadelphia, PA; Development and Training Center, San Diego, CA
Length: 6 weeks (180 hours)
Exhibit Dates: 12/72-Present.

Objectives: To train petty officers to perform their duties and to supervise personnel in steam plant operation.

Instruction: Classroom and practical instruction in the operation of high pressure steam systems using the Bailey Meter Automatic Control system, including safety controls and feed pumps.

Credit Recommendation: In the vocational certificate category, 3 semester hours in building maintenance and engineering (6/75).

NV-1710-0074

**STEAM PLANT AUTOMATIC CONTROLS MAINTENANCE (BAILEY METER)**

Course Number: A-651-0034, A-651-0044
Location: Boiler Technician School, Philadelphia, PA; Development and Training Center, San Diego, CA
Length: 6 weeks (180 hours)
Exhibit Dates: 12/72-Present.

Objectives: To train petty officers to perform their duties and to supervise personnel in steam plant operation.

Instruction: Classroom and practical instruction in the operation of high pressure steam systems using the Bailey Meter Automatic Control system, including safety controls and feed pumps.

Credit Recommendation: In the vocational certificate category, 3 semester hours in building maintenance and engineering (6/75).

NV-1710-0075

**1200 PSI STEAM GENERATING PLANT OPERATOR**

Course Number: A-651-0038
Location: Boiler Technician School, Philadelphia, PA
Length: 3 weeks (106 hours)
Exhibit Dates: 10/72-Present.

Objectives: To train boiler technicians in the operation of the 1200 psi boilers and associated auxiliary machinery.

Instruction: Classroom and practical instruction in the principles of high pressure steam systems including start-up, operation, and control of steam plants and steam plant auxiliaries.

Credit Recommendation: In the vocational certificate category, 2 semester hours in plant operation and maintenance (6/75); in the lower-division baccalaureate/associate degree category, 2 semester hours in plant operation and maintenance (6/75).

NV-1712-0001

**WAUKESHA DIESEL ENGINE**

Course Number: A-652-0003, J-651-0073
Location: Fleet and Mine Warfare Training Center, Charleston, SC
Length: 3 weeks (145 hours)
Exhibit Dates: 7/73-Present.

Objectives: To train engine operators and maintain specific diesel engines and distilling plant and engineering plant systems.

Instruction: Lectures and practical exercises in the operation and maintenance of specific diesel engines and distilling plant and engineering plant systems, including diesel engine construction, pump, and components: diesel engine systems, disassembly and reassembly procedure, alignment, troubleshooting, theory of distillation, principles, systems, and components of equipment: troubleshooting techniques; and engineering plant systems, clutches and couplings, reduction gears, propellers and shafting, engine alignment, and main propulsion system operating procedure.
1-156 COURSE EXHIBITS

Credit Recommendation: In the vocational certificate category, 2 semester hours in diesel engines (4/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in diesel engines (4/74).

Credit Recommendation: In the vocational certificate category, 2 semester hours in diesel engines (4/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in diesel engines (4/74) as an elective in mechanical technology (4/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in diesel engines (4/74) as an elective in mechanical technology (4/74).

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in diesel engines (4/74), in the upper-division baccalaureate category, 1 semester hour in diesel engines (4/74).

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in diesel engine technology, automotive or heavy equipment technology (9/77).

NV-1712-0002
SSN/SSBN DIESEL ENGINE (FAIRBANKS-MORSE) MAINTENANCE
Course Number: A-652-0046
Location: Submarine School, Groton, CT
Length: 5 weeks (150 hours)
Exhibit Dates: 12/71-Present
Objectives: To train enlisted personnel to maintain and repair the Fairbanks-Morse diesel engine.

Instruction: Lectures and practical exercises in Fairbanks-Morse diesel engine maintenance and repair, including diesel engine principles, components familiarization and maintenance, procedures, engine fluid systems, scavenging blower, camshaft drive, and bearings, tappet assemblies, fuel injection, engine timing, governor, engine control systems, and troubleshooting and corrective maintenance procedures.

Credit Recommendation: In the vocational certificate category, 5 semester hours in diesel engines (4/74), in the lower-division baccalaureate/associate degree category, 5 semester hours in diesel engines (4/74), in the upper-division baccalaureate category, 5 semester hours in diesel engines (4/74).

NV-1712-0003
FAIRBANKS-MORSE 3F3 1/4 DIESEL ENGINE
Course Number: F-652-0020
Location: Submarine School, Groton, CT
Length: 2 weeks (60 hours)
Exhibit Dates: 4/70-Present
Objectives: To train enlisted personnel to maintain and repair the Fairbanks-Morse diesel engine.

Instruction: Lectures and practical exercises in Fairbanks-Morse diesel engine maintenance and repair, including diesel engine characteristics, component parts, fresh and salt water systems, lube oil systems, vertical drive assembly, starting air system, camshaft, timing and pump drive, fuel system, governors, fuel injection, system, and troubleshooting and repair procedures.

Credit Recommendation: In the vocational certificate category, 2 semester hours in diesel engines (4/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in diesel engines (4/74); in the upper-division baccalaureate category, 2 semester hours in diesel engines (4/74).

NV-1712-0004
MINE WARFARE, WALKESHA DIESEL ENGINEMAN, CLASS C
Course Number: Not available
Location: Mine Warfare Class C School, Charleston, SC
Length: 2 weeks (120 hours)
Exhibit Dates: 1/67-Present
Objectives: To train enlisted personnel to maintain the Waukesha diesel engine.

Instruction: Lectures and practical exercises in Waukesha diesel engine maintenance, including engine systems introduction, components familiarization, disassembly and reassembly procedures, turbocharger, water pumps, cooler, and fuel injection maintenance and alignment, break-in, and troubleshooting procedures.

Credit Recommendation: In the vocational certificate category, 1 semester hour in diesel engines (4/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in diesel engines (4/74), in the upper-division baccalaureate category, 1 semester hour in diesel engines (4/74).

NV-1712-0005
GM-16-278A DIESEL ENGINE, CLASS CI
(Engineermen, Class C, General Motors 16-278A Diesel Engine)
Course Number: A-652-0021
Location: Propulsion Engineering School, Great Lakes, IL
Length: 3 weeks (90-100 hours)
Exhibit Dates: 5/73-Present
Objectives: To train petty officers to perform the maintenance and repair of the GM 16-278A diesel engine.

Instruction: Lectures and practical exercises in GM 16-278A diesel engine maintenance and repair, including component parts operation, gear trains, engine timing, air intake and exhaust system, centrifugal pumps and cooling systems, lubrication system, governor, speed control device, air jetting and starting procedures, and troubleshooting.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in diesel engines (9/77).

NV-1712-0006
GM-12-567E/567E DIESEL ENGINE, CLASS CI
(Engineermen, Class C, General Motors 12-567E Diesel Engine)
Course Number: A-652-0022
Location: Propulsion Engineering School, Great Lakes, IL
Length: 3 weeks (90-92 hours)
Exhibit Dates: 6/73-Present
Objectives: To train petty officers to supervise the maintenance and repair of the GM 12-567E diesel engine.

Instruction: Lectures and practical exercises in GM 12-567E diesel engine maintenance and repair, including component parts operation, gear trains, engine timing, air intake and exhaust systems, centrifugal pumps and cooling systems, lubrication system, fuel system, governor, starting system operation, reversing reduction gear, clutch, maintenance procedures, starting and operating procedures, and troubleshooting.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in diesel engines (9/77).

NV-1712-0007
GM 264A DIESEL ENGINE, CLASS CI
(Engineermen, Class C, General Motors 8-268A Diesel Engine)
Course Number: A-652-0020
Location: Propulsion Engineering School, Great Lakes, IL
Length: 3 weeks (95-120 hours)
Exhibit Dates: 5/73-Present
Objectives: To train petty officers to supervise the maintenance and repair of the GM 8-268A diesel engine.

Instruction: Lectures and practical exercises in GM 8-268A diesel engine maintenance and repair, including component parts operation, gear trains, engine timing, air intake and exhaust system, centrifugal pumps and cooling systems, lubrication system, fuel system, governor, maintenance procedures, starting and operating procedures, and troubleshooting.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in diesel engine technology, automotive or heavy equipment technology (9/77).

NV-1712-0008
ENGINEERING OFFICER
(Engine Officer)
Course Number: K-4H-0028, A-4H-0022
Location: Fleet Training Center, San Diego, CA
Length: 12-13 weeks (360-417 hours)
Exhibit Dates: 9/70-Present
Objectives: To train junior officers to perform as engineering officers in diesel- and steam-powered ships.

Instruction: Lectures and practical exercises in the operation of diesel- and steam-powered ships, including engineering department management, shipboard fire fighting, damage control, nuclear, biological, and chemical warfare defense, shipboard electrical systems, and the principles of specific boiler operations, auxiliary machinery and steam propulsion machinery, officer administration, fuel oil system and cooling systems, gauges and instruments, and the operation of vertical, forced-draft blowers.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1712-0009
ASSAULT BOAT ENGINEER
Course Number: G-652-6160
Location: Amphibious School, Little Creek, VA
Length: 3 weeks (105 hours)
Exhibit Dates: 1/67-Present
Objectives: To train enlisted personnel in diesel engine and assault boat operation and maintenance.

Instruction: Lectures on diesel engine operation, component nomenclature, lubrication system, cooling system, fuel system, blowers, governors, fuel injection, hydraulic reverse gear, V drive, transmission, electrical systems, ram pump, and overhaul and troubleshooting procedures.

Credit Recommendation: In the vocational certificate category, 2 semester hours in heavy equipment or diesel technology (4/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in heavy equipment or diesel technology (4/74).

NV-1712-0010
AMERICAN LOCOMOTIVE (ALCO) DIESEL ENGINE, CLASS CI
(Engineeman, Class C, American Locomotive (ALCO) 251C Diesel Engine)
Course Number: A-652-0036
Location: Propulsion Engineering School, Great Lakes, IL
Length: 3 weeks (99-120 hours)
Exhibit Dates: 4/73-Present
Objectives: To train petty officers to supervise the operation, maintenance, and repair of diesel engines.

Instruction: Lectures in diesel engine introduction, construction, turbocharger, intake, and exhaust systems, starting air systems, lubrication, governor and instrumentation. PMS re...
requirements; and engine operation and troubleshooting procedures.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in diesel technology (9/77)

NV-1712-0011

ENGINEER, CLASS A

Course Number: A-652-0018
Location: Service School Command, Great Lakes, IL.
Length: Versus 1: Self-paced 5-6 weeks (216 hours). Versus 2: 12 weeks (455 hours) Version 3: 2 weeks (373 hours).

Objectives: To train enlisted personnel to operate diesel-powered ship engines.


Credit Recommendation: In the vocational certificate category, 1 semester hour as an elective in automotive or diesel technology (4/74); 1 semester hour in the lower-division baccalaureate/associate degree category, 1 semester hour as an elective in automotive or diesel technology (4/74)

NV-1712-0014

FMSDB 1/8 DR DIESEL ENGINE, CLASS C

Course Number: A-652-0023
Location: Propulsion Engineering School, Great Lakes, IL.
Length: 3 weeks (95-120 hours).
Exhibit Dates: 6/73-Present

Objectives: To train petty officers to supervise diesel engine operation, maintenance, diagnosis, and repair.

Instruction: Lectures and practical exercises in diesel engine operation, maintenance, diagnosis, and repair, including engine construction, control and vertical drive, timing, lubrication system, fuel system, cooling system, air starting system, blowers, intake and exhaust system, governor, and planned maintenance and troubleshooting procedures.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in diesel, automotive or heavy equipment technology (9/77)

NV-1712-0015

MINES WARE PACKARD DIESEL ENGINEER, CLASS C

Course Number: A-652-039
Location: Naval Schools, Charleston, SC.
Length: 11 weeks (64 hours).
Exhibit Dates: 9/70-Present

Objectives: To train enlisted personnel who have completed a basic engineer course to operate, maintain, diagnose, and overhaul diesel engines.

Instruction: Lectures and practical exercises in diesel engine operation, maintenance, diagnosis, and overhaul, including turbochargers, instruments, and controls, operating and construction data, cooling, lubrication, exhaust, and fuel systems, engine maintenance and overhaul procedures, and engine timing, troubleshooting, testing, and starting procedures.

Credit Recommendation: In the vocational certificate category, 3 semester hours in diesel technology or heavy equipment technology (4/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in diesel technology or heavy equipment (4/74)

NV-1712-0013

DEPOT LEVEL BOAT REPAIRMAN (ENGINEER)

Course Number: H-652-0066

Location: Amphibious School,Coronado, San Diego, CA.
Length: 3 weeks (105-111 hours).
Exhibit Dates: 7/66-Present

Objectives: To train personnel as assault boat engineers.

Instruction: Lectures and practical exercises in model 64HN9 and 6121-T diesel engines installed in landing craft, and in the operation and maintenance of ramp and steering machinery installed in LCMVs and LCMS, including basic diesel engine construction and operation and General Motors 64HN9 diesel engine familiarization, cylinder block and cylinder head overhaul, engine pump overhaul, engine disassembly, and assembly, engine timing, and adjustments, transmission, and troubleshooting.

Credit Recommendation: In the vocational certificate category, 3 semester hours in diesel technology (9/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in automotive technology (5/74)

NV-1712-0017

ENGINEERIES, DIESEL ENGINE, CLASS C

Course Number: Not available
Location: Engineerman. Class C School, Great Lakes, IL.
Length: 6 weeks (185-190 hours).
Exhibit Dates: 7/63-12/68

Objectives: To train enlisted personnel to maintain and repair diesel engines.

Instruction: Lectures and practical exercises in the maintenance, repair, and operation of diesel engines. Topics include diesel engine construction and operation, fuel systems, and individual units of construction of specific power plants.

Credit Recommendation: In the vocational certificate category, 6 semester hours in diesel engine laboratory and lecture (7/74); in the lower-division baccalaureate/associate degree category, 6 semester hours in diesel engine laboratory and lecture (7/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in diesel engine laboratory and lecture (7/74)

NV-1712-0018

PATROL GUNBOAT/PG/ENGINEERING SYSTEMS OPERATOR AND MAINTENANCE, CLASS C

Course Number: A-652-0032.
Location: Development and Training Center, San Diego, CA.
Length: 10 weeks (360 hours).
Exhibit Dates: 7/72-Present

Objectives: To provide personnel with the necessary skills and related knowledge to enable them to operate and perform board maintenance on patrol gunboat engineering systems.

Instruction: Lectures and practical exercises in the principles of operation, maintenance, and repair of gas turbines, diesel engines and generators, reduction gears, controllable pitch propellers, air control systems, steering subsystems, generators, and switchboards.

Credit Recommendation: In the vocational certificate category, 3 semester hours in marine technology (5/74).

NV-1712-0019

DETOIT DIESEL V-1 SERIES ENGINE MAINTENANCE, CLASS C

Course Number: A-652-0030
Location: Service School Command, Great Lakes, IL.
Length: 3 weeks (120 hours).
Exhibit Dates: 7/77-Present

Objectives: To train selected petty officers to supervise performance of scheduled and
1-158 COURSE EXHIBITS

unscheduled maintenance, diagnosis, and repair of the Detroit Diesel V71 engine.

- Areas of instruction include engine construction, fuel systems, lubrication, cooling, governors, tune up and maintenance procedures, starting, operating procedures, and troubleshooting.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in diesel engine operation, repair, and maintenance (9/77).

NV-1712-0020

DIESEL ENGINE TECHNICIAN, CLASS C1

Course Number: A-652-0021, A-652-0022

Objectives: To train petty officers to supervise the maintenance and repair of diesel engines.

Instruction: This course is a combination of A-652-0020, GM 268A Diesel Engine, Class C1 (NV-1712-0007), A-652-0021, GM-16-278A Diesel Engine, Class C1 (NV-1712-0008), and A-652-0022, GM-12-567E/645E Diesel Engine, Class C1 (NV-1712-0006). Topics cover the maintenance and repair of the specified diesel engines.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 6 semester hours in diesel engine technology (9/77).

NV-7713-0001

ENGINEERING AIDS, CLASS B (EA)*

Course Number: A-412-0015

Location: Construction Training Center, Port Hueneme, CA. Construction Training Center, Gulfport, MS

Length: 15-16 weeks (450-480 hours)

Instruction: Lectures and practical exercises in foremanship, mathematics, construction drafting, construction surveys, triangulation and surveying, astronomy, map projection, planning and estimating, advance-base planning, soils testing, bituminous materials and asphalt theory.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 10 semester hours in construction surveying, 3 in drafting (12/68).

NV-1713-0002

ILLUSTRATOR DRAFTSMAN, CLASS A

Course Number: Not available

Location: Construction School, Port Hueneme, CA

Length: 15 weeks (450 hours)

Instruction: Lectures and practical exercises in blueprint reading, mechanical drafting, ship and aircraft structural drafting, electrical and electronic drafting, media, visual aids, methods of reproduction, and techniques of reproduction.

Credit Recommendation: In the vocational certificate category, 6 semester hours in basic drafting (5/74).

NV-1714-0001

ELECTRICIAN'S MATE ENLISTED (MAINTENANCE)

Course Number: A-662-0018

Location: Naval Air Maintenance Training Detachment, El Toro, CA.

Length: 3 weeks (120 hours)

Instruction: Lectures and practical exercises in basic electrical, aircraft munitions, utility and fuel systems, power plants and propeller systems as they pertain specifically to the EC-130Q.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (11/73).

NV-1714-0002

ELECTRICIAN'S MATE MAINTENANCE

Class P

Course Number: A-651-0005

Location: Naval Development and Training Center, San Diego, CA

Length: 3 weeks (90 hours)

Instruction: To provide a knowledge of basic electrical theories and systems and to inculcate necessary basic repair and maintenance skills.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (11/73).

NV-1714-0003

ELECTRICIAN'S MATE MAINTENANCE

Class A

Course Number: A-721-0018

Location: Naval Destroyer School, Newport, RI

Length: 4 weeks (117 hours)

Instruction: Lectures and practical exercises in basic electricity, aircraft munitions, weapons, munitions handling, and aircraft ordnance.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, credit in electricity on the basis of institutional evaluation (3/74).

NV-1714-0007

AVIATION ORDINANCER (TURB), CLASS A

Course Number: None

Location: Air Technical Training Center, Jacksonville, FL

Length: 11 weeks (440 hours)

Instruction: Lectures and practical exercises in basic electricity, aircraft munitions, bomb and torpedo-handling equipment, weapons, munitions handling, and aircraft ordnance.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, credit in electricity on the basis of institutional evaluation (3/74).

NV-1714-0008

CONSTRUCTION ELECTRICIAN, CLASS A

(CES-A)

Course Number: Version 1, A-721-0018

Location: Construction Training Center, Port Hueneme, CA. Construction Training Center, Gulfport, MS.


Instruction: Lectures and practical exercises in basic electrical theory, telephone communications, interior wiring, pole line construction, motors and generators, mathematics review, and electrical blueprint reading.

Credit Recommendation: Version 1: In the lower-division baccalaureate/associate degree category, 2 semester hours in power generation and distribution, 2 semester hours in electronic wiring (7/76).

Version 2: In the vocational certificate category, 7 semester hours in electricity (3/74), in the lower-division baccalaureate/associate degree category, credit in electricity on the basis of institutional evaluation (3/74).
institutional evaluation (3/74) Version 3 In the vocational certificate category, 7 semester
hours in electricity (3/74), in the upper-
division baccalaureate/associate degree
category, credit in electricity on the basis of
institutional evaluation (3/74), in the upper-
division baccalaureate category, credit in
 electricity on the basis of institutional eval-
uation (3/74)

NV-1714-0009

1 BASIC ELECTRICITY AND ELECTRONICS, CLASS A-P (MODULES 0-25)
2 BASIC ELECTRICITY AND ELECTRONICS, CLASS P
(Basic Electricity Phase of Class A
Electronics Technician School)
Location: Basic Electricity/Electronics School. Great Lakes, IL; Basic
Electricane/Electronics School, Memphis, TN; Basic Electricity/Electronics School, Treasure
Island, CA; Basic Electricity Electronics School, Orlando, FL; Basic Electricity/Electronics School,
San Diego, CA.
Length: Version 1 Self-paced average 1-8
weeks (150-264 hours) Version 2 4-8 weeks (162-215 hours)
Exhibit Dates: Version 1 6/75-Present
Version 2 4/55-5/75
Objectives: To provide enlisted personnel
with training in basic electronics
Instruction: All Versions: Lectures and
laboratory, for all other ratings. 6 semester
hours in basic electronics (3/74), in the lower-
division baccalaureate/associate degree.
Objectives: To train enlisted personnel to
o operate and maintain electrical equipment
and Instruments, in the operation and maintenance
of electrical equipment and Instruments,
and small-craft electrical systems
Credit Recommendation: Credit is not rec-
ommended because of the limited technical
nature of the course (3/74).

NV-1714-0011
H-46 ELECTRICAL AND INSTRUMENT SYSTEMS ORGANIZATIONAL
MAINTENANCE
Course Number: Not available
Location: Air Maintenance Training De-
tachment, New River, NC; Air Mainte-
ance Training Detachment, Santa Ana, CA.
Length: 4 weeks (160 hours)
Exhibit Dates: 6/68-Present
Objectives: To train maintenance person-
nel to operate and maintain the electrical
and instrument systems of the E-1B aircraft
Instruction: Lectures and practical exer-
cises in the operation and maintenance of the
E-1B aircraft, including power supplies, power
plant and accessories, controls, various
systems, structural control systems, heating
and de-icing systems, and various electrical
systems, lighting systems, various electrical
Instruments, and electronic systems.
Credit Recommendation: Credit is recom-
mmended because of the limited technical
nature of the course (3/74).

NV-1714-0012
ELECTRICIAN'S MATE, CLASS A
(Construction Electrician, Class A)
Course Number: Version A A-662-0015
Version 2 C-662-303
All Versions A-662-0015
Location: Version 2 Service School Com-
mand, San Diego, CA; All versions. Service
School Command, Great Lakes, IL.
Length: Version 1 9-10 weeks (258 hours)
Version 2 13-14 weeks (387-420 hours)
Exhibit Dates: Version 1 3/76-Present
Version 2 6/62-7/76
Objectives: To train enlisted personnel to
operate, maintain and repair electrical
equipment.
Instruction: Lectures and practical exer-
cises in electrical systems, electrical equip-
ment operation, maintenance, and repair, includ-
ing safety precautions and first aid, rotating-
machinery introduction. AC and DC gener-
rators, AC and DC generators, and hand-
tools operation, maintenance and material
management, single-phase motor de-graus-
ing. AC and DC controllers, electrical dis-
ruptors and electromagnetic, and small-craft
electrical systems
Credit Recommendation: Credit is recom-
mmended because of the limited technical
nature of the course (3/74).
COURSE EXHIBITS

CONSTRUCTION ELECTRICIAN—POWER AND COMMUNICATIONS CABLE SPlicing (Construction Electrician Cable Splicer (Class C)) (CE-C Cable Splicing)
Course Number: A-721-0023
Location: Construction Training Center, Providence, RI. Construction Training Center. Gulfport, MS. Construction School.
Davison, RI.
Length: 11-13 weeks (345-406 hours)
Exhibit Dates: 11/72-Present
Objectives: To train construction electricians to perform as cable-splicing technicians for telephone and power cable systems.

Instruction: Lectures and practical exercises in the installation and repair of telephone and power cables, including cable types, splicing techniques, and installation of telephone and high-voltage cables, cable terminations, project planning, electrical properties of power cable insulation, and troubleshooting techniques and test equipment.

Credit Recommendation: In the vocational certificate category, 6 semester hours in electrical equipment maintenance on the basis of institutional evaluation (11/76).

VARIOUS COURSES:

NV-1715-0002
AIRBORNE ELECTRONIC WARFARE, CLASS O
Course Number: None
Location: Naval Air Technical Training Center, Glencoa, GA.
Length: 7 weeks (104 hours)
Exhibit Dates: 1/76-Present
Objectives: To train fleet personnel in electronic warfare principles and systems.


Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (11/73).

NV-1715-0003
ELINT EVALUATION OPERATOR/OffICer
Course Number: D-150-016
Location: Reconnaissance Attack Squadron Three, Naval Air Station, Albany, NY.
Length: 11 weeks (430 hours)
Exhibit Dates: 5/69-85
Objectives: To train officer and enlisted personnel to efficiently process and evaluate electronic intelligence data collected by RA-5C aircraft.

Instruction: IOIS Systems Cross-Training: basic ELINT intelligence data display; ELINT evaluation, dissemination, maintenance consideration, operational problems: flight operations, electronic data processing, photo interpretation, electronic countermeasures, telemetry, digital plotter.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (11/73).

NV-1715-0004
AN/UPR-2 INFOnOMIC SOUNDER SET MAINTENANCE (ELECTRONICs TECHNICIAN, CLASS C)
Course Number: A-101-0047
Location: Service School Command, San Diego, CA.
Length: 4 weeks (199-120 hours)
Exhibit Dates: 5/77-Present
Objectives: To provide selected trainees with the skills and knowledge necessary to operate and maintain the AN/UPR-2 Oblique Ionospheric Sounder.

Instruction: Operation and system maintenance, including transmitted wave form and functional block diagram, technical maintenance, including frequency standard, master tuning and programming, filter switching, frequency synthesizer, and digital code filter.

Credit Recommendation: Credit is recommended because of the limited technical nature of the course (11/73).

NV-1715-0005
ELECTRONIC TEST EQUIPMENT: OPERATION/OPERATIONAL USE
Course Number: J-100-0000
Location: Fleet Training Center, Mayport, FL.
Length: 2 weeks (57 hours)
Exhibit Dates: 11/71-Present
Objectives: To train shipboard electronic maintenance and repair personnel in the correct methods of operation and application of electronic test equipment.

Instruction: Equipment theory of operation, equipment operational methods and techniques, successful utilization of electronic test equipment.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics (11/73).

NV-1715-0006
ELECTRONICS TECHNICIAN CLASS C, AN/SPS-40A RADAR SET MAINTENANCE
Course Number: A-104-0050, A-104-0131
Location: Naval Schools Command, Norfolk, VA. Naval Schools Command, San Diego, CA.
Length: 8 weeks (231-240 hours)
Exhibit Dates: 1/72-Present
Objectives: To provide selected trainees with the skills and knowledge necessary to operate and maintain the AN/SPS-40A, and to operate and use associated test equipment.

Instruction: Power conversion; AN/SPS-40A radar set operation, and functional analysis of maintenance, and subsystems such as antenna, air pressure and cooling systems.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (11/73).

NV-1715-0007
ELECTRONICS TECHNICIAN, CLASS C, ELECTRONICS MATERIAL OFFICER
Course Number: A-4B-015
Location: Naval School, Norfolk, VA.
Length: 4 weeks (97 hours)
Exhibit Dates: 7/70-Present
Objectives: To provide selected officers with the necessary knowledge and skill to enable them to direct the administration of the electronics division aboard their ship.

Instruction: Administration, maintenance and material management systems, preventive and corrective maintenance, publications, field changes, electronic navigation, radar, communication, and electronic countermeasures systems.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (11/73).

NV-1715-0008
ELECTRONICS TECHNICIAN, CLASS C, AN/SSM-5 MONITOR TEST SET MAINTENANCE
Course Number: A-100-0022, A-100-0030
Location: Naval School, San Diego, CA. Naval School, Norfolk, VA.
Length: 4 weeks (120 hours)
Exhibit Dates: 1/72-Present
Objectives: To provide selected trainees with the skills and knowledge necessary to maintain the AN/SSM-5 monitor test set.

Instruction: Test set operation, basic operation of tape reader and line printer, power distribution, tape format and sequence; logic symbols and special circuits; test control-block diagram analysis; tape reader; parity and coincidence control; tape drive control, sequence counter and control, stimulus control, analog-to-frequency converter; decision comparator, digital data line printer, associated test equipment, pre-ventive maintenance, troubleshooting.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (11/73).

NV-1715-0009
AN/UC/1 SERIES TELEGRAPH TERMINAL MAINTENANCE (ELECTRONICS TECHNICIAN, CLASS C-1)
Location: Service School Command, San Diego, CA, Fleet Training Center, Norfolk, VA.
Length: 2 weeks (60-72 hours).
Exhibit Dates: 3/71-Present
Objectives: To provide selected trainees with the skills and knowledge necessary to operate and maintain the AN/UC/1-1, 1C, and 1D telegraph terminals, and to operate and use associated test equipment to the extent required for maintenance of the telegraph terminals.
Instruction: Operational characteristics and system configurations, location and identification of major units and subunits, test sets, operating procedures. AC and DC power distribution, frequency shift keys, computer attention, frequency shift converters, block and schematic diagram analysis, system troubleshooting.
Credit Recommendation: In the vocational certificate category. 1 semester hour in electronics laboratory (11/77).

NV-1715-0010
AN/WRC-1 RADIO SET MAINTENANCE (ELECTRONICS TECHNICIAN, CLASS C-1)
Course Number: A-101-0026
Location: Service School Command, San Diego, CA, Fleet Training Group, Pearl Harbor, Hawaii.
Length: 2 weeks (59-60 hours).
Exhibit Dates: 3/71-Present
Objectives: To provide selected trainees with the skills and knowledge necessary to maintain the AN/WRC-1 radio set.
Instruction: Familiarization and operation, functional block diagram, radio receiver transmitter, equipment layout of the main assembly, RF amplifier, transmitter-synthesizer assembly, mode selector, IF assembly, chassis and main frame, troubleshooting, location and maintenance of radio transmitter, AFSK tone generator, audio amplifier, mode selector, IF amplifier, antenna, copier operation and maintenance.
Credit Recommendation: In the vocational certificate category. 1 semester hour in communications systems (11/77).

NV-1715-0011
AN/WRT-2 RADIO TRANSMITTER MAINTENANCE (ELECTRONICS TECHNICIAN, CLASS C-1)
(Electronics Technician, Class C, AN/WRT-2 and AN/WRR-2)
Location: Service School Command, San Diego, CA, Fleet Training Center, Norfolk, VA, Naval Technical Training Command, San Francisco, CA.
Length: 3-4 weeks (90-110 hours).
Exhibit Dates: 1/71-Present
Objectives: To provide selected trainees with the skills and knowledge necessary to maintain the AN/WRT-2 radio transmitting set.
Instruction: Operation of and familiarization with AN/WRT-2, AC/DC power distribution, modulator functional section, amplifier/powersupply, RF amplifier and tuner functional section, RF amplifier, transmitter troubleshooting.
Credit Recommendation: In the vocational certificate category. 3 semester hours in electronic communications systems (11/77).

NV-1715-0012
ELECTRONICS TECHNICIAN, CLASS C, AN/UHXH-2 FACSIMILE RECORDING EQUIPMENT MAINTENANCE
Course Number: A-101-0035, A-101-0050
Location: Naval School, San Diego, CA, Naval School, Norfolk, VA.
Length: 3 weeks (60 hours).
Exhibit Dates: 5/71-Present
Objectives: To provide selected trainees with the skills and knowledge necessary to operate and maintain the AN/UHXH-2B and CV-1066B/UX, and to operate and use associated test equipment.
Instruction: Maintenance and operation, introduction to AN/UHXH-2B and CV-1066B/UX, operating procedures and safety, system troubleshooting.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (11/73).

NV-1715-0013
ELECTRONICS TECHNICIAN, INDICATOR GROUP AN/SPA-40, CLASS C
Course Number: A-104-019, A-104-020
Location: Naval School, San Diego, CA, Naval School, Norfolk, VA.
Length: 2 weeks (60 hours).
Exhibit Dates: 10/69-Present
Objectives: To provide selected trainees with the skills and knowledge necessary to operate and use associated test equipment.
Instruction: Familiarization and operation, including location and identification of units, assemblies, and subassemblies, technical maintenance, including AC/DC power distribution, auto zero correction, DC power supplies, timing, height line cursor generation and servomechanism, range sweep deflection, height sweep deflection, marker generation and video amplifier, and intensity control, system maintenance and troubleshooting.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (11/73).

NV-1715-0014
ELECTRONICS TECHNICIAN, SHIP'S NAVIGATION AND AIRCRAFT INERTIAL ALIGNMENT SYSTEM (SNAIAS), CLASS C OPERATOR MAINTENANCE
Course Number: A-193-025
Location: Naval School, Norfolk, VA.
Length: 2 weeks (72 hours).
Exhibit Dates: 1/68-Present
Objectives: To train students to operate and maintain ship's navigation and aircraft inertial alignment systems (SNAIAS).
Instruction: Familiarization and operation, including SNAIAS functional block diagram, equipment operation, alarms, technical maintenance, including block diagrams, data distribution, intercommunication system test sets, troubleshooting.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (11/73).

NV-1715-0015
AN/SPN-40 RADIO NAVIGATION SET (ELECTRONICS TECHNICIAN, CLASS C-1)
Location: Service School Command, San Diego, CA, Fleet Training Center, Norfolk, VA.
Length: 2 weeks (60 hours).
Exhibit Dates: 5/71-Present
Objectives: To train students to operate and maintain the AN/SPN-40 radio navigation set.
Instruction: Equipment operation and maintenance, technical training, including Loran A receiver and vertical deflection, oscillator-AFC section, framing section, divider section, rate selector and reset generator section, basic pulse repetition rate (BPRR), special pulse repetition rate (SPRR), square wave generator, pedestal generator, deflection section, attenuator and gain control, and system troubleshooting.
Credit Recommendation: In the vocational certificate category. 1 semester hour in electronics laboratory (11/77).

NV-1715-0016
ELECTRONICS TECHNICIAN CLASS C, AN/VCC-2 SHIPBOARD SYSTEM
Course Number: None
Location: Naval School, San Diego, CA, Naval School, Norfolk, VA.
Length: 3 weeks (96 hours).
Exhibit Dates: 10/71-Present
Objectives: To provide selected trainees with the skills and knowledge necessary to maintain the AN/VCC-2 shipboard communications systems.
Instruction: Maintenance and material management system, operation of and familiarization with the RT-524/VRC radio transmitter-receiver, functional analysis and maintenance of the receiver transmitter, including AC/DC power distribution and control circuits, VHF and VHF system assembly, modulator assembly, master oscillators, buffer amplifier, transmitter driver and power amplifier, power supply, and transmitter assembly. Functional analysis of the AN/VCC-2 telephone-telegraph terminal, functional analysis of the AN/SRA-40(X) antenna coupler, including RF, four-channel combiner, operational control section, monitoring and protection section, and power supply.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (11/73).

NV-1715-0017
BASIC ELECTRONIC WARFARE (EW) EQUIPMENT OPERATOR
Location: Fleet Anti-Air Warfare Training Center, San Diego, CA.
Length: 2 weeks (59 hours).
Exhibit Dates: 5/71-Present
Objectives: To train enlisted personnel in the fundamentals and techniques of electronic warfare (EW) and EW equipment operation.
NV-1715-0018

ELECTRONICS TECHNICIAN, CLASS C, INDICATOR GROUP AN/SPA-41 MAINTENANCE

Course Number: A-104-0124
Location: Naval School, Norfolk, VA.
Length: 3 weeks (80 hours).
Exhibit Dates: 7/70-9/70
Objectives: To train technicians to operate and maintain the AN/SPA-41 Shipboard Range/Height Indicator and associated test equipment.

Instruction: System familiarization and operational characteristics, location and identification of units, assemblies, and subassemblies; operating procedures; technical maintenance, including AC power distribution, auto zero correction, DC power supplies, timing, height line cursor generation and servomechanism, range and height computing sections, range and height time share networks and sweep deflection, and range calibration, marking, and intensity, system troubleshooting.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (11/73).

NV-1715-0019

ELECTRONICS TECHNICIAN CLASS C, AN/FGC-73 TELETYPEWRITER ROUTING SET AND AN/UGR-14 INKTRONIC PAGE PRINTER

Course Number: A-101-0048
Location: Naval School, Great Lakes, IL.
Length: 6 weeks (180 hours).
Exhibit Dates: 11/72-6/77
Objectives: To train students to maintain and program teletypewriter routing sets, the Inktronic page printer, and associated test equipment.

Instruction: Teletypewriter familiarization and message format; introduction to AN/FGC-73 system, logic fundamentals; core memories; TS-2723/FG-73 printed circuit board test; MX-8173/FGC format stringer; AN/FGC-73 Inktronic Page Printer system maintenance and packaging of repairable components.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (11/73).

NV-1715-0020

ELECTRONIC WARFARE FOR NONACOUSTIC OPERATOR, F3A/B/D

Course Number: E-210-048
Location: Fleet Airborne Specialized Operational Training Group, Pacific Fleet, Moffett Field, CA.
Length: 2 weeks (63 hours).
Exhibit Dates: 10/72-8/73
Objectives: To train antisubmarine warfare operators in electronic warfare intercept procedures, terminology, applications, and the skills of signal evaluation.

Instruction: Introduction to and definition of electronic warfare; ESM fundamentals; radar scans and types; passive receiver, D-2, D-3, ULA-2, pulse analyzer, AN-SGI-3, pulse analyzer, tactical voice procedures, electronic warfare logs, intercept procedures, electronic warfare, and associated equipment.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (11/73).

NV-1715-0021

ELECTRONIC WARFARE INTELLIGENCE OPERATOR

Course Number: E-221-34
Location: Fleet Airborne Electronics Training Unit, Pacific, San Diego, CA.
Length: 4 weeks (132 hours).
Exhibit Dates: 10/72-9/73
Objectives: To train electronic warfare specialists in the fundamentals, techniques, and terminology of electronic warfare (EW), and in the operation of EW equipment.

Instruction: History of electronic warfare; radar fundamentals; EW equipment and operation; electronic intelligence (ELINT) operator procedures; logging; signal identification; ELINT publications familiarization; special intercept techniques; plotting; tactical missions.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (11/73).

NV-1715-0022

ELECTRONIC WARFARE OFFICERS AND SUPERVISORS COURSE

Course Number: K-2G-0026
Location: Fleet Combat Direction Systems Training Center, Pacific, San Diego, CA.
Length: 2 weeks (58 hours).
Exhibit Dates: 5/72-5/77
Objectives: To train junior officers and senior enlisted radarmen in the fundamentals and techniques of electronic warfare (EW) and electronic intelligence (ELINT).

Instruction: Concepts of electronic warfare; duties and responsibilities of the EWO and supervisor; characteristics of electronic emissions; and thorough evaluation of intercepted electronic emissions; threat radars and IFF systems, EW capabilities and ELINT.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (11/73).

NV-1715-0023

OFFICER ELECTRONIC WARFARE OPERATIONS

Course Number: K-2G-0026
Location: Fleet Combat Direction Systems Training Center, Pacific, San Diego, CA.
Length: 4 weeks (117 hours).
Exhibit Dates: 5/72-5/77
Objectives: To train officers in the fundamentals and techniques of electronic warfare.

Instruction: Fundamentals of electronic warfare, fundamentals of electromagnetic radiation; electronic systems theory, trends; use of the electromagnetic spectrum, intelligence in support of electronic warfare; electronic warfare management; electronic warfare in support of military operations.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (11/73).

NV-1715-0024

ELECTRONICS TECHNICIAN, CLASS C, NAVAL RADAR MAINTENANCE

Course Number: A-104-0031
Location: Naval Technical Training, Treasure Island, San Francisco, CA.
Length: 4 weeks (120 hours).
Exhibit Dates: 5/72-7/75
Objectives: To provide selected trainees with the skills and related knowledge necessary to maintain the AN/SPS-29 radar set.

Instruction: System operation; AC and DC power distribution, trigger generator, and monitor functions; antenna function, receiving channel; AN/SPS-29 radar set maintenance and troubleshooting.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (11/73).

NV-1715-0025

ELECTRICAL COMPONENT MAINTENANCE (UNREP)

Course Number: A-551-0026; A-551-0030.
Location: UNREP Schools Division of the Naval Schools Command, Treasure Island, San Francisco, CA.
Length: 10 weeks (294 hours).
Exhibit Dates: 12/73-7/75
Objectives: To train electricians and interior communications specialists to maintain the electronic and electronic-hydraulic components of highline-tensioned inhaul and outhaul winches, sliding blocks, transfer trucks, and ram targets.

Instruction: Basic electricity; basic electronics; hydraulic interface with electronic/electric controls for UNREP winches; maintenance of power supplies; drive systems and control systems for sliding blocks, transfer heads, Drexel & Westman gear multi-directional missile-handling trucks; maintenance of Cutler-Hammer and General Electric static logic controllers.

Credit Recommendation: In the vocational certificate category, 4 semester hours in electronics (11/73); in the I^2^2^2^-division baccalaureate/associate degree category, 2 semester hours in electronics (11/73); in the upper-division baccalaureate category, 1 semester hour in electrical laboratory (11/73).

NV-1715-0026

ELECTRONICS TECHNICIAN CLASS C, DATA TRANSMISSION GROUP, TRANSMISSION EQUIPMENT MAINTENANCE

Course Number: A-101-042.
Location: Naval School, Mare Island, Vallejo, CA.
Length: 14 weeks (411 hours).
Exhibit Dates: 1/70-Present
Objectives: To train students with a background in electronics and communications theory to operate and maintain electronic data transmission equipment of the Naval Tactical Data System.

Instruction: Introduction and orientation to data transmission equipment; operation of control systems; radio sets; antenna couplers; communications central equipment.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics (11/73).

NV-1715-0027

ELECTRONICS TECHNICIAN CLASS C, HIGH POWER INDEPENDENT SINGLE SIDEBAND TRANSMITTER (AN/FRT-39; AN/URT-19; AN/URA-30)

Course Number: A-101-0038.
Location: Electronics Technician Class C Naval Training Center, Great Lakes, IL.
Length: 4 weeks (120 hours).
Exhibit Dates: 11/72-7/74
Objectives: To train students with electronic communications backgrounds to op-
erate and maintain the AN/FRT-39 trans-
mitting set and auxiliary equipment

Instruction: Characteristics of teletype sig-
nals, multichannel telegraph, transmission test
to audio distribution and patching, DC
signal distribution, telephone terminal
equipment, single-sideband fundamentals,
multiplexing, spectrum analyzer, AN/FRT-
39 system, independent, single-sideband re-
ceivers, AN/URA-10 modulator oscillator;
system troubleshooting

Credit Recommendation: In the voca-
tional certificate category, 3 semester hours in
electronics (11/73)

NV-1715-0028

ELECTRONICS TECHNICIAN CLASS C, R-
1224(P)/WRR COUNTERMEASURES
RECEIVER MAINTENANCE

Course Number: A-102-0098, A-102-0108
Location: Naval Technical Training
Schools, San Diego, CA, Naval Technical
Training Schools, Norfolk, VA
Length: 2 weeks (60-hours)

Exhibit Dates: 8/72-Present

Objectives: Train students with elec-
tronics and communications backgrounds to
operate and maintain the R-1524(P)/WRR
countermeasures receiver and its associated
tuning and test equipment

Instruction: Familiarization with and op-
eration of R-1524(P)/WRR counter-
measures receiver, functional analysis and main-
tenance, including AC and DC power dis-
tribution, RF tuning units, IF amplifiers,
isolation amplifier, A FC/AGC/squelch/video, and audio am-
plifier circuitry, troubleshooting

Credit Recommendation: Credit is not re-
commended because of the limited technical
ature of the course (11/73)

NV-1715-0029

RADAR REPEATER SYSTEMS MAINTEN-
ANCE (ELECTRONICS TECHNICIAN CLASS

C(1)

Course Number: A-104-0129, A-104-0130
Location: Service School Command, San
Diego, CA. Fleet Training Center, Norfolk,
VA
Length: Version 1, 3 weeks (90 hours)
Version 2: 10 weeks (220-235 hours)

Exhibit Dates: Version 1: 1/71-5/77
Version 2: 1/71-5/77

Objectives: To provide the training re-
quired to maintain any switchboard-repeat-
er systems aboard ship

Instruction: Version 1, Operation and fa-
miliarization of signal distribution switch-
boards and a radar repeater Version 2, Op-
eration and system maintenance of switch-
boards, indicator groups, radar transmitters, and
signal data converters, circuit analysis, cal-
ibration, troubleshooting

Credit Recommendation: Credit is not rec-
ommended because of the limited technical
ature of the course (11/73)

NV-1715-0030

IOIC INTELLIGENCE DATA SYSTEM
(STORAGE AND RETRIEVAL) MAINTEN-
ANCE

Course Number: D-150-011
Location: Reconnaissance Attack Squad-
ron Three, Albany, GA.
Length: 15 weeks (600 hours)

Exhibit Dates: 5/73-Present

Objectives: To train data systems tech-
cicians to perform center equipment main-
tenance and repair

Instruction: Lectures and practical exer-
cises in digital plotting systems and logic
design, system timing, printers display
equipment and position system details, paper
tape reader, computer, stereo comparison
viewer, functions, logic, electromechanisms,
and optics testing and maintenance, code
matrix reader, oscilloscope, logic, align-
ment, and maintenance, and system periph-
eral equipment maintenance and testing

Credit Recommendation: In the voca-
tional certificate category, 12 semester hours
in electronics laboratory (3/74); in the lower-
division baccalaureate/associate degree cate-
gory, 3 semester hours in electronics labo-
ratory (3/74)

NV-1715-0032

RA-5C SIGNAL DATA CONVERTER GROUP
TO EQUIPMENT INTERMEDIATE
MAINTENANCE

Course Number: None
Location: Air Maintenance Training De-
tachment, Sanford, FL
Length: 3 weeks (120 hours)

Exhibit Dates: 1/68-12/68

Objectives: Train maintenance person-
nel to repair RA-5C signal data converter
group test equipment

Instruction: Lectures and practical exer-
cises in operational maintenance, and serv-
ing of data converter and viewerfinder test
equipment and digital data system test equip-
ment

Credit Recommendation: In the voca-
tional certificate category, credit in signal data
converter group test equipment mainte-
nance on the basis of institutional evalua-
tion (3/74); in the lower-division baccalaureate/associate
degree category, credit in signal data converter
group test equipment maintenance on the basis of insti-
tutional evaluation (3/74)

NV-1715-0033

MX XII IFF SYSTEMS, CLASS C

Course Number: Not available
Location: Version 1: Service Schools
Command, El Toro, CA, Version 2: Fleet
Training Center, Norfolk, VA
Length: Version 1, 11 weeks (330 hours)
Version 2: 3 weeks (90 hours)

Exhibit Dates: Version 1: 1/71-5/77
Version 2: 3/71-5/77

Objectives: The trained personnel to main-
tain MX XII IFF electronic systems

Instruction: Lectures and practical exer-
cises in MX XII operation, malfunctioning
component troubleshooting procedures and
test equipment usage, preventive main-
tenance procedures, and electronic circuits
and mechanical assemblies alignment

Credit Recommendation: In the voca-
tional certificate category, 3 semester hours in
electronic systems, 1 in electronic laboratory
(3/74); in the lower-division baccalaureate/associate
degree category, 3 semester hours as an elective in electronic
communications (3/74)

NV-1715-0034

H-46 AN/APX-6B and AN/APA-89
IDENTIFICATION SYSTEM
INTERMEDIATE MAINTENANCE

Course Number: Not available
Location: Air Maintenance Training De-
tachment, Jacksonville, NC, Air
Maintenance Training Detachment, Santa Ana,
CA
Length: 2 weeks (80 hours)

Exhibit Dates: 1/73-Present

Objectives: To train maintenance per-
sonnel to maintain and service AN/APX-6B
and AN/APA-89 electronics systems

Instruction: Lectures and practical exer-
cises in AN/APX-6B and AN/APA-89
electronic systems analysis, maintenance
procedures, alignment, circuit and circuit-
component repair, servicing techniques, and
diagnosis and troubleshooting procedures

Credit Recommendation: In the voca-
tional certificate category, 3 semester hours in
electronics, 1 in electrical laboratory (3/74).

NV-1715-0035

INTEGRATED AVIONICS RADAR SYSTEM
TECHNICIAN

Course Number: Not available
Location: Air Maintenance Training De-
tachment, Lemoore, CA
Length: 8 weeks (320 hours)

Exhibit Dates: 9/71-Present

Objectives: To train enlisted personnel in
tactical avionics radar system operational
theory, functional capability, and mainte-
nance and servicing techniques

Instruction: Lectures include avionics
theory, radar theory, altimeters, Doppler
systems, and power supplies, air
data and tactical computer operation, air
navigation computer operation, aimer,
ion isolation techniques, electrical systems
circuit analysis and block diagrams; math-
ematics, flow diagramming, inertial meas-
urement, weapons systems, and armament
control, associated test equipment, and mainte-
nance, servicing, and alignment procedures

Credit Recommendation: In the voca-
tional certificate category, 3 semester hours in
electronic communications, 1 in laboratory
(3/74); in the lower-division baccalaureate/associate
degree category, 3 semester hours as an elective in electronic
communications (3/74)

NV-1715-0036

KC-10E AN/APN-19 RADAR
MAINTENANCE

Course Number: Not available
Location: Air Maintenance Training De-
tachment, El Toro, CA
Length: 3 weeks (120 hours)

Exhibit Dates: 1/68-Present

Objectives: To train personnel to main-
tain the AN/APN-19 radar set and as-
signed test equipment

Instruction: Lectures in AN/APN-19
radar set maintenance, including block dia-
agrams, functional operation of radar set
controls, analysis of transmitter unit, power
supplies, phanathron oscillator, gate and
swep generator, various circuits operation,
antennas, amplifiers, and troubleshooting

Credit Recommendation: In the voca-
tional certificate category, 3 semester hours in
electronic communications, 1 in laboratory
(3/74)

NV41715-0037

MARINE AIR TRAFFIC CONTROL
NAVIGATIONAL AIDS REPAIRMAN,
CLASS C

MARINE AIR TRAFFIC CONTROL
NAVIGATIONAL AIDS MAINTENANCE

Course Number: C-103-2020
Location: Air Technical Training Center,
Glynco, GA
Length: Version 1: 8 weeks (267 hours)
Version 2: 13 weeks (320 hours)

Exhibit Dates: Version 1: 5/73-Present
Version 2: 3/71-4/73
Objectives: To train electronic technicians to install, inspect, test, maintain, and repair air control navigation equipment.

Instruction: Lectures and laboratories in radio direction-finding techniques, logic circuit techniques, and familiarization and maintenance of AN/TPN-11A direction-finding equipment, AN/TRN-29 beacon-transponder sets, and radio beacon sets.

Credit Recommendation: Version 1. In the vocational certificate category, 3 semester hours in electronic communications, 1 in lower-division baccalaureate/associate degree category, 3 semester hours as an elective in electronic communications (3/74).

NV-1715-0038

MARINE AIR TRAFFIC CONTROL UNIT RADAR REPAIRMAN, CLASS C

(Marine Air Traffic Control Unit Radar Maintenance, Class C)

Course Number: C-103-2021

Location: Air Technical Training Center, glync, CA

Length: Version 1 8 weeks (267 hours) Version 2 12 weeks (680 hours)

Exhibit Dates: Version 1 9/72-4/73

Objectives: To train electronic technicians to site, install, inspect, test, maintain, and repair specific air control navigational equipment.

Instruction: Lectures and practical exercises in air control navigational equipment operation, maintenance, including AN/TPN-11A precision approach radar and AN/UPS-1 radar set maintenance, power distribution and supplies, antenna control, transmitter, radio-frequency system,geometry, operation and maintenance, and system analysis and alignment, and C-4105 control indicator, and AN/APA-125 surveillance approach indicator circuitry, amplifiers, search servo system, and system alignment and troubleshooting procedures.

Credit Recommendation: Version 1 In the vocational certificate category, 3 semester hours in electronic communications and 1 in electronic communications laboratory (6/75). In the lower-division baccalaureate/associate degree category, 2 semester hours in electronic communications (6/75) Version 2 In the vocational certificate category, 3 semester hours in electronic communications, and 1 in electronic communications laboratory (3/74), in the lower-division baccalaureate/associate degree category, 3 semester hours as an elective in electronic communications (3/74).

NV-1715-0039

Marine Air Traffic Control Unit Maintenance Management, Class O

(Marine Air Traffic Control Unit Maintenance Management, Class O)

2. Marine Air Traffic Control Unit Equipment Management, Class C

3. Marine Air Traffic Control Unit Equipment Maintenance, Class C

Course Number: Version 1: C-103-2019, C-102-3501

Location: Air Technical Training Center, glync, CA

Length: Version 1 3 weeks (120 hours) Version 2 15 weeks (600 hours) Version 3 18 weeks (720 hours)


Objectives: To train radar technicians to operate and maintain air traffic control systems.

Instruction: Version 1 Lectures and practical exercises in air traffic control principles and in the supervision of the installation, maintenance, andrepair of air traffic systems, navigational aids, and communication systems and associated equipment. Version 2 Lectures in installation, maintenance, testing, and repair of specific radar sets, including basic electronics review, transistor fundamentals review, and basic radar and test equipment review and components circuit analysis. Version 3 Lectures in installation, maintenance, testing, and repair of specific radar sets, including basic electronics review, transistor fundamentals review, and basic radar and test equipment review and components circuit analysis.

Credit Recommendation: Version 1 Credit is not recommended because of the limited technical nature of the course (3/74) Version 2 In the vocational certificate category, 3 semester hours in electronic communications, 1 in lower-division baccalaureate/associate degree category, 3 semester hours in electronics laboratory (3/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics laboratory (3/74).

NV-1715-0040

Submarine Sonar Technician A-1

Course Number: A-103-0029, J-103-0513, K-150-1007

Location: Fleet Anti-Submarine Warfare Training Center, San Diego, CA.

Length: Version 1 10-12 weeks (400-480 hours) Version 2 16-18 weeks (640-720 hours)

Exhibit Dates: Version 1 8/77-Present Version 2 4/70-7/77

Objectives: To train enlisted personnel to operate and maintain specific submarine sonar systems and auxiliary equipment.

Instruction: All Versions. Lectures and laboratory in basic mathematics, vacuum tubes and semiconductor devices, physics of sound, and specific sonar systems operation and maintenance techniques. Version 1 Emphasis is placed on sonar fundamentals and operation of specific sonar equipment.

Credit Recommendation: Version 1 In the vocational certificate category, 3 semester hours in electronic communications, and 1 in electronics laboratory (9/77) Version 2 In the vocational certificate category, 3 semester hours in electronic communications, and 1 in laboratory (9/74), in the lower-division baccalaureate/associate degree category, 3 semester hours as an elective in electronic communications (3/74).

NV-1715-0041

KC-130F AN/APN-59B RADAR INTERMEDIATE MAINTENANCE

Course Number: C-102-3501

Location: Air Maintenance Training Detachment, El Toro, CA

Length: 3 weeks (120 hours)

Exhibit Dates: 9/69-Present

Objectives: To train maintenance personnel to maintain, repair, and test the AN/APN-59B radar set at the intermediate maintenance level.
CPR-642A computer repairs. This course is designed for DATA SYSTEMS TECHNICIANS, CLASS A, NV-1715-0045, who have some knowledge of digital computer systems. It is recommended because of the limited technical nature of the course (3/74).

**NV-1715-0045**

**DATA SYSTEMS TECHNICIANS, CLASS A,** Phase 2-1—Part III, CP-642A

**Course Number:** A-150-0025

**Location:** Naval Schools Command, Mare Island, CA

**Length:** 8 weeks (240 hours).

**Exhibit Dates:** 1/70-Present.

**Objectives:** To train enlisted personnel who have some knowledge of digital computer fundamentals to operate, troubleshoot, and repair the CP-642A computer.

**Instruction:** Lectures and practical exercises in CP-642A computer operation; computer maintenance programming and control, and computer and peripheral equipment operation, maintenance, and repair. (See NV-1715-0753 for Phase A-1)

**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (3/74).

**NV-1715-0046**

**E-2A COMPUTER INDICATOR (AN/ASA-27) INTERMEDIATE MAINTENANCE**

**Course Number:** Not available

**Location:** Air Maintenance Training Detachment, North Island, CA

**Length:** 22 weeks (880 hours).

**Exhibit Dates:** 1/70-Present.

**Objectives:** To train maintenance personnel to perform shop maintenance on computer indicators.

**Instruction:** Lectures and practical exercises in operation, function, and shop maintenance of computer indicators, including computer system fundamentals and timing, computer operations, programming, and in-flight navigation computer operations.

**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (3/74).

**NV-1715-0047**

**DATA SYSTEMS TECHNICIAN-PERIPHERAL EQUIPMENT MAINTENANCE, CLASS C**

**Course Number:** A-150-0051

**Location:** Naval Schools Command, Mare Island, CA

**Length:** 9 weeks (320 hours).

**Exhibit Dates:** 10/72-Present.

**Objectives:** To train qualified computer technicians in the operation and maintenance of peripheral equipment.

**Instruction:** Practical experience in the operation and maintenance of RD-231/USQ-20(V) paper tape units, modified telephone repairer sets, and system-monitoring panels, and identification and use of management tools, including maintenance requirement cards.

**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (3/74).

**NV-1715-0048**

**DATA SYSTEMS TECHNICIAN, CLASS C, MK 11, MOD 2/4 SYSTEMS GROUP**

**Course Number:** A-150-060

**Location:** Naval Schools Command, Mare Island, CA

**Length:** 8 weeks (240 hours).

**Exhibit Dates:** 10/72-Present.

**Objectives:** To train personnel to perform shop maintenance and repair NDTS/WDS Mark II systems.

**Instruction:** Practical experience in missile, gun, and weapon systems; maintenance and material management; functional analysis, logical description, and system switching and testing.

**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (3/74).

**NV-1715-0049**

**ADVANCED FUNDAMENTALS, CLASS A**

**Course Number:** Not available

**Location:** Air Reserve Electronics Training Unit, Los Alamitos, CA

**Length:** 12 weeks (520 hours).

**Exhibit Dates:** 6/64-12/68.

**Objectives:** To provide selected enlisted personnel with a basic understanding of electronic circuitry and test equipment.

**Instruction:** Lectures and practical experience in the fundamentals of radio, transmitter, computer, and radar electronics.

**Credit Recommendation:** In the vocational certificate category, 6 semester hours in electronics and electronics (3/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in electronics and electronics, 3 in electronic circuits (12/68).

**NV-1715-0050**

**FAB AN/AJ-24 LOFT BOMB RELEASER**

**Course Number:** C-602-3083, C-602-3811

**Location:** Air Maintenance Training Detachment, Chuckery Point, NC, Air Maintenance Training Detachment, Miramar, CA; Air Maintenance Training Detachment, Oceana, VA

**Length:** 2 weeks (72 hours).

**Exhibit Dates:** 3/70-Present.

**Objectives:** To train personnel to test, maintain, and repair loft bomb release computers.

**Instruction:** Lectures and practical exercises in the theory and operation of radar, electronic circuitry and test equipment.

**Credit Recommendation:** In the vocational certificate category, 2 semester hours in electronics and electronics (3/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in electronic communications laboratory (3/74).

**NV-1715-0051**

**A-6 BOMBARDIER NAVIGATOR CONTROL**

**Box and Associated Test Set, INTERMEDIATE MAINTENANCE (A-6 BOMBARDIER NAVIGATOR CONTROL BOX AND ASSOCIATED TEST SET, INTERMEDIATE MAINTENANCE)**

**Course Number:** C-102-3776

**Location:** Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Oceana, VA

**Length:** 2 weeks (80 hours).

**Exhibit Dates:** 4/73-Present.

**Objectives:** To train personnel to test, maintain, and repair the A-6 BOMBARDIER NAVIGATOR CONTROL box and associated test sets.

**Instruction:** Lectures and practical exercises in theory and operation of radar set control, bombcomputer-navigator control box test sets, and maintenance and troubleshooting procedures.

**Credit Recommendation:** Insufficient data for evaluation (3/74).

**NV-1715-0052**

**AN/ALM-109 TEST CONSOLE AND AN/ALQ-99 TRACKING RECEIVERS AND CONTROL MONITORS, INTERMEDIATE MAINTENANCE**

**Course Number:** C-102-3944

**Location:** Air Maintenance Training Detachment, Whidbey Island, WA

**Length:** 3 weeks (280 hours).

**Exhibit Dates:** 4/73-Present.

**Objectives:** To train enlisted personnel to test, maintain, and repair radio receivers.

**Instruction:** Lectures and practical exercises in digital integrated circuits, circuit analysis and maintenance procedures for functional circuitry of radio receivers.

**Credit Recommendation:** In the vocational certificate category, 3 semester hours in electronic communications, 2 in electronic communications laboratory (3/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in electronic communications laboratory (3/74).

**NV-1715-0053**

**AN/ALQ-99 JAMMING TRANSMITTERS AND AN/ALM-107 COUNTERMEASURES TEST STATION INTERMEDIATE MAINTENANCE**

**Course Number:** C-102-3946

**Location:** Air Maintenance Training Detachment, Whidbey Island, WA

**Length:** 11 weeks (440 hours).

**Exhibit Dates:** 3/73-Present.

**Objectives:** To train enlisted personnel in the maintenance, repair, and functional testing procedures for special-purpose radio transmitters.

**Instruction:** Practial exercises in troubleshooting, repair, power and control, and countermeasures, and power supply modules.

**Credit Recommendation:** In the vocational certificate category, 3 semester hours in electronic communications, 3 in electronic communications laboratory (3/74).

**NV-1715-0054**

**AN/ALM-108 RECEIVER TEST CONSOLE AND AN/ALQ-99 RECEIVERS INTERMEDIATE MAINTENANCE**

**Course Number:** C-102-3945

**Location:** Air Maintenance Training Detachment, Whidbey Island, WA

**Length:** 3 weeks (240 hours).

**Exhibit Dates:** 4/73-Present.

**Objectives:** To train enlisted personnel in the maintenance, repair, and testing of specific radio receivers.

**Instruction:** Lectures and practical experience in functional analysis and power generation, surveillance receivers, fault isolation, and circuit analysis.

**Credit Recommendation:** In the vocational certificate category, 3 semester hours in electronic communications, 3 in electronic communications laboratory (3/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in electronic communications laboratory (3/74).

**NV-1715-0055**

**AN/ALQ-92 COUNTERMEASURES SET INTERMEDIATE MAINTENANCE**

**Course Number:** C-102-3708

**Location:** Air Maintenance Training Detachment, Whidbey Island, WA

**Length:** 6 weeks (240 hours).

**Exhibit Dates:** 1/73-Present.
COURSE EXHIBITS

Objectives: To train enlisted personnel to test, maintain, and repair specific electronic systems.

Instruction: Discussions and practical experience in basic digital logic, circuit analysis, and maintenance procedures.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics or communications laboratory (3/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics communications laboratory (3/74).

NV-1715-0056
AN/URT-2/3 RADIO TRANSMITTER WITH AN/URA-38 ANTENNA COUPLER MAINTENANCE (ELECTRONICS TECHNICIAN, CLASS C)
(AN/URT-2/JV) Radio Transmitting Set and AN/URA-38 Antenna Coupler Maintenance, Class C
Course Number: A-101-0049, A-101-0051
Location: Fleet Training Center, Norfolk, VA; Service School Command, San Diego, CA
Length: 3 weeks (90 hours)
Exhibit Dates: 4/72-Present
Objectives: To train enlisted personnel in the maintenance and repair of specific radio transmitters.
Instruction: Practical and theoretical instruction in the maintenance of specific radio transmitters.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics communications (1/77).

NV-1715-0057
AN/ALQ-44 INTERMEDIATE MAINTENANCE
Course Number: C-102-3069
Location: Air Maintenance Training Detachment, Cherry Point, NC
Length: 6 weeks (240 hours)
Exhibit Dates: 2/73-Present
Objectives: To train enlisted personnel in the operation and maintenance of specific radio transmitters.
Instruction: Practical experience in alignment, troubleshooting, and repair of radio transmitters.
Credit Recommendation: In the vocational certificate category, 3 semester hour in electronics communications laboratory (3/74).

NV-1715-0058
AN/ARC-143 H F COMMUNICATIONS SYSTEM INTERMEDIATE MAINTENANCE
Course Number: C-102-3582
Location: Air Maintenance Training Detachment, Patuxent River, MD, Air Maintenance Training Detachment, Moffett Field, CA
Length: 4 weeks (120 hours)
Exhibit Dates: 2/73-Present
Objectives: To train enlisted personnel in the maintenance and repair of specific transmitters.
Instruction: Practical experience in troubleshooting and repair of radio transmitters.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electronic communications laboratory (3/74).

NV-1715-0059
AN/ARC-143 COMMUNICATIONS SYSTEM INTERMEDIATE MAINTENANCE
Course Number: C-102-3581
Location: Air Maintenance Training Detachment, Patuxent River, MD, Air Maintenance Training Detachment, Moffett Field, CA
Length: 2 weeks (80 hours)
Exhibit Dates: 2/73-Present
Objectives: To train enlisted personnel in the maintenance, repair, and functional testing of specific communications systems.
Instruction: Lectures and practical experience in communications system theory of operation, test set use, and system operation.
Credit Recommendation: In the vocational certificate category, 1 semester hour in electronic communications laboratory (3/74).

NV-1715-0060
AN/ALQ-44 MID-BAND TUNER INTERMEDIATE MAINTENANCE
Course Number: C-102-3072
Location: Air Maintenance Training Detachment, Cherry Point, NC
Length: 4 weeks (120 hours)
Exhibit Dates: 10/72-Present
Objectives: To train enlisted personnel in the maintenance, repair, and troubleshooting of specific transmitters.
Instruction: Lectures and practical experience in tuner operation, check-out, alignment and trouble analysis.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0061
SUBMARINE RADAR MAINTENANCE (ENLISTED)
Course Number: F-104-010
Location: Submarine School, Groton, CT
Length: 3 weeks (90 hours)
Exhibit Dates: 4/68-Present
Objectives: To train submariners to maintain environmental detection systems, NAVDAC test sets, sonar test sets, and AN/URR-38, AN/URR-37, and AN/URR-39 test sets.
Instruction: Lectures and practical exercises in the maintenance, repair, and operation of specific electronic systems.
Credit Recommendation: Credit is recommended because of the limited technical nature of the course (3/74).

NV-1715-0062
SUBMARINE GYROCOMPASS MK 19 MOD 3
Course Number: A-670-0042, F-623-015
Location: Fleet Ballistic Missile Submarine Training Center, Charleston, SC
Version 1: Fleet Ballistic Missile Submarine Training Center, Charleston, SC
Version 2: Submarine School, Groton, CT
Length: Version 1: 4 weeks (120 hours), Version 2: 2 weeks (80 hours)
Exhibit Dates: 8/67-12/71
Objectives: To train submariners to maintain and repair gyrocompasses.
Instruction: Lectures and practical exercises in gyrocompass maintenance, troubleshooting, and repair.
Credit Recommendation: Credit is recommended because of the limited technical nature of the course (3/74).

NV-1715-0063
ELECTRONICS TECHNICIAN, CLASS C, SSBN NAVIGATION AIDS TECHNICIAN MAINTENANCE
Course Number: A-193-003
Location: Electronics Technician School, Dam Neck, VA
Length: 26 weeks (910 hours)
Exhibit Dates: 11/72-Present
Objectives: To train electronic technicians to operate and maintain navigational equipment and support systems.
Instruction: Lectures and practical exercises in the operation of navigational systems, frequency-time standards, Loran-C receiving sets, radio navigation sets, and sonar sounding sets.
Credit Recommendation: Credit is recommended because of the limited technical nature of the course (3/74).

NV-1715-0064
ELECTRONICS TECHNICIAN, CLASS C, SSBN NAVIGATION AIDS, FBM TENDER NAVIGATION MAINTENANCE
Course Number: A-193-0037
Location: Guided Missiles School, Dam Neck, VA
Length: 6 weeks (210 hours)
Exhibit Dates: 11/72-12/74
Objectives: To train electronic technicians to maintain navigational and communications equipment.
Instruction: Lectures and laboratories in digital module test sets, sonar test sets, Loran-C switching units, electronic circuit plug-in units, and signal simulators, ancillary commercial test equipment, and advanced soldering and wire-wrapping techniques.
Credit Recommendation: Credit is recommended because of the limited technical nature of the course (3/74).

NV-1715-0065
ELECTRONICS TECHNICIAN, CLASS C, SSBN SHIPS INERTIAL NAVIGATION, FBM TENDER NAVIGATION MAINTENANCE
Course Number: A-193-0036
Location: Electronics Technician School, Dam Neck, VA
Length: 6 weeks (210 hours)
Exhibit Dates: 11/72-Present
Objectives: To train electronic technicians to maintain inertial navigation systems and support equipment.
Instruction: Lectures and laboratories in digital module test sets, Loran-C test systems, NAVDAC test sets, sonar test sets, SDC test sets, synchro/resolver test sets, and type II servo amplifier test set, advanced soldering and wire-wrapping techniques, and ancillary commercial test equipment.
Credit Recommendation: Credit is recommended because of the limited technical nature of the course (3/74).
NV-1715-0066

ELECTRONICS TECHNICIAN, CLASS C, SSBN, STRATEGIC BATTLE SYSTEMS NAVIGATION SYSTEM MK 2 MOD 9-6 TECHNICIAN

Course Number: A-193-026
Location: Guided Missiles School, Dam Neck, VA.
Length: 12 weeks (805 hours)
Exhibit Dates: 11/72-Present
Objectives: To train electronics technicians to operate and maintain Mk 2 ship's inertial navigation systems, Mk 3 multiplex recorders, Mk 1 navigation operational check-out consoles, and Mk 3 navigation subsystem switchboards at design performance levels.

Instructor: Lectures and practical exercises in equipment familiarization and operational test procedures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74)

NV-1715-0067

A-6 AN/ASQ-61A BALLISTICS COMPUTER THEORY

Course Number: C-150-3766
Location: Air Maintenance Training Detachment, Whidbey Island, WA, Air Maintenance Training Detachment, Oceana, VA.
Length: 7 weeks (230 hours)
Exhibit Dates: 11/71-Present
Objectives: To train maintenance personnel in the operation of AN/ASQ ballistic computer sets.

Instruction: Lectures and practical exercises in flip-flops, computer organization, logic circuits, adders, and ballistics computer sets.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74)

NV-1715-0068

A-6 AN/ASQ-61 BALLISTICS COMPUTER INTERMEDIATE MAINTENANCE

(A-6 AN/ASQ-61A Ballistics Computers Intermediate Maintenance)

Course Number: C-150-3763
Location: Air Maintenance Training Detachment, Whidbey Island, WA, Air Maintenance Training Detachment, Oceana, VA.
Length: 2-7 weeks (280-360 hours)
Exhibit Dates: 6/68-Present
Objectives: To train maintenance personnel in the operation of AN/ASQ-61A ballistic computer sets.

Instruction: Lectures and practical exercises in flip-flops, computer organization, logic circuits, adders.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74)

NV-1715-0069

AN/AJM-31(V) INTERMEDIATE MAINTENANCE

Course Number: Not available
Location: Air Maintenance Training Detachment, Lemoore, CA.
Length: 4 weeks (160 hours).
Exhibit Dates: 11/72-Present
Objectives: To train fleet maintenance personnel in intermediate maintenance techniques, including inspection, trouble-shooting, automatic and semi-automatic testing equipment.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74)

NV-1715-0070

A-1E AN/ASN-91 TACTICAL COMPUTER INTERMEDIATE MAINTENANCE

Course Number: C-102-3784
Location: Air Maintenance Training Detachment, Lemoore, CA, Air Maintenance Training Detachment, Cecil Field, FL.
Length: 6 weeks (240 hours)
Exhibit Dates: 1/71-Present
Objectives: To train fleet maintenance personnel to operate, maintain, and repair the AN/ASN-91 computer, special support equipment, and loader-verifier units.

Instruction: Lectures and practical exercises in the AN/ASN-91 computer system, including programming and data flow, computer circuit analysis, test benches, and loader-verifier units.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74)

NV-1715-0071

A-6 MEMORY DRUM TEST CONSOLE AN/ASM-316 (XN-1) AND CARD AND MODULE TESTER INTERMEDIATE MAINTENANCE

Course Number: C-150-3769
Location: Air Maintenance Training Detachment, Whidbey Island, WA, Air Maintenance Training Detachment, Oceana, VA.
Length: 7 weeks (280 hours)
Exhibit Dates: 2/70-Present
Objectives: To train maintenance personnel to operate and maintain AN/ASM-316 (XN-1) memory drum test consoles and card and module testers.

Instruction: Lectures and practical exercises in the operation of memory drum test consoles, card and module testers, and ballistics computer sets.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74)

NV-1715-0072

TARTAR DSOT ANALYSIS MISSILE FIRE CONTROL SYSTEM MFCS MK 74 Mod 0

Course Number: A-121-0096, A-121-0097
Location: Guided Missiles School, Dam Neck, VA
Length: 2 weeks (70 hours)
Exhibit Dates: 10/72-Present
Objectives: To train fleet personnel to conduct a defense system operational test (DSOT), analyze the results, and initiate corrective actions.

NV-1715-0073

AN/ALH-6 RECORDER/REPRODUCER INTERMEDIATE MAINTENANCE

Course Number: C-102-073
Location: Air Maintenance Training Detachment, Cherry Point, NC.
Length: 3 weeks (120 hours)
Exhibit Dates: 11/72-Present
Objectives: To train maintenance personnel to maintain, operate, and service AN/ALH-6 recorder/reproducer systems.

Instruction: Lectures and practical exercises in automatic and semi-automatic testing equipment, and test equipment.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74)

NV-1715-0074

AIA PROGRAMMER, SEMI-AUTOMATIC TEST EQUIPMENT INTERMEDIATE MAINTENANCE

Course Number: Not available
Location: Air Maintenance Training Detachment, Whidbey Island, WA, Air Maintenance Training Detachment, Oceana, VA.
Length: 18 weeks (720 hours)
Exhibit Dates: 1/70-Present
Objectives: To train maintenance personnel to maintain the programming test group equipment.

Instruction: Lectures and practical exercises in programming test groups, programming analyzer test benches, and GT-1 program testing stations.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74)

NV-1715-0075

MK NC-2 PLOTTER MOD 1A (SPERRY) MAINTENANCE, CLASS C

Course Number: A-622-0020, A-622-0021
Location: Technical Training Command, Norfolk, VA, Technical Training Command, San Diego, CA.
Length: 4 weeks (160 hours)
Exhibit Dates: 5/72-Present
Objectives: To train maintenance personnel to maintain, troubleshoot, and repair the Mk NC-2 Mod 1A plotting systems.

Instruction: Lectures and practical exercises in the review of base electronics, synchro/servo systems, solid-state devices, plotting systems and tables, transistors, and voltage networks.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74)

NV-1715-0076

MK NC-2 PLOTTER MOD 2/2A MAINTENANCE, CLASS C

Course Number: A-622-0016
Location: Technical Training Command, San Diego, CA.
Length: 4 weeks (160 hours)
Exhibit Dates: 5/72-Present
Objectives: To train maintenance personnel to maintain, troubleshoot, and repair the Mk NC-2 Mod 2/2A plotting systems.

Instruction: Lectures and practical exercises in the review of base electronics, synchro/servo systems, solid-state devices, plotting systems and tables, transistors, and voltage networks.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74)
193
**DATA SYSTEMS TECHNICIAN—DATA CONVERSION GROUP EQUIPMENT MAINTENANCE, CLASS C**

**Course Number:** A-150-0027

**Location:** Naval Schools Command, Mare Island, CA.

**Length:** 20 weeks (600 hours)

**Exhibit Dates:** 10/72–Present

**Objectives:** To train data systems technicians to maintain and repair data conversion equipment.

**Instruction:** Lectures and practical exercises in data systems theory and maintenance procedures, including digital data converter fundamentals, data source equipment maintenance, radar azimuth converter maintenance, sonar data source equipment maintenance, and beacon video processor system fundamentals and troubleshooting procedures.

**Credit Recommendation:** Insufficient data for evaluation (3/74).

---

**DATA SYSTEMS TECHNICIAN—DATA CONVERSION GROUP EQUIPMENT MAINTENANCE, CLASS C**

**Course Number:** A-150-0028

**Location:** Intelligence Processing System Training Facility, Albany, GA.

**Length:** 28 weeks (1160 hours)

**Exhibit Dates:** 11/72–Present

**Objectives:** To train maintenance personnel to maintain and repair EDP display equipment.

**Instruction:** Lectures and practical exercises in data systems theory and maintenance procedures for input/output device and display equipment.

**Credit Recommendation:** Insufficient data for evaluation (3/74).

---

**DATA SYSTEMS TECHNICIAN—DATA CONVERSION GROUP EQUIPMENT MAINTENANCE, CLASS C**

**Course Number:** A-150-0029

**Location:** Naval Schools Command, Mare Island, CA.

**Length:** 10 weeks (300 hours)

**Exhibit Dates:** 11/71–Present

**Objectives:** To train data systems technicians to operate, maintain, and repair the AN/UGC-20/25 teletype machine.

**Instruction:** Lectures and practical exercises in theory of operation, systems maintenance, and troubleshooting of digital data recorder-repeater, card-reader-punch, data processing line printers, input-output keyboard, printers, and motor generator/controllers.

**Credit Recommendation:** In the vocational certificate category, 8 semester hours in computer science (3/74); in the lower-division baccalaureate/associate degree category, 4 semester hours in computer science (3/74).

---

**AN/SRC-20, AN/SRC-21 RADIO SETS MAINTENANCE (ELECTRONICS TECHNICIAN, CLASS C)**

**Course Number:** A-101-0015, A-101-0016

**Location:** Electronics Technician, Class C School, Treasure Island, CA.

**Length:** 5 weeks (150 hours)

**Exhibit Dates:** 10/68–Present

**Objectives:** To train submarine radiomen to operate, maintain, and repair the AN/SRC-20/21 radio set.

**Instruction:** Lectures and practical exercises in AN/SRC-20/21 radio set theory and operating procedures for each section of the machine, fault isolation and repair to major subassemblies of the electronic and mechanical systems, routine maintenance, cleaning, and material usage.
NC-1715-0091
DATA SYSTEMS TECHNICIAN, CLASS C.
DATA TRANSMISSION GROUP. DATA TERMINAL.
Course Number: A-109-0016.
Location: Naval Schools Command, Mare Island, CA.
Length: 4 weeks (420 hours).
Instruction: Lectures and practical exercises in data transmission equipment and block diagram analysis, experiments on transmission and reception equipment, and use of test equipment.
Credit Recommendation: In the vocational certificate category, 1 semester hour in data transmission equipment.

NV-1715-0092
AN/AQH-4 SOUND RECODER/REPRODUCER SET. INTEZATECATION MAINTENANCE.
Course Number: C-102-3656.
Location: Air Maintenance Training Detachment, Patuxent River, MD, Air Maintenance Training Detachment, Moffett Field, CA.
Length: 4 weeks (80 hours).
Instruction: Lectures and practical exercises in sound recording and reproducing equipment.
Credit Recommendation: In the vocational certificate category, credit in audio-visual techniques on the basis of institutional evaluation (3/74).
NV-1715-0101

CH-53 COMMUNICATION, NAVIGATION AND IDENTIFICATION (CNI) SYSTEMS ORGANIZATIONAL MAINTENANCE

Course Number: C-102-3441.

Location: Air Maintenance Training Detachment, New River, NC; Air Maintenance Training Detachment, Saatsa Ana, CA.

Length: 3 weeks (120 hours).

Exhibit Dates: 3/71-Present.

Objectives: To train enlisted personnel to perform disassembly and reassembly of CH-53 helicopter communication equipment.

Instruction: Lectures on CH-53 communication equipment and practical exercises in assembly and disassembly.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0102

1. AVIONICS INTERMEDIATE, CLASS B

2. AVIONICS INTERMEDIATE, CLASS C

(Intermediate Avionics, Class B).

Course Number: C-100-2012; C-102-2012; C-111-2012; C-112-2012.

Location: Air Technical Training Center, Memphis, TN.


Objectives: To train enlisted personnel to perform complex circuit analysis and avionic equipments procedures.

Instruction: Lectures and practical exercises in mathematics and physics, electronics principles, digital and analog computers and peripheral devices, troubleshooting, and maintenance.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0103

1. SOLID STATE THEORY FOR ELECTRONIC EQUIPMENT

(Static State Theory)

2. ELECTRONICS TECHNICIAN, CLASS C

3. SOLID STATE FUNDAMENTALS

Course Number: Version 1: K-113-2067

Version 2: None.

Location: Version 1: Fleet Training Center, San Diego, CA; Version 2: Electronics Technician, Class C School, Treasure Island, CA.


Objectives: To provide electronics technicians with training in semiconductor and solid-state technology.

Instruction: Lectures and practical exercises in transistor and transistor amplifiers, single and multijunction semiconductors, and sine wave oscillators operation and theory, switching, gating, and pulse circuits, and troubleshooting and servicing.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics and electricity (electric and electronic laboratory) (3/74);

the lower-division baccalaureate/associate degree category, 2 semester hours in electronics (3/74); in the upper-division baccalaureate category, 1 semester hour in electronics, and additional credit in electronics laboratory on the basis of institutional evaluation (3/74).

NV-1715-0104

1. ELECTRICIAN'S MATE, CLASS C

2. ELECTRICIAN'S MATE, CLASS B


Location: School, Command, Great Lakes, IL.


Objectives: To train electrician's mates to repair electrical systems with electronic controls.

Instruction: Lectures and laboratories in trigonometry, AC, and DC circuits, vacuum tubes and semiconductors, digital logic and logic circuits, solid-state devices, microcircuits, and controllers operation and troubleshooting procedures, degrading systems operation and testing, voltage regulators, and AC and DC motors and generators operation and maintenance.

Credit Recommendation: In the vocational certificate category, 6 semester hours in electricity and electronics, 2 in computer technology and 7 in electricity and electronics laboratory (9/77), in the lower-division baccalaureate/associate degree category, 3 semester hours in electricity and electronics, 2 in computer technology and 1 in electronics laboratory (9/77). Version 2: In the vocational certificate category, 14 semester hours in electricity and electronics, 4 in computer technology, and additional credit in electronics laboratory on the basis of institutional evaluation (3/74). Version 3: In the lower-division baccalaureate/associate degree category, 6 semester hours in electricity and electronics, 2 in computer technology, and additional credit in electronics laboratory on the basis of institutional evaluation (3/74). Version in the upper-division baccalaureate category, 1 semester hour in digital logic, 1 in rotating machines, and additional credit in electrical laboratory on the basis of institutional evaluation (3/74). Version 3: In the lower-division baccalaureate/associate degree category, 2 semester hours in electricity and electronics (12/68).

NV-1715-0105

COMMUNICATIONS SYSTEMS TECHNICIAN, CLASS C

Course Number: A-202-0013; A-380-0014.

Location: Communication Station, Washington, DC.

Length: 12 weeks (420-480 hours).

Exhibit Dates: 12/71-Present.

Objectives: To train enlisted personnel to perform specific types of communications equipment.

Instruction: Lectures and laboratories in SSB receiver operation, UHF and microwave, multiplexing techniques, and the use and interpretation of wave meter readings.

Credit Recommendation: In the vocational certificate category, 8 semester hours in electrical laboratory, 6 in lower-division baccalaureate/associate degree category, 2 semester hours in electrical laboratory (6/75).

NV-1715-0106

1. AN/GRC-27A MAINTENANCE

2. AN/GRC-27A RADIO EQUIPMENT MAINTENANCE


Version 2: Not available.


Length: 3 weeks (90 hours).


Objectives: To train maintenance personnel who have backgrounds in basic electronic theory to maintain AN/GRC-27A radio equipment.

Instruction: Lectures on AN/GRC-27A radio components theory of operation, receiver and transmitter electrical and mechanical alignment procedures, modulator power supply adjustments, and troubleshooting and repair of all major components.

Credit Recommendation: In the vocational certificate category, 6 semester hour in electronic communications, 1 in electrical laboratory (3/74).

NV-1715-0107

AN/UGA-3A MAINTENANCE

Course Number: F-160-010.

Location: Submarine School, Groton, CT.

Length: 2 weeks (60 hours).

Exhibit Dates: 11/72-Present.

Objectives: To train technicians who have completed basic electronics training to maintain and troubleshoot the AN/UGA-3A code converter.

Instruction: Lectures and laboratories in AN/UGA-3A code converter maintenance and troubleshooting procedures, including equipment familiarization, maintenance and material management introduction, logic diagram analysis, digital logic circuits analysis and troubleshooting, and special circuits, output oscillator, decoder, and power supply operation and maintenance.

Credit Recommendation: In the vocational certificate category, 1 semester hour as elective in digital circuits (3/74).
NV-1715-0108  
**DATA SYSTEMS TECHNICIAN CLASS C**  
**DATA DISPLAY GROUP**  
**MAINTENANCE**  
Course Number: A-150-018  
Location: Naval Schools Command, Mare Island, CA  
Length: 3 weeks (600 hours)  
Exhibit Dates: 10/72-Present  
**Objectives:** To train enlisted personnel with a background in electronics and digital theory to operate, maintain, and repair data display equipment.  
**Instruction:** Lectures and practical exercises in operation and maintenance of data display consoles, display readouts, and computer display systems.  
**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0109  
**A-6A OA-6672/ASA-48 UNIVERSAL ENCODER TEST CONSOLE**  
**INTERMEDIATE MAINTENANCE**  
Course Number: None  
Location: Air Maintenance Training Detachment, Oceana, VA, Air Maintenance Training Detachment, Whidbey Island, WA  
Length: 2 weeks (80 hours)  
Exhibit Dates: 7/70-Present  
**Objectives:** To train enlisted personnel to maintain and operate universal encoder test consoles.  
**Instruction:** Lectures and practical exercises in encoder test console description and operation, testing procedures, and troubleshooting procedures.  
**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0110  
**DATA SYSTEMS TECHNICIAN RD-294/UYK MAGNETIC TAPE UNIT**  
**CLASS C**  
Course Number: A-150-0073  
Location: Naval Schools Command, Mare Island, CA  
Length: 3 weeks (90 hours)  
Exhibit Dates: 3/71-Present  
**Objectives:** To train enlisted personnel with a background in electronics and digital theory to operate, maintain, and repair RD-294/UYK magnetic tape units.  
**Instruction:** Lectures and laboratories in RD-294/UYK magnetic tape unit basics, operational control logic, magnetic tape operations, and system maintenance.  
**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0111  
**COMPUTER DETECTOR (CP-411/ASA-27)**  
**INTERMEDIATE MAINTENANCE**  
Course Number: C-150-3827/C-150-16  
Location: Air Maintenance Training Detachment, North Island, CA  
Length: 2 weeks (360 hours)  
Exhibit Dates: 1/81-12/72  
**Objectives:** To train enlisted personnel who are familiar with digital fundamentals and avionics systems to operate, test, and repair computer detectors.  
**Instruction:** Lectures and practical exercises in computer detector operation, function, and theory, including system power supply, block diagram, drum servo system, and timing generator operation, target detection, including radar magnetic drum, quantizers, density detectors, and IFF decoder and density detector; data acquisition, including data control and counting, servos and translators; target computation, including programmer, drum memory, height coordinate computer, and arithmetic and transfer logic, and test circuits and troubleshooting procedures.  
**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0112  
**AN/APN-70 LORAN SYSTEM**  
**INTERMEDIATE MAINTENANCE**  
(P-3 AN/APN-70 Loran System Intermediate Maintenance)  
Course Number: C-102-3539  
Location: Air Maintenance Training Detachment, Patuxent River, MD, Air Maintenance Training Detachment, Moffett Field, CA  
Length: 2 weeks (80 hours)  
Exhibit Dates: 10/70-Present  
**Objectives:** To train maintenance personnel who have backgrounds in transistor theory to operate and maintain the AN/APN-70 Loran system.  
**Instruction:** Lectures in AN/APN-70 components and equipment; familiarization, including circuit analysis, block diagram analysis, radar introduction, low-voltage power supplies, oscillators, and antennas, calibration and alignment adjustment procedures, bench setup troubleshooting; Loran equipment and associated test equipment usage; and equipment malfunction isolation and repair.  
**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0113  
**COMMUNICATIONS OFFICER ASHORE**  
**Course Number:** A-4C-0016  
**Location:** Education and Training Center, Newport, RI  
Length: 3-5 weeks (87-120 hours)  
Exhibit Dates: 12/71-Present  
**Objectives:** To familiarize officers with lessons in communications procedures, cryptography, care and custody of registered publications, security, and operational communications.  
**Instruction:** Lectures and practical exercises in communications procedures, cryptograph operaions, and registered publicaions system.  
**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0114  
**P-3 RADAR AND IFF SYSTEMS**  
**ORGANIZATIONAL MAINTENANCE**  
Course Number: C-104-3521  
Location: Air Maintenance Training Detachment, Patuxent River, MD, Air Maintenance Training Detachment, Moffett Field, CA  
Length: 2-3 weeks (80-120 hours)  
Exhibit Dates: 4/70-Present  
**Objectives:** To train maintenance personnel to maintain, calibrate, align, and maintain P-3 radar and IFF systems.  
**Instruction:** Lectures and practical exercises in radar and IFF systems, components, and equipment; organizational maintenance; and troubleshooting procedures.  
**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0115  
**P-3 AN/ASA-16 INDICATOR GROUP**  
**ORGANIZATIONAL MAINTENANCE**  
Course Number: Not available  
Location: Air Maintenance Training Detachment, Moffett Field, CA, Air Maintenance Training Detachment, Patuxent River, MD  
Length: 2 weeks (80 hours)  
Exhibit Dates: 6/70-Present  
**Objectives:** To train maintenance personnel to operate, maintain, and service AN/ASA-16 indicator groups.  
**Instruction:** Lectures and practical exercises in indicator group components and equipment; organizational maintenance; and troubleshooting procedures.  
**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0116  
**P-3 AN/APR-10/V RADAR SET**  
**INTERMEDIATE MAINTENANCE**  
Course Number: C-102-3858  
Location: Air Maintenance Training Detachment, Miramar, CA  
Length: 2 weeks (80 hours)  
Exhibit Dates: 9/69-Present  
**Objectives:** To train enlisted personnel on the radar homing and warning set.  
**Instruction:** Lectures and practical exercises in theory of operation of radar homing and warning sets, test equipment, circuit analysis, and intermediate maintenance.  
**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0117  
**P-3 PT-396/AS AND OA-1768/ASA-13 PLOTTER GROUP INTERMEDIATE MAINTENANCE**  
Course Number: C-102-3555  
Location: Air Maintenance Training Detachment, Patuxent River, MD, Air Maintenance Training Detachment, Moffett Field, CA  
Length: 2 weeks (80 hours)  
Exhibit Dates: 7/70-Present  
**Objectives:** To train enlisted personnel to operate, maintain, and isolate malfunctions in PT-396/AS and OA-1768/ASA-13 plotter groups.  
**Instruction:** Lectures and practical exercises in plotting group maintenance and troubleshooting procedures.  
**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0118  
**P-3 AN/APX-6 RADAR IDENTIFICATION SYSTEM INTERMEDIATE MAINTENANCE**  
Course Number: None  
Location: Air Maintenance Training Detachment, Patuxent River, MD, Air Maintenance Training Detachment, Moffett Field, CA  
Length: 2 weeks (64 hours)  
Exhibit Dates: 3/71-Present
CURRICULUM INSTRUCTION

Objectives: To train maintenance personnel to operate, calibrate, align, and maintain AN/AQ-3 sonar data recording systems.

Instruction: Lectures and practical exercises on system components and equipment, operation, maintenance, and troubleshooting procedures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0119
UNDERWATER FIRE CONTROL GROUP MK 111 MAINTENANCE

Course Number: 4-130-0056
Location: Fleet Anti-Submarine Warfare Training Center, Pacific, San Diego, CA
Length: 18 weeks (540 hours)
Exhibit Dates: 3/76-12/77
Objectives: To provide selected sonar technicians with the necessary skills to maintain the specified fire control equipment.

Instruction: Lectures and practical exercises in preventive and corrective maintenance of sonar based fire control equipment.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronic troubleshooting (9/77).

NV-1715-0120
P-3 AN/AQA-1 SONO INDICATOR SYSTEM INTERMEDIATE MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Center, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA
Length: 3 weeks (96 hours)
Exhibit Dates: 12/70-Present.
Objectives: To train maintenance personnel to operate, calibrate, align, repair, and maintain AN/AQA-1 sono indicator systems.

Instruction: Lectures and practical exercises in AN/AQA-1 components and equipment, familiarization, maintenance procedures, use of test equipment, and troubleshooting.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0121
P-3 AN/AQA-3 SONAR DATA RECORDING SYSTEM MAINTENANCE, NO. 46

Course Number: Not available.
Location: Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA.
Length: 3-4 weeks (120-160 hours)
Exhibit Dates: 3/68-Present
Objectives: To train maintenance personnel in the latest maintenance, modification, and operating procedures for AN/AQA-3 sonar data recording systems.

Instruction: Lectures and practical exercises in AN/AQA-3 sonar data recording system special circuits, functional block diagrams, various circuit analyses, system switching, and power supply operation and maintenance techniques.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0122
GROUND CONTROLLED APPROACH OPERATOR, CLASS C

Course Number: Not available.
Location: Air Technical Training Unit, Olustee, KS
Length: 8 weeks (320 hours).
Exhibit Dates: 7/55-12/68
Objectives: To train enlisted personnel and officers to operate ground controlled approach equipment.

Instruction: Lectures and practical exercises in AN/CPN-4 and AN/MPN-5 radar sets, search radio/telephone procedures, AN/CPN-4/AN/MPN-5 radar procedures, and AN/CPN-4/AN/MPN-5 radar operational training, including normal approaches, hooded approaches, emergency approaches, and in-flight training.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0123
GROUND CONTROLLED APPROACH CONTROLLER, CLASS C

Course Number: C-222-2013
Location: Air Technical Training Center, Glynnco, GA
Length: 3-6 weeks (220-240 hours)
Exhibit Dates: 3/65-Present.
Objectives: To train air controllers, Marine Corps personnel, and radarmen in ground-controlled approach procedures and equipment.

Instruction: Lectures and practical exercises in ground-controlled approach basic operating procedures, ATC-radar familiarization, surveillance control training, precision control procedures, and radar air traffic control facility organization and operation.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0124
AN/BQS-8 (SERIES) SONAR MAINTENANCE

Course Number: K-130-1025
Location: Fleet Anti-Submarine Warfare School, San Diego, CA
Length: 6 weeks (105 hours)
Exhibit Dates: 6/72-Present.
Objectives: To train sonar technicians to operate and maintain AN/BQS-8 (Series) sonar detection and ranging sets.

Instruction: Lectures and practical exercises in theory and principles of continuous transmission, frequency modulated sonar; preventive and corrective maintenance of AN/BQS-8 (Series) Sonar, and the 3-M system.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0125
BASIC NAVIGATION WATCHSTANDER

(Navigational Technician Watchstander - Enlisted)

Course Number: F-194-076
Location: Submarine School, Groton, CT
Length: 3 weeks (90 hours)
Exhibit Dates: 2/69-Present
Objectives: To train enlisted personnel to operate and monitor navigation officer's center equipment.

Instruction: Lectures and practical exercises in operation of navigation subsystems primary power and data flow requirements of navigational subsystem equipment, and monitoring navigation centers.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0126
GENERAL SUBMARINE SONAR MAINTENANCE

Course Number: A-130-0027, K-130-567, K-130-1009
Location: Fleet Anti-Submarine Warfare School, San Diego, CA.
Length: 6-12 weeks (240-595 hours).
Exhibit Dates: 8/70-Present.
Objectives: To train sonar technicians to operate and maintain submarine and aircraft radar equipment, found aboard conventional, ski, skipjack, and SSBN-type submarines.

Instruction: Lectures and practical exercises in preventive and corrective maintenance of auxiliary and major sonar equipment.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/77).

NV-1715-0127
GUN FIRE CONTROL RADAR MK 25 MOD 3 MAINTENANCE

Course Number: J-113-0118, J-113-1181, J-113-1182
Location: Location: Fleet Combat Direction Systems Training Center, Atlantic, Newport, RI.
Length: 3-4 weeks (120,160 hours).
Exhibit Dates: 7/55-12/68
Objectives: To provide navigation personnel to perform required tests, adjustments, troubleshooting, casualty analysis, repairs, and maintenance of MK 25 Mod 3 radar equipment.

Instruction: Lectures and practical exercises in capability and limitations of gun fire control radar systems, including special circuits, power distribution circuits, transmitter and receiver sections theory and operation, automatic tracking and range determination systems circuits and operation, planned maintenance, and radar signal processing equipment.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0128
NAVIGATION OPERATIONS CHECKOUT CONSOLE (NOCC) MK 1 MOD 1 ADVANCED MAINTENANCE

Course Number: A-192-0259, F-192-088.
Location: FBM Submarine Training Center, Charleston, SC.
Length: 2 weeks (80 hours)
Exhibit Dates: 11/72-Present.
Objectives: To provide navigation electronics technicians with advanced training in the operation and maintenance of MK 1 and Mod 1 navigation operational checkout console theory.

Instruction: Lectures in NOCC circuitry review and Loran C signal simulator functional description, encoder-test set; internal NOCC simulator, and troubleshooting, maintenance, and adjustment procedures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0129
RADAR MK 25 MOD 3 MAINTENANCE

Course Number: K-113-2024.
COURSE EXHIBITS

Location: Fleet Training Center, San Diego, CA.
Length: 2 weeks (60 hours).

COURSE DESCRIPTION:
- Objectives: To train fire control technicians and strikers to maintain and repair Mk 25 and Mod 3 radar systems.
- Equipment: Lectures and practical exercises in blocking diagrams and circuit analysis, strobe pulse logic analysis, power supply, maintenance standards, and troubleshooting procedures.

CREDIT RECOMMENDATION:
- Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0190

ELECTRONICS TECHNICIAN, CLASS C, SSBN 
SUBMARINE INERTIAL NAVIGATION SYSTEM 
(SINS) MK 2 MOD 2/3 TECHNICIAN

Course Number: A-193-015.
Location: Guided Missiles School, Dam Neck, VA.
Length: 26 weeks (910 hours).

Objectives: To train electronic technicians to operate and maintain ship's inertial navigation systems, including Mk 25 and Mod 3 radar fundamental, maintenance, operational, and preventive maintenance procedures.

CREDIT RECOMMENDATION:
- Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0131

1. LORAN RECEIVING SET AN/WPN-5 OPERATION AND MAINTENANCE

Location: Submarine School, Key West, FL.
Length: 12-14 weeks (360-420 hours).

Objectives: To train enlisted personnel in the operation and maintenance of Loran C receiving sets and associated equipment.

CREDIT RECOMMENDATION:
- Credit is not recommended because of the limited technical nature of the course (3/74).

2. LORAN RECEIVING SETS AN/SPN-38 AND AN/WPN-5 OPERATION, MAINTENANCE AND FUNCTIONAL CHECKOUT

NV-1715-0134

1. AVIATION ELECTRICIAN'S MATE, CLASS B (ADVANCED)

Course Number: None.
Location: Air Technical Training Center, Memphis, TN.

Objectives: To train aviation electricians in the operation and maintenance of aircraft electrical systems, navigation equipment, and electronic equipment.

CREDIT RECOMMENDATION:
- Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0132

ANTENNA COUPLER CU-1441 COMBINED 
(Maintenance)

(Coupler, Antenna CU-1441/Brr Check-Out and Maintenance (Anion'S Series (CU-1441/BRR Multicoupler))

Location: Submarine School, New London, CT.

Length: 2 weeks (60-65 hours).

Objectives: To train rated electronics technicians and designated strikers to operate and maintain the CU-1441/BRR antenna multicoupler.

CREDIT RECOMMENDATION:
- Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0135

AVIATION ELECTRICIAN'S MATE, CLASS B 
INTERMEDIATE

Course Number: C-602-2014.
Location: Air Technical Training Center, Jacksonville, FL.
Length: Version 1: 10 weeks (333 hours).
Length: Version 2: 3 weeks (936 hours).

Objectives: To provide aviation electricians with advanced technical training in electricity and electronics.

CREDIT RECOMMENDATION:
- Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0136

MK 152 COMPUTER COMMON CORE

Course Number: A-112-0068.
Location: Service School Command, Great Lakes, IL.
Length: 8 weeks (296 hours).

Objectives: To train personnel in the operation and maintenance of the Mk 152 computer and its I/O console and motor generator set.

CREDIT RECOMMENDATION:
- Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0127
1. **AVIONICS ADVANCED, CLASS C**  
   (Avionics Advanced, Class B)  
   (Avionics Advanced, Class B)  
   (Aviation Electronics  
   Technician/Aviation Fire Control  
   Technician, Advanced Class B)  
   (Aviation Electronics  
   Technician, Advanced Class C)  

   **Course Number:** C-100-2011; C-102-2011; C-111-2011; C-112-2011  
   **Location:** Air Technical Training Center, Memphis, TN  
   **Length:** Version 1: 26 weeks (866-1040 hours)  
   **Objectives:** To train noncommissioned officers to maintain and supervise the maintenance of avionics systems.  

   **Instruction:**  
   All Versions: Lectures and practical exercises in algebra, trigonometry, electronics, and magnetism, AC and DC circuits, basic electronics, small-signal and power amplifier analysis, synchros, servos, transposition lines, antennas, and modulation techniques. Lecture II, instruction includes semiconductors, rectifiers, power supplies, amplifiers, oscillators, limiters, clamps, multivibrators, counters, CRTs, and analog computing. Lecture II, instruction includes analytical geometry, calculus, limits, differentiation, integration, integrals, transcendental functions, partials, double integrals, infinite series, differential equations, atomic physics, and digital computers.  

   **Credit Recommendation:** Version 1: In the vocational certificate category, 2 semester hours in mathematics, 3 in physics, and 9 in electricity (6/75); in the lower-division baccalaureate/associate degree category, 2 semester hours in mathematics, 3 in physics, and 9 in electricity (6/75); in the upper-division baccalaureate/associate degree category, 2 semester hours in mathematics, 3 in physics, and 9 in electricity (6/75) Version 2: In the vocational certificate category, 20 semester hours in mathematics, physics, and electrical engineering (3/74), in the lower-division baccalaureate/associate degree category, 4 semester hours in mathematics, 3 in physics, 10 in electricity or electronics (3/74); in the upper-division baccalaureate category, 5 semester hours in mathematics, 5 in physics, 5 in electrical engineering (12/68) Version 3: In the vocational certificate category, 25 semester hours in mathematics and electrical engineering (3/74); in the lower-division baccalaureate/associate degree category, 15 semester hours in physics and electrical engineering (3/74); in the upper-division baccalaureate category, 6 semester hours in physics (electricity), 12 in electrical engineering (12/68)  

   **NV-1715-0139**  
   **AVIATION FIRE CONTROL TECHNICIAN (F) CONVERSION (CLASS C)**  
   **Course Number:** Not available.  
   **Location:** Air Weapons Systems School, Jacksonville, FL  
   **Length:** 27 weeks (1080 hours)  
   **Exhibit Dates:** 8/57-12/68.  
   **Objectives:** To train Navy and Marine Corps enlisted personnel to inspect, test, troubleshoot, and repair aircraft armament control systems.  

   **Instruction:** Lectures and practical experience in aircraft armament control systems inspection, testing, troubleshooting, and repair, including AC and DC circuits fundamentals, gyroscopes, accelerometers, optics, vacuum tubes, radar, servomechanisms, and circuit diagnosis and repair.  

   **Credit Recommendation:** In the vocational certificate category, 9 semester hours in electricity or electronics (3/74), in the lower-division baccalaureate/associate degree category, 6 semester hours in electricity or electronics (6/75); in the upper-division baccalaureate category, 3 semester hours in electricity or electronics for non-engineering majors (7/34)  

   **NV-1715-0142**  
   **F-4 BASIC ELECTRICAL SYSTEMS**  
   **ORGANIZATIONAL MAINTENANCE**  
   **Course Number:** C-602-3821  
   **Location:** Air Maintenance Training Detachment, Monterey, CA, Air Maintenance Training Detachment, Oceana, VA  
   **Length:** 4 weeks (160 hours)  
   **Exhibit Dates:** 4/73- Present  
   **Objectives:** To train enlisted personnel to repair F-4 aircraft electrical systems.  

   **Instruction:** Lectures and practical exercises in F-4 aircraft DC and AC electrical generation systems, power distribution, transformers, and hydraulic, pneumatic, fuel, attitude reference, and flight control systems maintenance.  

   **Credit Recommendation:** In the vocational certificate category, 6 semester-hours in electronics or electronics laboratory, 2 in hydraulics and fluids (3/75); in the lower-division baccalaureate/associate degree category, 3 semester hours in electronics or electronics laboratory, 1 in hydraulics and fluids (3/74).  

   **NV-1715-0143**  
   **RA-5C PANORAMIC CAMERA SHOP MAINTENANCE**  
   **Course Number:** C-100-3745  
   **Location:** Air Maintenance Training Detachment, Sanford, FL  
   **Length:** 6 weeks (240 hours)  
   **Exhibit Dates:** 1/68-Present  
   **Objectives:** To train maintenance personnel to maintain and service electronic camera systems.  

   **Instruction:** Lectures and practical exercises in an introduction to panoramic camera control electronics and automatic exposure control, mounts and mount electronics, and maintenance of panoramic cameras.  

   **Credit Recommendation:** In the vocational certificate category, 3 semester hours in electronics laboratory (3/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics laboroarty (3/74).  

   **NV-1715-0144**  
   **AN/APN-120 ELECTRONIC ALTIMETER INTERMEDIATE MAINTENANCE**  
   **Course Number:** C-102-3742  
   **Location:** Air Maintenance Training Detachment, Sanford, FL  
   **Length:** 4 weeks (160 hours)  
   **Exhibit Dates:** 6/68-Present  
   **Objectives:** To train electronic repairmen to maintain electronic altimeters.  

   **Instruction:** Lectures and practical exercises in an introduction to the altimeter, high-altitude systems theory, control circuits, power supply, amplifiers, modulators, oscillators, and test equipment maintenance, and electronic countermeasures equipment, op-
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (3/74).

NV-1715-0148
CHAFFROC MK 28 MOD J LAUNCHER SYSTEMS MAINTENANCE
Course Number: K-041-2010
Location: Fleet Training Center, San Diego, CA.

Length: 3 weeks (90 hours)
Exhibit Dates: 2/73-Present.

Objectives: To train enlisted personnel who have experience in basic, hydraulics and electricity to operate, load, and launch decoys.

Instructor: Lectures in basic electrical review, Ohm's law, magnetism, conductors, resistors, insulators, circuits, meters, and batteries, hydraulics principles, including Pascal's law, Bernoulli's law, and hydraulic pumps; and launch operation, including electrical firing circuits, applied hydraulics, and local and remote control techniques.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics, and additional credit in electronics on the basis of institutional evaluation (3/74).

NV-1715-0149
SOLID STATE CIRCUIT TROUBLESHOOTING TECHNIQUES
Course Number: C-602-3789
Location: Air Maintenance Training Detachment, Miramar, CA.

Length: 2 weeks (80 hours)
Exhibit Dates: 2/73-Present.

Objectives: To train maintenance personnel to troubleshoot and repair solid-state electronic circuits.

Instruction: Lectures and practical exercises in solid-state circuits and troubleshooting, including diode limiters, rectifiers, d-c circuits, silicon controlled rectifier circuits, basic types of transistor circuits, multivibrators and oscillators, DC and operational amplifiers, and test equipment for troubleshooting.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics (3/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics (3/74).

NV-1715-0150
3-A A ELECTRICAL AND INSTRUMENTS ORGANIZATIONAL MAINTENANCE
Course Number: C-602-3491
Location: Air Maintenance Training Detachment, North Island, CA.

Length: 3 weeks (120 hours)
Exhibit Dates: 8/67-Present.

Objectives: To train aviation electricians to repair, maintain, and troubleshoot aircraft electrical and instrument systems.

Instruction: Lectures and practical exercises in aircraft AC and DC power systems operation, circuit analysis, maintenance and repair, and aircraft utility, environmental, instrument, and electrical systems maintenance, repair, and troubleshooting procedures.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics (3/74).
Location: Air Technical Training Center, Memphis, TN
Length: Course 1: 9-11 weeks (342-360 hours) Version 2: 2-7 weeks (880 hours)
Exhibit Dates: Version 1 1/56-12/68 (930 hours), Phase II, 440 hours
Objective: To train enlisted personnel to maintain and repair antisubmarine warfare equipment.

Instruction: All Versions. Lectures and practical exercises in antisubmarine warfare equipment, repair, including airborne sonar, special detecting systems, sonobuoy systems, magnetic airborne detection systems, and dipping sonar equipment. Version 1. Instruction includes integrated display systems, magnetrod airborne detection systems, special detection electronics, military electronics, and radar electronics, including amplification, rectification, power amplifiers, AC fundamentals, and series-parallel resonance.

Credit Recommendation: Version 1. No credit because of the limited technical nature of the course (3/74). Version 2. In the lower-division baccalaureate/associate degree category, 4 semester hours in electricity or electronics (3/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in electronics circuits (12/68); in the upper-division baccalaureate/associate degree category, 3 semester hours in electronics (12/68). Credit recommendation (3/44).

Version 1:

Course Number: C-000-3187
Location: Marine Technical Training Center, Whidbey Island, WA
Length: 2 weeks (80 hours)
Exhibit Dates: 1/56-12/68.
Credit Recommendation: In the electrical systems category, 1 semester hour in electricity or electronics (3/74). Credit recommendation (3/44).

Version 2:

Course Number: C-130-570
Location: Fleet Sonar Training Center, Bainbridge, MD
Length: 2 weeks (80 hours)
Exhibit Dates: 1/64-5 Present.

Objectives: To train technicians to inspect and repair sonar and electronic equipment familiarization and application of basic electronic and physics fundamentals applicable to sonar equipment and systems.

Instruction: Lectures and practical exercises in mathematics, including basic trigonometric functions, AC and DC circuit fundamentals, network theorems, transistors, power supplies, amplifiers, oscillators, and wave forming circuits with emphasis on radar and video electronics, solution of linear equations, and frequency and phase shift circuitry.

Credit Recommendation: In the vocational certificate category, 15 semester hours in electricity or electronics and credit in electronic laboratory on the basis of institutional evaluation (3/74), in the lower-division baccalaureate/associate degree category, 6 semester hours in electricity or electronics (3/74), in the upper-division baccalaureate/associate degree category, 6 semester hours in electricity or electronics (3/74).

NAV-1715-0155

FIRE CONTROL TECHNICIAN, CLASS A

PHASES I AND II

Course Number: A-113-0010, A-113-0012
Location: Training Center, Bainbridge, MD

Objectives: To train enlisted personnel with prior electrical experience in complex weapons guidance and control systems.

Instruction: Lectures and practical exercises in the use of fire control equipment and all related equipment needed to keep the fire control system operational including test equipment, transmitters, receivers, motor-generators, gyro, synchronizers, resolver, servo system fundamentals, oscilloscope operation, amplifiers, oscillators, and wave forming circuitry with a rigorous mathematical treatment.

Phase II: Lectures and laboratory exercises in numbering systems and arithmetic, logic block diagrams and VHF, transmitters, receivers, motor-generators, transistors, adders, counters, digital computers, I/O systems, converters (AD and DA) analog computer fundamentals, encoders, decoders, cathode ray tubes, and logic circuit fundamentals, analog and digital computer fundamentals, magnetic amplifiers, gyroscopes, mathematical analysis of electronic circuits, theory and construction of computers, solution techniques, core memory, and fire control radar systems. Version 2. Lectures and practical exercises in theory, operation, maintenance and repair of weapons guidance and control systems including magnetic amplifiers, gyroscopes, mathematical analysis of electronic circuits, theory and construction of computers, solution techniques, core memory, and fire control radar systems. Version 2. Lectures and practical exercises in the design and construction of electronic circuits, theory and construction of computers, solution techniques, core memory, and fire control radar systems.

Credit Recommendation: In the baccalaureate/associate degree category, 1 semester hour in electronics laboratory (3/74), in the lower-division baccalaureate/associate degree category, credit in electronics laboratory on the basis of institutional evaluation (3/74).

NAV-1715-0156

MICROMINIATURE COMPONENT REPAIR

INTERMEDIATE MAINTENANCE

Course Number: C-100-3187
Location: Air Maintenance Training Detachment, Whidbey Island, WA
Length: 2 weeks (80 hours)
Exhibit Dates: 1/56-12/68.

Objectives: To train enlisted personnel to repair microminiature printed circuits.

Instruction: Lectures and laboratories in selection and use of the proper hand tools for repair and soldering of microminiature printed circuits, digital encoders, and solderable connectors, magnetic field, current and voltage, printed circuit boards, defects in printed circuit boards, repair of circuit board components, repair of components such as transistors, diodes, and other solid state devices, and computer repair, electronic soldering, core splicing of electrical wire, electroplating electronic circuits, repairing plating edge-lighted panels, and maintenance of microminiature repair stations.

Credit Recommendation: In the vocational certificate category, 1.5 semester hours in electronics laboratory (3/74), in the lower-division baccalaureate/associate degree category, credit in electronics laboratory on the basis of institutional evaluation (3/74).
COURSE EXHIBITS

Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics laboratory (3/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics laboratory (3/74), and 1 additional credit in electronics laboratory on the basis of institutional evaluation (3/74). In the upper-division baccalaureate category, credit in electronics laboratory on the basis of institutional evaluation (3/74).

NV-1715-0160

PHOTOGRAPHIC EQUIPMENT MAINTENANCE

PHOTOGRAPHIC EQUIPMENT REPAIR, CLASS A

Course Number: C-670-2012, C-670-12

Location: Naval Technical Training Center, Corty Station, Daytona Beach, FL


Exhibit Dates: Version 1: 8/75-Present Version 2: 8/63-7/75.

Instruction: Version 1: Course uses modular learning techniques, including individual instruction in the primary instructional method with a heavy emphasis on performance. It includes eight modules and a five-day performance terminal. There is an optional nine-day aerial cameras and systems module which some students elect to take instead of the eight modules. Note: Students who attend only the nine-day aerial cameras and systems module are not eligible for credit. The eight modules are photographic laboratory, mechanical application of principles, basic camera components, basic DC electricity, SLR and rangefinder camera, applied DC electricity, basic AC electricity, and applied AC electricity. Version 2: Lectures and laboratories in photographic equipment repair, including DC circuit fundamentals, electronic theory, and hand tools usage. Instruction emphasizes aerial camera components and principles, motion picture systems, (CMY-5, CMY-7a, and KP-9) and still ground cameras (Graflex), mule growths, use of techniques, twin, reflex, and Slr cameras (Mamiyaflex C-3), dual-curved focal plane camera (KE-28), and mechanical, rapid lifesaving shutters, and photographic laboratory. Using equipment, including advanced aerial equipment, and Navy camera control systems. Repair procedures.

Credit Recommendation: Version 1: In the lower-division baccalaureate/associate degree category, 8 semester hours in camera repair or photographic equipment repair and additional credit in electricity and electronics laboratories in the basis of demonstrated skills and/or institutional evaluation (see note above) (1/77). Version 2: In the vocational certificate category, 3 semester hours in electronics, and credit in photography on the basis of institutional evaluation (4/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics, and credit in photography on the basis of institutional evaluation (4/74).

NV-1715-0161

ANTENNA MULTICOMPANION/AN-BRA-16 COMBINED MAINTENANCE

(AN-BRA-16 Functional Checkout and Maintenance)


Location: Submarine School, New London, CT; Fleet Ballistic Missile Submarine Training Center, Charleston, SC; Submarine Training Center, Pacific, Pearl Harbor, HI.

Length: 3 weeks (90 hours)

Exhibit Dates: 11/72-Present

Objectives: To provide the theory and skills to operate, maintain, troubleshoot, and repair the AN-BRA-16 submarine antenna.

Instruction: Lectures and practical exercises in AN-BRA-16 antenna components, component testing, and including power supply, control panel, test equipment, maintenance charts, antenna circuitry, navigation output phasing, and mast preflight.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics laboratory (9/77).

NV-1715-0162

AN/ASN-99 PROJECTED MAP DISPLAY SET INTERMEDIATE MAINTENANCE

Course Number: C-102-3787

Location: Air Maintenance Training Detachment, Lemoore, CA, Air Maintenance Training Detachment, Chico, CA, Air Maintenance Training Detachment, Fort. FL.

Length: 4 weeks (80 hours)

Exhibit Dates: 9/72-Present

Objectives: To train qualified electronics technicians to operate, troubleshoot, and repair AN/ASN-99 projected map display sets.

Instruction: Lectures and practical exercises in AN/ASN-99 projected map display set operation, maintenance, and troubleshooting, including servomechanisms and digital logic review, block diagram analysis, maintenance charts, and training of model equipment.

Credit Recommendation: In the vocational certificate category, credit in electrical laboratory on the basis of institutional evaluation (4/74).

NV-1715-0163

CONTINUOUS WAVE ILLUMINATOR (CW1) COMMON CORE

Course Number: A-113-0070

Location: Air Force School Command, Great Lakes, IL

Length: 4 weeks (108 hours)

Exhibit Dates: 11/72-Present

Objectives: To train selected personnel to perform circuit-level fault isolation and planned maintenance on a continuous-wave illuminator.

Instruction: Includes use of instruments to isolate and repair the continuous-wave illuminator radar system, operating procedures, and repair maintenance.

Credit Recommendation: In the vocational certificate category, 2 semester hours in radar systems laboratory (9/77).

NV-1715-0164

E-1B AN/ASN-28 CENTRAL GYRO REFERENCE SYSTEM MAINTENANCE

Course Number: Not available

Location: Air Maintenance Training Detachment, North Island, CA, Air Maintenance Training Detachment, Norfolk, VA

Length: 6 weeks (240 hours)

Exhibit Dates: 1/68-Present

Objectives: To train maintenance personnel with backgrounds in electronics to maintain, troubleshoot, and repair the AN/ASN-28 central gyro reference system.

Instruction: Lectures and practical exercises in central gyro reference system maintenance and repair, including in-depth functional and circuit-level descriptions of components, power systems, and control circuits, circuit card and card components (troubleshooting, electronics, control amplifiers, including azimuth, patch and roll servo signal processing, logic, relay, and power circuitry), and resolver excitation and accelerometer restoring amplifier, navigational computer amplifiers, relay control circuits, power supply, gyro scope assembly, control signal data converter, and environmental controls; and extensive alignment, troubleshooting, and bench-testing.

Credit Recommendation: In the vocational certificate category, credit in electronics or aviation on the basis of institutional evaluation (11/68).

NV-1715-0165

ADVANCED TRANSISTOR THEORY

Course Number: F-000-023

Location: Submarine School, Groton, CT

Length: 3 weeks (90 hours)

Exhibit Dates: 2/68-Present

Objectives: To train electronics technicians to operate, troubleshoot, and repair semiconductor devices.

Instruction: Lectures and laboratories in transistor circuit design, circuit analysis, and applications, including effects of devices, diodes, and transistors. Includes AC and DC circuits, including network theorems and mesh equation solutions using determinants, circuit analysis of CE, CB, and CC amplifier configurations, graphical and small signal h-parameter equivalent circuits, interface coupling methods, including gain, frequency response, feedback circuits, transistor applications in digital circuits, high-frequency equivalent circuits, and PET properties; bias equations, stability, and noise design considerations, and SCR properties.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electrical laboratory (4/74); in the lower-division baccalaureate/associate degree category, 4 semester hours in electrical laboratory (4/74), 1 semester hour in the lower-division baccalaureate category, 2 semester hours in electronics engineering on the basis of institutional evaluation (4/74).

NV-1715-0166

MARINE AIR TRAFFIC CONTROL UNIT MAINTENANCE, MANAGEMENT, CLASS C

Course Number: Not available

Location: Air Technical Training Center, Gageo, GA

Length: 3 weeks (120 hours)

Exhibit Dates: 7/71-Present

Objectives: To train officer and enlisted personnel to supervise the maintenance and repair of air traffic control systems.

Instruction: Lectures on organization and functions of air traffic control units and radar, air traffic control centers; survey, and flight inspection procedures familiarization, maintenance publications familiarization, supply control and materials management familiarization, electronic device management and maintenance funds administration, and supervision of installation, maintenance, and repair of air traffic control radar, navigational aids, instrument landing, and communications systems.
**Course Number:** A-100-0031  
**Location:** Amphibious School Coronado, San Diego, CA  
**Length:** 2 weeks (80 hours)  
**Exhibit Dates:** 11/72-Present  
**Objectives:** To train electronics technicians to operate, maintain, and repair radio, radar, and cryptographic equipment.

**Instruction:** Lectures include radar, SSB transmission, interception, frequency interception, and teletype review, waterproofing equipment usage, antenna theory and wave propagation review. Emphasis is on circuit analysis, operation, and preventive maintenance procedures for specific radar, radio, and cryptographic equipment.

**Credit Recommendation:** CredIt is not recommended because of the limited technical nature of the course (3/74).

---

**Course Number:** C-40-B-1010  
**Location:** Air Technical Training Center, Memphis, TN  
**Length:** 40 weeks (1600 hours)  
**Exhibit Dates:** Version 1: 9/71-Present  
**Version 2:** 11/69-9/71  
**Version 3:** 1/69-10/69  
**Version 4:** 9/68-12/68

**Objectives:** To train officers to be avionics officers.

**Instruction:** Lectures and practical exercises in algebra, trigonometry, differential and integral calculus, and differential equations, calculus-based physics, both traditional and modern methods of electronic circuits analysis, measurements and standards, electromagnetic theory, microwave devices and principles, and digital and analog computers.

**Credit Recommendation:** Version 1:  
In the upper-division baccalaureate category, 9 semester hours in mathematics, 6 in physics, 3 in maintenance mathematics, and 7 in engineering electronics (6/74).  
Version 2: In the upper-division baccalaureate category, 9 semester hours in mathematics, 3 in physics, 2 in management, and 12 in engineering electronics (12/68).  
Version 3: In the upper-division baccalaureate category, 4 semester hours in mathematics, 3 in physics, 2 in maintenance mathematics, and 14 in engineering electronics (12/68).  
Version 4: In the upper-division baccalaureate category, 4 semester hours in mathematics, 3 in physics, 12 in maintenance mathematics, and 15 in engineering electronics (12/68).

**Credit Recommendation:** Credit is not recommended because of the military-specific nature of the course (3/74).

---

**Course Number:** C-102-3535  
**Location:** Amphibious Training Detachment, Patuxent River, MD, Air Maintenance Training Detachment, Moffett Field, CA  
**Length:** 3 weeks (104 hours)  
**Exhibit Dates:** 1/68-Present  
**Objectives:** To train enlisted personnel with a knowledge of electronics and transitor theory to operate, calibrate, align, and maintain an aircraft radar indicator display.

**Instruction:** Lectures and practical exercises in theory, maintenance, and operation of the AN/AEN-25A radar indicator, including low- and high-voltage power supplies, range gate generators, multivibrators, waveforms, and mixers, indicator control circuits, sweep circuits, and servo systems.

**Credit Recommendation:** Credit is not recommended because of the military-specific nature of the course (3/74).

---

**Course Number:** N-623-0011  
**Location:** IC Electricians, Class A School, Great Lakes, IL, IC Electricians, Class A School, San Diego, CA  
**Length:** 8 weeks (240 hours)  
**Exhibit Dates:** 12/57-12/68

**Objectives:** To provide trained personnel with a basic understanding of electricity and electronic principles.

**Instruction:** Lectures and laboratories in basic concepts of electricity, including circuit diagrams, symbols, familiarization with Ohm's law, resistors, capacitors, inductors, tubes and transistors; use of electrician's hand tools and soldering techniques; construction of simple circuits using bells and push buttons; basic electrical testing equipment; principles of vacuum tube amplifiers, RC coupling, frequency response, ideal transformer coupling, pull-pull amplifier, and power amplifiers.

**Credit Recommendation:** In the vocational baccalaureate category, 8 semester hours in electricity or electrical laboratory on the basis of institutional evaluation, in the lower-division baccalaureate/associate degree category, credit in electronics on the basis of institutional evaluation (3/74).
COURSE EXHIBITS

AN/AW-M-55(V) armament station control unit test set

Instruction: Lectures and practical exercises in armament station control test sets, test bench peculiarities, and fault control and fault data display.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0175

AN/NSR-13 TACAN DISTANCE AZIMUTH MEASURING EQUIPMENT (DAME) MAINTENANCE/ELECTRONICS TECHNICIAN, CLASS C

Course Number: C-103-0124

Location: Service School Command, San Diego, CA, Fleet Training Center, Norfolk, VA.

Length: 3 weeks (90 hours)

Exhibit Dates: 3/71-Present

Objectives: To train maintenance personnel to maintain and repair the platform test set.

Instruction: Lectures in TACAN azimuth measuring equipment.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0176

RA-SC SEMI-AUTOMATIC TEST EQUIPMENT, PROGRAMMER, SYSTEM ANALYZER AND COUNTERMEASURES TEST BENCH AN/ULM-1 INTERMEDIATE MAINTENANCE

Course Number: Not available.

Location: Air Maintenance Training Detachment, Albany, GA.

Length: 7 weeks (200 hours).

Exhibit Dates: 2/70-Present

Objectives: To train maintenance personnel who have backgrounds in advanced electronics to operate, maintain, and repair RA-SC, and the TACAN systems semi-automated test equipment.

Instruction: Lectures in semi-automated test equipment, programmer, and system analyzer and countermeasures test bench operation, maintenance, and repair, including equipment introduction, control panel, power distribution, tape programmer, self-test procedures, signal relay assembly, decoder and matrix circuitry, tape reader monitor logic, adapter control and programming unit, signal generator, and communications and maintenance routines and procedures.

Credit Recommendation: Credit is not recommended due to the limited military-specific nature of the course (3/74).

NV-1715-0177

A-6 SHIP AND SHORE INERTIAL PLATFORM TEST STATION INTERMEDIATE MAINTENANCE

Course Number: C-102-3762.

Location: Air Maintenance Training Detachment, Whiskey Island, WA, Air Maintenance Training Detachment, Oceana, VA.

Length: 3 weeks (120 hours).

Exhibit Dates: 2/70-Present

Objectives: To train experienced electronics maintenance personnel to maintain and repair the platform test station.

Instruction: Lectures in accelerometer assembly, and operation, Litton gyroscope construction and operation, amplifiers, modulation, and demodulation associated with azimuth, theory of operation and power sources; elevation and roll test loops, four-gumbal platform operation, and test station overall operation and maintenance procedures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0178

AN/ASQ-10 MAGNETIC ANOMALY DETECTOR INTERMEDIATE MAINTENANCE

(AN/ASQ-10A Magnetic Anomaly Detecting Systems Intermediate Maintenance (3/74)

(P-3 AN/ASQ-10A Magnetic Anomaly Detecting Systems Maintenance, No 42)

Course Number: C-102-1059

Location: Air Maintenance Training Detachment, Patuxent River, MD, Air Maintenance Training Detachment, Quonset Point, RI, Air Maintenance Training Detachment, Moffett Field, CA, Air Maintenance Training Detachment, Key West, FL, Air Maintenance Training Detachment, North Island, CA.

Length: 3 weeks (80-104 hours)

Exhibit Dates: 1/68-Present

Objectives: To train maintenance personnel to maintain, calibrate, align, troubleshooting, and repair magnetic anomaly-detectors.

Instruction: Lectures in magnetic anomaly detector block diagrams, theory of operation, maintenance, calibration, alignment, troubleshooting, and repair; and subsystems maintenance, including power supplies, detectors, heater, and antenna amplifier, band-pass and pen amplifier, test circuits, and error voltage controls.

Credit Recommendation: Credit is not recommended because of the limited military-specific nature of the course (3/74).

NV-1715-0179

GUN MAINTENANCE 57/54 CALIBER RAPID FIRE MK 42

Course Number: J-047D/123, J-173-D

Location: Fleet Anti-Air Warfare Training Center, Dam Neck, VA.

Length: 2 weeks (70 hours).

Exhibit Dates: 10/72-Present

Objectives: To train maintenance personnel to operate and maintain the 5/54 (RF) gun mount.

Instruction: Lectures and practical exercises in the maintenance of the 5/54 (RF) gun mount, safety precautions, gun loading, system tests and adjustments, corrective and preventive maintenance, and troubleshooting techniques.

Credit Recommendation: Credit is not recommended because of the limited military-specific nature of the course (3/74).

NV-1715-0180

5/54 GUN MOUNT MK 42 MOD 7/4 DIFFERENCES

Course Number: A-113-0028.

Location: Service School Command, Great Lakes, IL.

Length: 6 weeks (170 hours).

Exhibit Dates: 2/70-Present

Objectives: To train gunner's mates to maintain, adjust, and operate 5/54 gun mounts.

Instruction: Lectures and practical exercises in the system components, lower accommodation systems, loaders and lower hoists, upper-gun loading systems, fuse setters, train and elevation power drives, firing circuits, and gun mount controls.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0181

F-5 ARMAMENT SYSTEM ORGANIZATIONAL MAINTENANCE

Course Number: C-646-3851; C-646-12

Location: Air Maintenance Training Detachment, Miramar, CA.

Length: 2 weeks (80 hours).

Exhibit Dates: 5/69-Present

Objectives: To train fleet maintenance personnel to operate and maintain the F-5H/J armament system.

Instruction: Lectures and practical exercises in the maintenance and testing of the F-5H/J aircraft armament system, including instruction in system components, the gun-nery system, fuselage stores system, wing pylons stores system and associated equipment, corrosion control and radiation hazards.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0182

ELECTRONICS TECHNICIAN, CLASS C, FBM

TENDER NAVIGATION MAINTENANCE

Course Number: A-191-0036

Location: Guided Missiles School, Dam Neck, VA.

Length: 7 weeks (210 hours).

Exhibit Dates: 9/70-Present

Objectives: To train electronics technicians to train maintenance personnel to maintain selected navigation systems, loaders and lower hoists, upper-gun loading systems, fuse setters, train and elevation power drives, firing circuits, and gun mount controls.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0183

F-5 ELECTRICAL, INSTRUMENTS AND STABILIZATION SYSTEMS ORGANIZATIONAL MAINTENANCE

Course Number: Not available.

Location: Air Maintenance Training Detachment, Miramar, CA.

Length: 3 weeks (120 hours).

Exhibit Dates: 6/69-Present

Objectives: To train electrical maintenance personnel to maintain selected aircraft electronics and electrical and flight stabilization systems.
Instruction: Lectures and practical exercises in the maintenance of electronics equipment, including microwave components and devices, including basic transmission line theory, use of the Smith chart, transmission line measurements, microwave components, and satellite antennas, and measurement methods and test equipment, and circuit components.

Credit Recommendation: In the vocational certificate category, 4 semester hours in microwaves (3/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in electricity, 1 in electrical laboratory (3/74).

NV-1715-0184
KY-332A/KY-333A IFF TRANSPONDER INTERMEDIATE MAINTENANCE
Course Number: C-102-3078.
Location: Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Albany, GA; Air Maintenance Training Detachment, Miramar, CA; Air Maintenance Training Detachment, Oceana, VA; Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Cherry Point, NC; Air Maintenance Training Detachment, North Island, CA.
Length: 3 weeks (120 hours).
Exhibit Dates: 3/73-Present.

Objectives: To train maintenance personnel to test, repair, and maintain the KY-332A/KY-333A IFF transponder at the intermediate level.

Instruction: Lectures and practical exercises in IFF transponder repair, including theory, components, various modes of operation, and testing procedures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0185
FIRE CONTROL, TECHNICIAN, CLASS B
Course Number: A-113-0015.
Location: Service Schools Command, Great Lakes, IL.
Length: 29 weeks (870 hours).
Exhibit Dates: 2/68-10/73.

Objectives: To train senior fire control technicians to operate and maintain complex weapons guidance and control systems.

Instruction: Lectures and practical exercises in the maintenance of complex weapons guidance and control systems, including electronics at the college algebra level, electricity, and basic circuits, basic electronic circuits, including vacuum tubes and transistors, communication circuits, industrial or control circuits, pulse and digital circuits, instrumentation, magnetic amplifiers, synchronizers, and alignment and test equipment.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronic communications (3/74).

NV-1715-0188
AN/ARC-111 RECEIVER TRANSMITTER INTERMEDIATE MAINTENANCE
Course Number: C-102-3016.
Location: Air Maintenance Training Detachment, New River, NC; Air Maintenance Training Detachment, Santa Ana, CA.
Length: 2 weeks (80 hours).
Exhibit Dates: 7/68-Present.

Objectives: To train maintenance personnel to operate, maintain, and test the AN/ARC-131 receiver-transmitter at the intermediate level.

Instruction: Lectures and practical exercises in the maintenance and repair of the AN/ARC-131 receiver-transmitter, including a detailed description of the transmitter, block diagrams, amplifiers, and operation of test equipment.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronic communications laboratory (3/74).

NV-1715-0189
CLOSED CIRCUIT TV MAINTENANCE, CLASS C1
Location: Service Schools Command, Great Lakes, IL.
Length: Version I. 18 weeks (636 hours).
Version II. 19 weeks (570 hours).

Exhibit Dates: Version I. 10/55-Present.
Version II. 12/66-9/75.

Objectives: To train communications electronics personnel to operate, maintain, and repair closed-circuit television and pilot-LSO landing aid television systems.

Instruction: Lectures and practical exercises in the maintenance and repair of black and white and color closed-circuit television and pilot-LSO landing aid television systems, including circuit inputs, outputs, and changes of waveforms, receiver fundamentals, cameras, video tape recorders, and inspection, calibration, and testing of television systems.

Credit Recommendation: Version I: In the vocational certificate category, 8 semester hours in TV systems and 5 in TV systems laboratory (9/77), in the lower-division baccalaureate/associate degree category, 3 semester hours in TV systems (9/77). Version II: In the vocational certificate category, 10 semester hours in electronic communications laboratory (3/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in electronic communications laboratory (3/74), 5 in electronic communications laboratory (3/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in electronic communications laboratory (3/74), 5 in electronic communications laboratory (3/74).

NV-1715-0190
E-2A AN/ARC-80 RADIO SET INTERMEDIATE MAINTENANCE
(E-2A Radio Set AN/ARC-80 Intermediate Maintenance)
Course Number: C-150-3477.
Location: Air Maintenance Training Detachment, North Island, CA.
Length: 4-6 weeks (160-400 hours).
Exhibit Dates: 3/68-Present.

Objectives: To train maintenance personnel to operate, maintain, and repair the E-2A AN/ARC-80 SSB transceiver and receiver and associated test equipment.

Instruction: Lectures and practical exercises in SSB transmitter and receiver circuit analysis, operating principles, section theory, radio frequency amplifier, antenna coupler, and transmitter antennas, power supply, and system checks and troubleshooting.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronic communications, 1 in electrical laboratory (3/74).

NV-1715-0191
AN/AQH-1 RECORDER/REPRODUCER INTERMEDIATE MAINTENANCE
Course Number: C-102-3534.
Location: Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA.
Length: 2 weeks (50 hours).
Exhibit Dates: 9/70-Present.

Objectives: To train intermediate maintenance personnel to operate, maintain, and modify the AN/AQH-1 recorder/playback device.

Instruction: Lectures and practical exercises in basic tape recorder principles, head circuits, motor and control circuits, power supply, FM, and direct-channel theory of operation, and precision plate assembly maintenance.

206
NV-1715-0192
EA-B COURSE ATTITUDE DATA TRANSMITTER INTERMEDIATE MAINTENANCE
(T-1073A/Course Attitude Data Transmitter Intermediate Maintenance EA-B Radio Receiver Transmitter)
Course Number: C-602-3775
Location: Air Maintenance Training Detachment, Whidbey Island, WA
Length: 2 weeks (72 hours)
Exhibit Dates: 12/72-Present.
Objectives: To train maintenance personnel to maintain and repair the EA-B attitude data transmitter.

Instruction: Lectures and practical exercises in EA-B attitude data transmitter maintenance and repair, including system equipment and analysis, calibration, alignment, testing, and troubleshooting procedures.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics laboratory (3/74).

NV-1715-0193
AN/URN-20 TACAN MAINTENANCE (ELECTRONICS TECHNICIAN, CLASS C)
(Electronics Technician AN/URN-20 Radio System Class C Maintenance)
Course Number: A-102-0034, A-102-033
Location: Service Schools Command, San Diego, CA, Fleet Training Center, Norfolk, VA.
Length: 5 weeks (150 hours)
Exhibit Dates: 3/69-Present.
Objectives: To train enlisted personnel to operate and maintain the AN/URN-20 radio receiver-transmitter.

Instruction: Lectures and practical exercises in AN/URN-20 radio receiver-transmitter maintenance and operation, including receiver block diagram, test equipment operation, and logical troubleshooting procedures.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics communications system and 2 in electronics laboratory (11/77).

NV-1715-0194
ELECTRONICS TECHNICIAN, CLASS C, AN/FGC-40, AN/FTA-15, MULTICHANNEL VOICE FREQUENCY TELEGRAPH TERMINAL EQUIPMENT
(Electronics Technician AN/FGC-40, AN/FTA-15 Multichannel Voice Frequency Telegraph Terminal Equipment)
Course Number: A-104-0060, A-104-0060
Location: Service Schools Command, Great Lakes, IL.
Length: 4 weeks (120 hours)
Exhibit Dates: 11/72-7/74.
Objectives: To train enlisted personnel who have completed the electronic technician shipboard course to maintain a specific multiplex voice-telegraph system.

Instruction: Lectures and practical exercises in communications system and terminal fundamentals, transmitter and receiver, modification, system operation, and telephone and telegraph terminal devices maintenance.

Credit Recommendation: In the vocational certificate category, 3 semester hours in telephony laboratory (3/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in telephony laboratory (3/74).

NV-1715-0195
E-1B ARC-97 RADIO REPEATER SYSTEM MAINTENANCE
(Course Number: A-102-3074)
Location: Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Albatry, GA; Air Maintenance Training Detachment, Oceana, VA; Air Maintenance Training Detachment, Lemoore, CA; Air Maintenance Training Detachment, Cecil Field, FL; Air Maintenance Training Detachment, Cherry Point, NC; Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Miramar, CA.
Length: 6 weeks (240 hours)
Exhibit Dates: 8/67-Present.
Objectives: To train fleet maintenance personnel to operate, modify, and troubleshoot the E-1B ARC-97 and AN/ALQ-81/100 electronic countermeasures systems.

Instruction: Lectures and practical exercises in AN/ALQ-100 and AN/ALQ-81/100 electronic countermeasures systems.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0196
AN/ALQ COUNTERMEASURES SET INTERMEDIATE MAINTENANCE (AN/ALQ-81/100 Countermeasures Set Maintenance)
(Course Number: C-102-3074)
Location: Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Albatry, GA; Air Maintenance Training Detachment, Oceana, VA; Air Maintenance Training Detachment, Lemoore, CA; Air Maintenance Training Detachment, Cecil Field, FL; Air Maintenance Training Detachment, Cherry Point, NC; Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Miramar, CA.
Length: 6 weeks (240 hours)
Exhibit Dates: 8/67-Present.
Objectives: To train maintenance personnel to operate and maintain specific electronic countermeasure systems.

Instruction: Lectures and practical exercises in AN/ALQ-100 and AN/ALQ-81/100 electronic countermeasures systems.

Credit Recommendation: No credit because of the limited technical nature of the course (4/74).

NV-1715-0197
TACAN MAINTENANCE, CLASS C (ELECTRONICS TECHNICIAN, CLASS C, TACAN MAINTENANCE)
(Course Number: A-102-0044, A-102-0045)
Location: Electronics Technician, Class C School, Treasure Island, CA; Electronics Technician, Class C School, Great Lakes, IL.
Length: 7 weeks (210 hours)
Exhibit Dates: 3/63-Present.
Objectives: To train electronics technicians to operate and maintain TACAN, navigation equipment.

Instruction: Lectures and practical exercises in TACAN navigation system equipment, including beacon electronics, test equipment, antennas, control circuits, and radio frequency, navigation, and 3-M system maintenance and material management.

Credit Recommendation: In the vocational certificate category, 3 semester hours in microwave and pulsed electronics and 1 in microwave and pulse electronics laboratory (9/77).

NV-1715-0198
E-6A AN/ALQ-76/86 ECM SYSTEMS ORGANIZATIONAL MAINTENANCE
(Course Number: C-102-3942)
Location: Air Maintenance Training Detachment, Cherry Point, NC.
Length: 5 weeks (200 hours)
Exhibit Dates: 3/73-Present.
Objectives: To train maintenance personnel to maintain a specific ECM system.

Instruction: Lectures and practical exercises in the operation and maintenance of the AN/ALQ-76/86 ECM system, including components, troubleshooting, and use of associated test equipment.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0199
AN/SPS-3 RADAR TRAINER CLASS C, MAINTENANCE
(Course Number: A-104-0048, A-104-0049)
Location: Electronics Technician, Class C School, Norfolk, VA; Electronics Technician, Class C School, San Diego, CA.
Length: 4 weeks (120 hours)
Exhibit Dates: 6/71-Present.
Objectives: To train electronics technicians to operate and maintain specific radar trainer systems.

Instruction: Lectures and practical exercises in the maintenance and operation of the AN/SPS-3 radar trainer, including use of associated test equipment, components of the system, signal simulation, and system troubleshooting.

Credit Recommendation: No credit because of the limited technical nature of the course (4/74).

NV-1715-0200
A-7 AN/APN-190 DOPPLER RADAR NAVIGATION SYSTEM INTERMEDIATE MAINTENANCE
(Course Number: C-102-3785)
Location: Air Maintenance Training Detachment, Lemoore, CA; Air Maintenance Training Detachment, Cecil Field, FL.
Length: 6 weeks (240 hours)
Exhibit Dates: 8/71-Present.
Objectives: To train enlisted personnel to maintain and operate a specific radar system.

Instruction: Lectures and practical exercises in the maintenance and operation of the AN/APN-190 Doppler radar navigation system, including block-diagram analysis and receiver, transmitter, antenna, and control indicator analysis.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).
Objectives: To train maintenance personnel to maintain and operate the AN/ARN-52 TACAN system at the intermediate level.

Instruction: Lectures and practical exercises in the maintenance of the AN/ARN-52 TACAN system, including specialized treatment of the specific equipment components and circuitry.

Credit Recommendation: Version X edit is not recommended because of the limited technical nature of the course (3/74). All Versions: 0 0

NV-1715-0205

FIRE CONTROL SYSTEM TECHNICIAN MK 88 MOD 4 TENDER MAINTENANCE

Course Number: A-121-0190
Location: Guided Missles School, Dam Neck, VA
Length: 14 weeks (220 hours).
Exhibit Dates: 1/71-Present

Objectives: To train enlisted personnel to operate and maintain the electromechanical teletypewriter, the computer tape reader, and the optical alignment group of the Fleet Ballistic Missile Weapons System.

Instruction: Lectures and practical exercises in the maintenance of the electromechanical teletypewriter, the computer tape reader, and the optical alignment group, including computer logic and instruction in theory, calibrations, optical principles, electro-servo components, and diagnosis of malfunctions.

Credit Recommendation: In the vocational education systems training center, San Diego, CA.

Length: 2 weeks (60 hours).
Exhibit Dates: 5/71-3/74

Objectives: To train electronics technicians to operate and maintain the AN/SRN-12 Omega receiving set (a long-range surface navigation aid) and test equipment, including components, circuitry, and preventive maintenance procedures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0202

SINS Mk 2 MOD 6 CALIBRATION

Course Number: A-193-0300
Location: Fleet Ballistic Missile Submarine Training Center, Charleston, SC. Submarine Base, New London, Groton, CT.
Length: 2 weeks (60 hours).
Exhibit Dates: 3/77-Present

Objectives: To provide an advanced knowledge of the theory of operation and calibration of the specified navigation system.

Instruction: Lectures and laboratories in monitor/gyro mechanization, monitor gyro error analysis, use of current procedures for performing calibration and evaluation of data for a Mark 2 system. PAP/HAP/HAP calibration are performed on an operational system.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (7/78).

NV-1715-0203

FIRE CONTROL SYSTEM TECHNICIAN MK 88 CONVERSION (MOD 6 TO MOD 11)

Course Number: A-121-0178.
Location: Guided Missiles School, Dam Neck, VA.
Length: 3 weeks (120-hours).
Exhibit Dates: 10/72-Present

Objectives: To train Mk 84 fire control system technicians to operate and maintain a specific fire control system and associated nontactical equipment.

Instruction: Lectures and practical exercises in the maintenance, operation, and maintenance of the Mk 84 fire control system (Mod 11), including changes introduced from the Mod 0 system; digital and analog circuitry associated with the digital read-in circuitry, radar, antennas, and computer test equipment, and radio communication electronics.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0204

F AN/ARN-52 TACAN INTERMEDIATE MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, Miramar, CA.
Length: 3 weeks (120 hours).
Exhibit Dates: 1/68-Present

Objectives: To train maintenance personnel to maintain a shipboard ground fire control system.

Instruction: Lectures and practical exercises in the maintenance of the Mk 56 ground fire control system, including use of PMS and MDCS, power distribution, AC and DC, power and mode control switching, power supplies, director control circuits, specific radar and rate-computation circuits, system servo loops, and computer power supply and maintenance.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0208

GUN FIRE CONTROL SYSTEM (GFCS) MK 88 MOD 4 MAINTENANCE

Course Number: K-113-2075
Location: Fleet Training Center, San Diego, CA.
Length: 2 weeks (60 hours).
Exhibit Dates: 10/72-Present

Objectives: To train fire control technicians to maintain a shipboard ground fire control system.

Instruction: Lectures and practical exercises in the maintenance of the Mk 88 ground fire control system, including analysis of the system and subsystems, power distribution and AC, drive, control switching, free gyroscopes, circuits, electromechanical computing elements, information flow, tests, and test analysis.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0209

F/RF-4B AIR DATA COMPUTER SET MAINTENANCE

Course Number: C-602-3834, C-602-181.
Location: Air Maintenance Training Detachment, El Toro, CA.
Length: 2 weeks (60 hours).
Exhibit Dates: 10/72-Present.

Objectives: To train maintenance personnel to test and maintain the F/RF-4B aircraft's air data computer.

Instruction: Lectures and practical exercises in the maintenance of the F/RF-4B aircraft air data computer, including computer compensator, computer, and organizational level test equipment and procedures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0210

1. GUN FIRE CONTROL SYSTEM (GFCS) MK 37 MAINTENANCE (LESS MK 25 RADAR)

Course Number: Version 1: K-113-1415
Version 2: K-113-1416
Location: All Versions: Fleet Training Center, San Diego, CA. Version 2: Fleet Training Group, Pearl Harbor, HI.
Length: Version 1: 2 weeks (60 hours)
Version 2: 3 weeks (90 hours)
Exhibit Dates: Version 1: 11/72-Present
Version 2: 11/65-10/72

Objectives: To train enlisted personnel to operate and maintain the Mk-37 GFCS gun fire control system.

Instruction: Lectures and training in Mk-37 GFCS gun fire control system operation and maintenance, including components familiarization, mechanical and electrical systems theory of operation, alignment procedures and system checks, and maintenance procedures.
COURSE EXHIBITS

system computer components operation and adjustment procedures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0211

FIRE CONTROL SYSTEM (FCS):

TECHNICIAN MK 30

(Fire Control System Technician-MK 80 Replacement)

Course Number: A-121-0024, A-121-0013.

Location: Submarine Training Center, Pacific, Pearl Harbor, HI; Guided Missiles School, Dam Neck, VA.

Length: 5 weeks (360-395 hours).

Exhibit Dates: 1/61- Present

Objectives: To train enlisted personnel to operate and maintain the Mk 80 fire control system.

Instruction: Lectures and practical exercises in the functional operation to block diagram level of a fleet ballistic missile fire control system on the 598 or 608 class SSBN submarine. Topics include meters, oscilloscope and hand tools to perform routine preventive maintenance, equipment alignment, repair, safety procedures, troubleshooting techniques to recognize and interpret malfunctions, basic corrective maintenance to the sub-system level following, maintained procedures for systematic fault isolation, and the removal and replacement of faulty modules.

Credit Recommendation: In the vocational certificate category, 4 semester hours in electronics laboratory (9/77).

NV-1715-0212

FIRE CONTROL TECHNICIAN CLASS C.

TARGET DESIGNATION SYSTEM (TDS) MK 1

Course Number: A-121-0095, A-121-095

Location: Version 1: Service Schools Command, Great Lakes, IL; All Versions: Service Schools Command, Bainbridge, MD.


Objectives: To train fire control technicians to operate and maintain the Mk 5 target designation system at an advanced level.

Instruction: Lectures and practical exercises in the maintenance of the MK 5 designation indicator, including instruction in electronics and circuitry used in radar and television, mathematical analysis of circuits, theory, construction, and operation of the designation indicator and associated equipment, testing and calibration, alignment data computation, and adjustment and repair.

Credit Recommendation: Version 1: In the vocational certificate category, 3 semester hours in electronics (3/74), in the lower-division baccalaureate/associate degree category, credit in electronic laboratory on the basis of institutional evaluation (9/74).

Version 2: In the vocational certificate category, 3 semester hours in electronics (3/74), in the lower-division baccalaureate/associate degree category, credit in electronic laboratory on the basis of institutional evaluation (12/68).

NV-1715-0215

ADVANCED AIRBORNE ELINT

EVALUATION

Course Number: E-2D-074

Location: Fleet Airborne Electronics Training Unit, Pacific, San Diego, CA.

Length: 48 weeks (3200 hours).

Exhibit Dates: 10/72- Present

Objectives: To train officers to evaluate, locate, and analyze threat and non-threat radar emissions, and to identify the concepts of electronic surveillance measures (ESM).

Instruction: Lectures and practical exercises in concepts, interpret procedures, and applications of electronic surveillance systems, including review of electronic warfare principles, review of radar and ESM equipment fundamentals, aircraft, and equipment capabilities and limitations, methods and procedures of data collection, and the evaluation of mission results.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0216

FIRE CONTROL TECHNICIAN CLASS C, GUN FIRE CONTROL SYSTEM MK 35 AND TARGET DESIGNATION SYSTEM MK 3

Course Number: Not available.

Location: Service Schools Command, Great Lakes, IL; Service Schools Command, Bainbridge, MD.

Length: 20 weeks (600 hours).

Exhibit Dates: 2/68-Present

Objectives: To train fire control technicians to operate, maintain, and repair the Mk 56 gun fire control system and the Mk 5 target designation system.

Instruction: Lectures and practical exercises in the operation and maintenance of the integrated Mk 56 gun fire control system and the Mk 5 target designation system, including theory and operation of the specific equipment, operation of the antenna system, transmitter and receiver circuits, and repair of systems equipment; and mathematical analysis of electronic surveillance measures (ESM) for power supplies, radar, and antennas.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electricity or electronics (3/74), in the lower-division baccalaureate/associate degree category, credit in electronic/electronics laboratory on the basis of institutional evaluation (12/68).

NV-1715-0217

GROUND CONTROLLED APPROACH ELECTRONICS MAINTENANCE

RADIAR SET AN/FM-151, CLASS C

Course Number: C-101-205

Location: Air Technical Training Center, Gunnyco, GA.


Objectives: To train electronics technicians to operate and maintain an AN/FM-36 radar installation.

Instruction: Lectures and practical exercises in the operation and maintenance of the complete AN/FM-36 radar installation, including the antenna system, transmitter and receiver group, remote equipment, indicator group, and quadradar system, control systems, amplifiers, power requirements, generators, radar positioning and runway survey, and testing and adjustment.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electrical testing and maintenance (6/75). Version 2: In the vocational certificate category, 3 semester hours in electrical maintenance, analysis and troubleshooting (3/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in circuit analysis, and troubleshooting (3/74).

NV-1715-0218

1 MK 56 GUN FIRE CONTROL SYSTEM (GFCs) MAINTENANCE, CLASS C

2 FIRE CONTROL TECHNICIAN CLASS C, GUN FIRE CONTROL SYSTEM (GFCs) MK 56

Course Number: All Versions, A-113-0014.

Location: Version 1: A-113-0025. Version 2: Service Schools Command, Bainbridge, MD; Service Schools Command, Great Lakes, IL.


Objectives: To train fire control technicians to operate, maintain, and repair the Mk 56 gun fire control system equipment.

Instruction: All Versions: Lectures and practical exercises in the maintenance of the Mk 56 gun fire control system equipment, including components, gyroscopes, testing, calibration, adjustment, and repair of systems equipment; and mathematical analysis of electronic surveillance measures (ESM) for power supplies, radar, and antennas.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electricity or electronics (3/74), in the lower-division baccalaureate/associate degree category, credit in electronic/electronics laboratory on the basis of institutional evaluation (12/68).
Topics include mathematical analysis of circuits.

Credit Recommendation: Version 1 In the vocational certificate category, 6 semester hours, in electronic systems maintenance (9/75).

In the lower-division baccalaureate/associate degree category, 1 semester hour in circuitry (9/77) Version 2. In the vocational certificate category, 6 semester hours in electronic systems maintenance (6/75), in the lower-division baccalaureate/associate degree category, 1 semester hour in circuitry and 1 in electronic laboratory (6/75).

NV-1715-0219

FIRE CONTROL TECHNICIAN CLASS C, GUN FIRE CONTROL SYSTEM (GFCS), Mk 37

Course Number: A-113-0016
Location: Service Schools Command, Great Lakes, IL
Length: 21-23 weeks (690-725 hours).

Exhibit Dates: 1/65-Present

Objectives: To train fire control technicians to operate, maintain, and repair the Mk 37 gun fire control system.

Instructor: Lectures and practical exercises in the maintenance of the Mk 37 gun fire control system and the Mk 5 radar altimeter system, including components, testing and repair procedures, and the theory of operation of director, radar, and computer equipment.

Credit Recommendation: In the vocational certificate category, 3 semester hours, in radar systems maintenance (9/77).

NV-1715-0222

RA-5C AN/AAS-21 INFRARED DETECTING SET AND MAINTENANCE

Course Number: C-102-3747
Location: Air Maintenance Training Detachment, Albany, GA
Length: 6 weeks (240 hours)
Exhibit Dates: 11/69-Present

Objectives: To train enlisted personnel to operate and maintain the AN/AAS-21 infrared detecting set.

Instruction: Lectures and practical exercises in infrared fundamentals, Stefan-Boltzmann law, IR receiver and recorder theory and design, basic scope, optical circuits operation and purpose, recorder data flow, filters and optics circuits, self-test and power control circuits, receiver synchronization and recorder, recorder design and theory of video and film speed circuits, and laboratory techniques for alignment and troubleshooting.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics laboratory (3/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in analog computers and 1 in radar (6/75).

NV-1715-0220

GUN FIRE CONTROL SYSTEM (GFCS) MK 37 MAINTENANCE

Course Number: J-113-0105: J-113-1052
Location: Fleet Combat Direction Systems Training Center, Atlantic, Dam Neck, VA
Length: 4 weeks (140 hours)

Exhibit Dates: 1/72-Present

Objectives: To train fire control technicians to operate and maintain the Mk 37 gun fire control system.

Instructor: Lectures and practical exercises in the maintenance of the Mk 37 gun fire control system, including components, preventive maintenance, test equipment, adjustments, use of the system dynamic test and error corrector, and operation of specific subsystems and associated equipment.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0221

GUN FIRE CONTROL SYSTEM (GFCS) MK 37 MAINTENANCE, CLASS 3

(Fire Control Technician Class C, GUN Fire Control System (GFCS) MK 37 and Target Designation System (TDS) Mk 5)

Location: Service School Command, Great Lakes, IL, Service School Command, Bainbridge, MD
Length: 23-25 weeks (690-781 hours)
Exhibit Dates: 2/68-Present.

Objectives: To train fire control technicians to operate, maintain, and repair the integrated Mk 37 gun fire control system and the Mk 5 target designation system.

Instruction: Lectures and practical exercises in the operation and maintenance of the Mk 37 gun fire control system and the Mk 5 target designation system, including components, testing and repair procedures, and the theory of operation of director, radar, and computer equipment.

Credit Recommendation: In the vocational certificate category, 3 semester hours, in radar systems maintenance (9/77).

NV-1715-0225

RF-5B AN/APN-199 RADAR ALTIMETER MAINTENANCE

Course Number: C-102-3837, C-102-199
Location: Air Maintenance Training Detachment, El Toro, CA
Length: 2 weeks (80 hours)
Exhibit Dates: 3/70-Present

Objectives: To train maintenance personnel to maintain, service, and troubleshoot the AN/APN-199 radar altimeter system.

Instruction: Lectures and practical exercises in AN/APN-199 radar altimeter system theory of operation, frequency-generating circuits, receiving, computing, and special circuits, and maintenance, troubleshooting, bench check-out, trouble analysis, alignment, and safety precautions.

Credit Recommendation: In the vocational certificate category, credit in electricity or electronics on the basis of institutional evaluation (3/74).

NV-1715-0226

AN/ASB-1A RADAR SUB-SYSTEM INTERMEDIATE MAINTENANCE

Course Number: C-111-3702
Location: Air Maintenance Training Detachment, Alameda, CA
Length: 3 weeks (120 hours)
Exhibit Dates: 3/73-Present

Objectives: To train maintenance personnel to maintain, service, and troubleshoot, and repair the AN/ASB-1A radar subsystem.

Instruction: Lectures in radar system components, symbols, and specifications; radar presentations; gyroscope assembly, antenna, block analysis of tunable radar, transmitter timing, modulation, RF, and tuning; receiver section, RF and AFC network, IF and video circuits; servo control amplifiers and display circuits; power supply, antenna, and synchronization circuits maintenance; and radar system preventive and corrective maintenance procedures.

Credit Recommendation: Credit in electricity or electronics on the basis of institutional evaluation (3/74).

NV-1715-0224

RA-5C ELECTRONIC RECONNAISSANCE ORGANIZATIONAL MAINTENANCE

Course Number: C-102-3743; C-102-294
Location: Air Maintenance Training Detachment, Albany, GA
Length: 2-3 weeks (80-120 hours)
Exhibit Dates: 4/69-Present

Objectives: To train naval fleet maintenance personnel to maintain, service, and troubleshoot the AN/AAS-21 infrared detecting set, AN/APD-7 side-looking radar (SLR), and AN/AAY-1 signal data converter group systems.

Instruction: Lectures and practical exercises in infrared detection, side-looking radar, signal data converter group systems analysis, maintenance, and troubleshooting, including signal data converter group systems, and data translator systems introduction, accessories and test equipment, video amplifiers, and optics system description, infrared detecting set, including infrared prisms, major components, and operation and testing procedures, and side-looking radar set block-diagram analysis, antenna system, cooling and presurization, fuel circuitry, and operation and testing procedures.

Credit Recommendation: In the vocational certificate category, credit in electronics on the basis of institutional evaluation (3/74).

Credit Recommendation: Credit is not recommended because of the military specific nature of the course (3/74).

NV-1715-0228 RF-4B AN/ASN-46/56 NAVIGATIONAL COMPUTER AND INERTIAL NAVIGATION SYSTEM INTERMEDIATE MAINTENANCE Course Number: Not available Location: Aircraft Maintenance Training Detachment, El Toro, CA Length: 6 weeks (240 hours) Exhibit Dates: 1/68-Present Objectives: Train maintenance personnel to troubleshoot, maintain, and repair AN/ASN-46/56 navigational computer and inertial navigation systems.

Institution: Lectures and laboratories in AN-46 systems and operating procedures, introduction to trangometry and resolver theory; test bench procedures, system hook-up, test procedures, theory of operation and purpose of navigational computers; platform test sets, gyro tests, and bias procedures, and theory of operation and purpose of inertial navigation systems.

Credit Recommendation: In the vocational certificate category, credit in electricity and electronics on the basis of institutional evaluation (3/74), in the lower-division baccalaureate/associate degree category, credit in electricity or electronics on the basis of institutional evaluation (3/74), in the upper-division baccalaureate/associate degree category, credit in electricity or electronics on the basis of institutional evaluation (3/74).


Institution: Lectures and laboratories in an introduction to single-sideband theory, power supplies and distribution, functional block diagram of SSB transmit circuits, audio and video amplifying, circuit generation, and power amplifiers, tuning and AM transmitting circuit analysis; CW transmitting and receiving mode of operation; FSK transmitting and receiving mode analysis, and transmission malfunctions.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics on the basis of institutional evaluation (3/74), in the lower-division baccalaureate/associate degree category, credit in electronics on the basis of institutional evaluation (3/74).
credit in electrical laboratory on the basis of institutional evaluation (3/74)

NV-1715-0234
CARRIER AIR TRAFFIC CONTROL CENTER
EQUIPMENT MAINTENANCE
AN/SPN-44
Course Number: C-103-2024
Location: Air Technical Training Center, Glynnco, GA.
Length: 6 weeks (240 hours)
Exhibit Dates: 6/73-Present
Objectives: To train electronics technicians to maintain and operate AN/SPN-44 radar sets
Instruction: Lectures and practical exercises in radar, navigation equipment, wave-guide systems, cooling systems, receivers, transmitters, power supplies, distribution, power-feeding systems, relay assembly, test number readout, communication and data handling, error determination techniques, and troubleshooting procedures.
Credit Recommendation: Insufficient data for evaluation (3/74)

NV-1715-0235
AN/ASB-7 RADAR SUB-SYSTEM
INTERMEDIATE MAINTENANCE
Course Number: C-111-3701
Location: Air Maintenance Training Detachment, Alameda, CA.
Length: 3 weeks (120 hours)
Exhibit Dates: 6/72-Present
Objectives: To train electronics technicians to maintain AN/ASB-7 radar sub-systems
Instruction: Lectures on radar, navigation equipment, wave-guide systems, cooling systems, receivers, transmitters, power supplies, distribution, power-feeding systems, relay assembly, test number readout, communication and data handling, error determination techniques, and troubleshooting procedures.
Credit Recommendation: Insufficient data for evaluation (3/74)

NV-1715-0236
CARRIER AIR TRAFFIC CONTROL CENTER
EQUIPMENT MAINTENANCE, RADAR SET AN/SPN-44, CLASS 2
Course Number: C-103-2014
Location: Air Technical Training Center, Glynnco, GA.
Length: 6 weeks (240 hours)
Exhibit Dates: 6/68-12/68
Objectives: To train electronics technicians to operate and maintain AN/SPN-44 radar sets
Instruction: Lectures and laboratories in transmitters/modulators, including control circuits, power supplies, timing generators, trigger shapers and modulators, sensor and AFTI circuits, wave-guide systems, cooling systems, receiver circuits, including mixer and local oscillators, parametric amplifiers, AFTI circuits, high-frequency amplifiers, RF filters, video amplifiers, and power supplies, and antenna stabilization and train systems, and maintenance and troubleshooting procedures.
Credit Recommendation: In the vocational certificate category, credit in electronics on the basis of institutional evaluation (3/74)

NV-1715-0237
SH-1A AN/APN-130 DOPPLER RADAR NAVIGATION MAINTENANCE
Course Number: Not available
Location: Air Maintenance Training Detachment, Ream Field, CA, Air Maintenance Training Detachment, Key West, FL
Length: 4 weeks (160 hours)
Exhibit Dates: 1/68-Present
Objectives: To train enlisted personnel to operate and maintain the AN/SPN-130 Doppler navigation radar as used in SH-1A helicopters
Instruction: Lectures and practical exercises in radar, navigation equipment, wave-guide systems, cooling systems, receivers/transmitters, power supplies, distribution, power-feeding systems, relay assembly, test number readout, communication and data handling, error determination techniques, and troubleshooting procedures.
Credit Recommendation: In the vocational certificate category, credit in electronics on the basis of institutional evaluation (3/74)

NV-1715-0238
RA-4C SEMI-AUTOMATIC TEST EQUIPMENT, PROGRAMMER AND SYSTEM ANALYZER INTERMEDIATE MAINTENANCE
Course Number: C-100-3741
Location: Air Maintenance Training Detachment, Sanford, FL
Length: 6 weeks (240 hours)
Exhibit Dates: 9/67-12/68
Objectives: To train maintenance personnel to repair semiautomatic test equipment
Instruction: Lectures and laboratories on operation of semiautomatic test equipment, familiarization with control panels, power distribution, and air conditioning, test procedures, signal relay assembly, test number readout, comparison, ADC comparison, counter timers, printer electronics, and test point monitors, and maintenance and troubleshooting procedures.
Credit Recommendation: Insufficient data for evaluation (3/74)

NV-1715-0239
MK 68 GUN DIRECTOR AND AN/SPG-33F RADAR MAINTENANCE
Course Number: A-113-0072
Location: Service School Command, Great Lakes, IL
Length: 20 weeks (560 hours)
Exhibit Dates: 3/75-Present
Objectives: To train students with prior electronics training to operate, maintain, and repair radar equipment, including automatic test equipment
Instruction: Instruction in the operation and maintenance of the MK 68 gun director and AN/SPG-33F radar system.
Credit Recommendation: In the vocational certificate category, 2 semester hours in radar systems laboratory (9/77)
1-188  COURSE EXHIBITS
and analog input techniques, special-purpose digital-to-analog output theory, serial digital output theory, and serial input/output and display devices.
Credit Recommendation: In the vocational certificate category, credit in electronics on the basis of institutional evaluation (3/74), and in the lower-division baccalaureate/associate degree category, credit in electronics on the basis of institutional evaluation (3/74).

NY-1715-0243
S-1D/E AN/AK-19A MULTI-CHANNEL JEEZEBEL RELAY INTERMEDIATE MAINTENANCE Course Number: C-102-3611
Location: Air Maintenance Training Detachment, North Island, CA. Air Maintenance Training Detachment, Key West, FL.
Length: 2 weeks (80 hours)
Exhibit Dates: 12/70-Present
Objectives: To train maintenance personnel to operate, maintain, troubleshoot, and align AN/AKT-19A multichannel Jeezel relay systems.
Instruction: Lectures and laboratories in multichannel Jeezel relay systems, circuit analysis of subassemblies, antenna couplers, control indicators, and multiplexer-transmitters, test and alignment procedures, and fault location.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (3/74).

NY-1715-0244
S-2E AN/ARC-44 HF RECEIVER-TRANSMITTER SYSTEM MAINTENANCE Course Number: Not available
Location: Air Maintenance Training Detachment, North Island, CA. Air Maintenance Training Detachment, Key West, FL.
Length: 4 weeks (160 hours)
Exhibit Dates: 1/68-Present
Objectives: To provide maintenance personnel with an overall knowledge of the AN/ARC-44 HF receiver-transmitter system.
Instruction: Lectures and laboratories on theory of operation and troubleshooting of HF/AM audio-amplifier modules, IF and RF transmitters, AF transmitters, auto-tune systems, power amplifier modules, electronic control amplifiers, RF oscillators, frequency divider modules, frequency stabilizer modules, power supplies, mode selectors, and chassis circuitry as applied to the AN/ARC-44 HF receiver-transmitter.
Credit Recommendation: In the vocational certificate category, credit in electronics on the basis of institutional evaluation (3/74), and in the lower-division baccalaureate/associate degree category, credit in electronics on the basis of institutional evaluation (3/74).

NY-1715-0245
GUIDANCE SYSTEM, Mk 3 Mod 0, OPERATION AND MAINTENANCE Course Number: F-121-061
Location: Submarine Training Center, Charleston, SC.
Length: 4 weeks (160 hours)
Exhibit Dates: 11/72-Present
Objectives: To train enlisted personnel to operate and maintain the Mk 3 Mod 0 guidance system.
Instruction: Lectures and practical exercises in organization, content, and use of the Mk 3 Mod 0 guidance system technical documentation, signal and interface between seven tactical subsystems, detailed functional description of each subsystem, including circuit analysis and logic flow, special tools and test equipment, normal operations, and system maintenance procedures.
Credit Recommendation: In the vocational certificate category, credit in electronics on the basis of institutional evaluation (3/74).

NY-1715-0246
RA-SC ELECTRONIC RECONNAISSANCE LINE MAINTENANCE Course Number: Not available
Location: Air Maintenance Training Detachment, Sanford, FL.
Length: 5 weeks (200 hours)
Exhibit Dates: 1/68-Present
Objectives: To train maintenance personnel to operate, maintain, and service the AN/APD-7 side-looking radar and the AN/ALQ-61 passive electronics countermeasures system.
Instruction: Lectures and practical exercises in line maintenance of AN/APD-7 side-looking radars, and in the repair of passive electronics countermeasures systems, including antenna, receiver, encoders, decoder, programer, tape recorder, and power distribution systems.
Credit Recommendation: Insufficient data for evaluation (3/74).

NY-1715-0247
AN/ARN-81 LORAN INTERMEDIATE MAINTENANCE—(C-2A AN/ARN-81 Loran Intermediate Maintenance Course Number: C-102-3043
Length: 3-4 weeks (120-160 hours)
Exhibit Dates: 1/68-Present
Objectives: To train maintenance personnel to operate, maintain, and service AN/ARN-81 long-range (Loran) navigation systems.
Instruction: Lectures and laboratories in Loran system, intermediate circuits, display circuits, troubleshooting, and alignment.
Credit Recommendation: In the vocational certificate category, credit in electronics on the basis of institutional evaluation (3/74), and in the lower-division baccalaureate/associate degree category, credit in electronics on the basis of institutional evaluation (3/74).

NY-1715-0248
AN/APD-7 SIDE LOOKING RADAR INTERMEDIATE MAINTENANCE (RA-SC AN/APD-7 Side Looking Radar (SLR) Intermediate Maintenance (RA-SC Side Looking Radar (SLR) AN/APD-7 (XN-1) Shop Maintenance Course Number: C-100-3747
Location: Air Maintenance Training Detachment, Albany, GA. Air Maintenance Training Detachment, Moffett Field, FL.
Length: 5-6 weeks (200-240 hours)
Exhibit Dates: 1/68-Present.
Objectives: To train maintenance personnel in troubleshooting, repair, and maintain AN/APD-7 side-looking radar systems.
Instruction: Lectures and practical exercises in operation and maintenance of transmitters, receivers, recorder systems, and associated systems and circuits of the side-looking radar system, and use of dual-trace oscilloscopes, millimeters, and associated test equipment.
Credit Recommendation: In the vocational certificate category, credit in electronics on the basis of institutional evaluation (3/74), and in the lower-division baccalaureate/associate degree category, credit in electronics on the basis of institutional evaluation (3/74).

NY-1715-0249
AN/VCC-1, AN/VRC-46 AND AN/SRA-60 TELEPHONE-TELEGRAPH COMMUNICATION SYSTEM Course Number: A-101-0063
Length: 3 weeks (90 hours)
Exhibit Dates: 2/70-Present.
Objectives: To train enlisted personnel to operate, maintain, and service AN/VCC-2, AN/VRC-46, and AN/SRA-60 telephone equipment.
Instruction: Lectures and laboratories in maintenance and material management, and AN/VCC-2, AN/VRC-46, and AN/SRA-60 telephone-telegraph communication system, familiarization, operation, functional analysis, and maintenance.
Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics laboratory (1/77).

NY-1715-0250
TRANSMITTER AN/WRT-4 COMBINED MAINTENANCE (Special Communications Equipment AN/WRT-4 Maintenance Course Number: A-101-0108, L-101-028, F-101-021
Location: Submarine Training Center, Pacific, Pearl Harbor, HI. Ballistic Missile Submarine Training Center, Charleston, SC.
Length: 4-5 weeks (120-150 hours)
Exhibit Dates: 5/67-Present.
Objectives: To train enlisted personnel to operate and maintain AN/WRT-4 communications equipment.
Instruction: Lectures and practical exercises in AN/WRT-4 communications equipment maintenance and troubleshooting, including principles of operation, descriptive treatment of components, including block diagram analysis, power supply operation, circuits, oscillator, generator, and output divider, and equipment troubleshooting and maintenance techniques. Troubleshooting of vacuum tube and transistor subsystems is taken to the component level.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in electronic engineering technology laboratory (9/77).

NY-1715-0251
AN/WRA-3 COMBINED MAINTENANCE (Special Communications Equipment AN/WRA-3 Maintenance Course Number: A-101-0105, L-101-029, Version 1: Submarine Training Center, Pacific, Pearl Harbor, HI. Version 2: Submarine Training Center, Boston, MA.
Length: 4-5 weeks (120-150 hours)
Exhibit Dates: 5/67-Present.
Objectives: To train maintenance personnel to operate and maintain AN/WRA-3 communications equipment.
NV-1715-0252
CONALOG MAINTENANCE NORDEN
(ENLISTED)
Course Number: A-623-0032; F-623-025
Location: Submarine School, Groton, CT
Length: 6 weeks (180 hours)
Exhibit Dates: 4/68-Present
Objectives: To train enlisted personnel to maintain and operate the CONALOG system and associated test and auxiliary equipment.

INSTRUCTION: Lectures and practical exercises in the maintenance of the CONALOG system and associated test and auxiliary equipment, including block diagram of closed-circuit television systems, introduction to AN/USM-105A oscilloscopes, primary power distribution and low-voltage power supply, circuit analysis of display generation systems and circuits, system overhauls, video processor circuits, and counter-operating and control circuits, roll, trim, and servo data flow, depth computation and control circuits, and alarm circuits data flow.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in electronics or electronics laboratory (3/74).

NV-1715-0253
CONALOG (NORDEN) REFRESHER
MAINTENANCE AND TROUBLESHOOTING
Course Number: L-191-011
Location: Fleet Submarine Training Facility, Pearl Harbor, HI
Length: 3 weeks (105 hours)
Exhibit Dates: 7/68-Present
Objectives: To train interior communications electronics technicians to operate and repair the Norden CONALOG system on FBM submarines.

INSTRUCTION: Lectures and practical exercises in the operation and repair of the CONALOG system on FBM submarines, including the use of the Tektronix 354 B oscilloscope, function of the John Fluke meter, circuit tracing, operation and alignment of the CONALOG system equipment, and troubleshooting procedures. Course designed to update previous training and skills.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics or electronics laboratory (3/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics laboratory, and additional credit in electronics laboratory on the basis of institutional evaluation (3/74).

NV-1715-0254
E-2A AN/ACQ-1 AND AN/ACQ-2 DATA TERMINAL INTERMEDIATE MAINTENANCE
Course Number: C-1603478
Location: Air Maintenance Training Detachment, North Island, CA
Length: 9 weeks (225 hours)
Exhibit Dates: 1/68-Present
Objectives: To train maintenance personnel to operate and troubleshoot the AN/ACQ-1 data terminal, set and the AN/ASM-228 and AN/USM-145 test benches.

INSTRUCTION: Lectures and practical exercises in the maintenance of the AN/ACQ-1 data terminal set and the AN/ASM-228 and AN/USM-145 test benches, including data terminal system familiarization, logic circuits, code generalization, Ladder and synchronizing circuits, code recognition circuits, control circuits, oscilloscope, computer, signal generator, wave analyzer, distortion analyzer, and operation of specialized test benches.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics or electronics laboratory on the basis of institutional evaluation (3/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in electrical laboratory on the basis of institutional evaluation (3/74).

NV-1715-0255
F-4B COMMUNICATION NAVIGATION IDENTIFICATION (CVN) ORGANIZATIONAL MAINTENANCE
Course Number: C-102-3814
Location: Air Maintenance Training Detachment, Miramar, CA
Length: 4 weeks (160 hours)
Exhibit Dates: 7/73-Present
Objectives: To train maintenance personnel to maintain and repair the CONALOG MAINTENANCE NORDEN group system, including history of sound buoy system, principles of operation, Loran-2, Coordinate Positioning System, and the sonar computer recorder.

INSTRUCTION: Lectures and practical exercises in the maintenance of the CONALOG MAINTENANCE NORDEN group system, including in-service recognition, Loran-2, Coordinate Positioning System, and the sonar computer recorder.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electrical laboratory on the basis of institutional evaluation (3/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in electrical laboratory on the basis of institutional evaluation (3/74).

NV-1715-0257
F-4B AN/AQH-4 RADAR SET GROUP ORGANIZATIONAL MAINTENANCE
Course Number: Not available
Location: Air Maintenance Training Detachment, Miramar, CA
Length: 3 weeks (105 hours)
Exhibit Dates: 1/68-Present
Objectives: To train maintenance personnel to maintain and repair the AN/AQH-4 radar set group at the intermediate level.

INSTRUCTION: Lectures and practical exercises in the maintenance of the AN/AQH-4 radar set group, including illumination and missile-tracing circuits, functional analysis and special test equipment operation, missile-firing group, various component functions, and troubleshooting procedures.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electrical laboratory on the basis of institutional evaluation (3/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in electrical laboratory on the basis of institutional evaluation (3/74).

NV-1715-0258
S-2G AN/AQA-7(V)/3 SONAR COMPUTER RECORDER GROUP ORGANIZATIONAL MAINTENANCE
Course Number: C-102-3623
Location: Air Maintenance Training Detachment, Quantico, VA
Length: 2 weeks (80 hours)
Exhibit Dates: 11/72-Present
Objectives: To train maintenance personnel to maintain and repair the S-2G AN/AQA-7(V)/3 sonar computer-recorder group system.

INSTRUCTION: Lectures and practical exercises in the maintenance of the S-2G AN/AQA-7(V)/3 sonar computer-recorder group system, including history of sound buoy system, principles of operation, Loran-2, Coordinate Positioning System, and the sonar computer recorder, bearing frequency controls, digital memory
COURSE EXHIBITS

NY-1715-0259
TALOS WEAPON DIRECTION SYSTEM Mk 6
Location: Guided Missiles School, Dam Neck, VA; Schools Command, Mare Island, CA
Length: 24 weeks (720 hours)

Exhibit Dates: 1/68-Present

Objectives: To train enlisted personnel to maintain and repair the TALOS weapon direction system.

Instruction: Lectures and practical exercises in the maintenance of the TALOS weapon direction system, including radar signal generator, digital computer, and associated test equipment, including instructor and auxiliary equipment.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electricity or electronics on the basis of institutional evaluation (3/74).

NY-1715-0260
A-1/E AN/AQ-126 RADAR SET
Location: Color Field, FL
Length: 4 weeks (102 hours)

Exhibit Dates: 1/72-12/77

Objectives: To train aviation fire control technicians to maintain, operate, and troubleshoot the AN/AQ-126 radar sets, utilizing intermediate test sets.

Instruction: All Versions: Lectures and practical exercises in the operation of the AN/AQ-126 radar set, including power supply, transmitters/modulators, antenna/receivers, navigation computers, sweep generators, and test sets.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics troubleshooting (8/72).

NY-1715-0262
P-3 AN/ARN-52 TACAN MAINTENANCE
Location: Air Maintenance Training Detachment, Moffett Field, CA
Length: 3 weeks (72 hours)

Exhibit Dates: 1/68-Present

Objectives: To train enlisted personnel with knowledge of basic transistors to operate and maintain the AN/ARN-52 (V) TACAN system at the intermediate level.

Instruction: Lectures and practical exercises in the maintenance and troubleshooting of the AN/ARN-52 (V) TACAN system, including power supply and associated test equipment, service operation generation of RF, frequency multipliers and RF amplifiers, decoders, AGC circuits, video circuits, bearing circuits, range circuits, and the antenna system.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics on the basis of institutional evaluation (3/74).

NY-1715-0263
A-3 BOMBING DATA COMPUTER CP-66A/ASB-1 COMBINED MAINTENANCE
Location: Whidbey Island, WA
Length: 5 weeks (240 hours)

Exhibit Dates: 1/72-11/77

Objectives: To train maintenance personnel to maintain and repair CP-66A/ASB-1 bombing data computer.

Instruction: Lectures and practical exercises in the maintenance of the CP-66A/ASB-1 bombing data computer, including bombing program, computer subsystems, and electrical computing devices and systems, shafts and gears, mathematics, trigonometry, synchronizers, servomotors, computer subsystems, and auxiliary equipment.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics on the basis of institutional evaluation (3/74).

NY-1715-0264
TARGET DESIGNATION SYSTEM MK 5 MAINTENANCE
Location: K-113-2073

Objectives: To train fire control technicians to maintain a shipboard target designation system.

Instruction: Lectures and practical exercises in the maintenance of the MK 5 shipboard target designation system using associated test equipment, instruction in video generator, designation indicator, coordinate converter and remote indicators, power distribution within the system, and auxiliary equipment.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course.

NY-1715-0265
SONAR RECEIVING SET AN/BQG PUFS MAINTENANCE
Location: Fleet, Anti-Submarine Warfare School, San Diego, CA
Length: 8 weeks (240 hours)

Exhibit Dates: 1/72-12/77

Objectives: To train maintenance personnel to operate and maintain the AN/BQG-4/4A sonar receiver equipment, including generation and synchronization of system time, allo-ware amplifier subsystem, delay-line time compressors, track amplifiers, null generator, null buffer and filter register, and timing circuits.

Instruction: Lectures and practical exercises in the maintenance of the Mk 5 shipboard sonar receiving set.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics on the basis of institutional evaluation (3/74).

NY-1715-0266
A-3 BOMBING DATA COMPUTER CP-66A/ASB-1 MAINTENANCE
Location: K-113-0160

Objectives: To train maintenance personnel to maintain and repair CP-66A/ASB-1 bombing data computer.

Instruction: Lectures and practical exercises in the maintenance of the CP-66A/ASB-1 bombing data computer, including bombing program, computer subsystems, and auxiliary equipment.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics on the basis of institutional evaluation (3/74).
INTEGRATED AVIONICS WEAPONS SYSTEM SPECIALIST

Course Number: Not available
Location: Air Maintenance Training Detachment, Lemoore, CA
Length: 12 weeks (482 hours)

Exhibit Dates: 7/71-Present

Objectives: To train electronics maintenance personnel to operate and maintain the complex integrated avionics weapons and navigation systems.

Instruction: Lectures and practical exercises in the maintenance of the complex integrated avionics weapons and navigation systems, including system and radar theory, tactical computer, weapons and electro-optical systems, circuit analysis, block diagrams, wiring and control systems, computer mathematics, power supply and distribution systems, antenna operation, testing, associated equipment, weapon delivery, video display, applicable computer instruction, and test equipment.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electrical laboratory (3/74), in the upper-division baccalaureate category, credit in electrical laboratory on the basis of institutional evaluation (3/74).

INTEGRATED AVIONICS WEAPONS SYSTEM TECHNICIAN

Course Number: Not available
Location: Air Maintenance Training Detachment, Lemoore, CA
Length: 8 weeks (320 houses)

Exhibit Dates: 4/71-Present

Objectives: To train electronics maintenance personnel to operate and maintain integrated avionics weapons delivery and navigation systems.

Instruction: Lectures and practical exercises in the maintenance of the complex integrated avionics weapons delivery and navigation system, including radar theory, digital and analog computers, optics, refraction of light, fiber optics applications, weapons control systems, navigation systems, data links, descriptive mathematics, tactical computers, test measurement, detailed circuit analysis, block diagrams, altimeters, Doppler radar theory, weapons release systems, malfunction isolation and associated test equipment.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics (3/74), in the upper-division baccalaureate/associate degree category, 1 semester hour in electronics (3/74), in the upper-division baccalaureate category, credit in electronics on the basis of institutional evaluation (3/74).

P:1 ANTI-SUBMARINE WARFARE (ASW) SYSTEMS ORGANIZATIONAL MAINTENANCE

Course Number: Not available
Location: Air Maintenance Training Detachment, Patuxent River, MD. Air Maintenance Training Detachment, Moffett Field, CA
Length: 3 weeks (120 hours)

Exhibit Dates: 7/70-Present

Objectives: To train fleet personnel to maintain anti-submarine warfare systems.

Instruction: Lectures and practical exercises in the maintenance, inspection, and fault isolation of anti-submarine warfare systems, including peak and trend procedures and lubrication, and organizational maintenance of the direction finder, pulse analyzer, particle detector, magnetic anomaly detector, position indicator, sono receivers, tape recorder system, and sonar data recorder.

Credit Recommendation: Insufficient data for evaluation (3/74).

RA-SC SHOEHORN ORGANIZATIONAL MAINTENANCE

Course Number: G102-3744
Location: Air Maintenance Training Detachment, Albany, GA
Length: 4-5 weeks (160-200 hours)

Exhibit Dates: 9/70-Present

Objectives: To train maintenance personnel to operate and maintain the RA-SC electronic warfare system.

Instruction: Lectures and practical exercises in the maintenance of the RA-SC electronic warfare systems, including various countermeasures systems, warning systems, system block and test, maintenance, and operation of countermeasures, and self-destruct systems.

Credit Recommendation: Insufficient data for evaluation (3/74).

AVIATION ANTI-SUBMARINE WARFARE (AASW) FOR FIRST TOUR PILOTS

Course Number: E-2D-0064, E-2D-064
Location: Fleet Aviation Specialized Operational Training Group, Moffett Field, CA
Length: 3-4 weeks (107-126 hours)

Exhibit Dates: 10/72-Present

Objectives: To train aviators for an initial aviation anti-submarine warfare (AASW) tour.

Instruction: Lectures and practical exercises in the operation of aviation anti-submarine warfare, including oceanography and underwater acoustics, the P3A/B(D) aircraft, AASW sensors, current AASW tactics, use of radar in anti-submarine warfare, location target, and current submarine operations and tactics.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (3/74).

MK 68 DIRECTOR AND COMPUTER Mk 47

Course Number: A-113-0073
Location: Service School Command, Great Lakes, IL
Length: 15 weeks (450 hours)

Exhibit Dates: 11/75-Present

Objectives: To train students in the operation, preventive maintenance, and repair of a gun fire control system.

Instruction: In the safe operation of the Director and the Director drive system, in troubleshooting the Director control, computers, stable element, and system interface.

Credit Recommendation: In the vocational certificate category, 3 semester hours in computer maintenance and 6 in electronic-cinematical drive systems (9/77).

NAVAL TACTICAL DATA SYSTEMS DATA TRANSMISSION GROUP MAINTENANCE

Course Number: Not available
Location: Tactical Data Systems Maintenance Class C School, Mare Island, CA
Length: 20 weeks (600 hours)

Exhibit Dates: 5/64-12/68

Objectives: To train enlisted personnel with training in Boolean algebra, logic, number systems, electronics, transistors, semiconductors, and vacuum tube theory to operate and maintain NTDS data transmission equipment.

Instruction: Lectures and practical exercises in the maintenance of NTDS data transmission equipment, including control and channeling equipment, modes of operation, control timing generator, transmit sequence control and generator, transmit program control, control code generation, computer control, frequency synthesizer, Doppler correction unit, frequency and phase demultiplexing, synchronization, fundamentals of single sideband communications, patching switchboard and converter indicator, R F amplifiers, multicoilers, and the audio patching adapter unit.

Credit Recommendation: In the vocational certificate category, 6 semester hours in electrical laboratory (3/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in electrical laboratory, and additional credit in electrical laboratory on the basis of institutional evaluation (3/74); in the upper-division baccalaureate category, credit in electrical laboratory on the basis of institutional evaluation (3/74).

NAVAL TACTICAL DATA SYSTEMS MAINTENANCE

Course Number: Not available
Location: Tactical Data Systems Maintenance School, Mare Island, CA
Length: 20 weeks (588 hours)

Exhibit Dates: 1/65-12/68

Objectives: To train enlisted personnel to maintain the USQ-20 Naval Tactial Data System (NTDS), including digital computer functions.
COURSE EXHIBITS

AN/SY/A data display group, specific channeling equipment, high-capacity communication system, introduction to keyset complex, USQ-20 components, and input/output timing chain, various console operations, and introduction to NTDS A link.

CREDIT: Recommendation: Insufficient data for evaluation (3/74)

NV-1715-0275

FUNDAMENTAL ANALYSIS TECHNIQUES (Plan)

Course Number: E-210-55
Location: Airborne Electronics Training Unit, Pacific Moffett Field, CA
Length: 2 weeks (70 hours)
Exhibit Dates: 10/72-10/64
Objectives: To train transitioning VP antisubmarine warfare operators to operate Jezzel equipment at a basic level
Instruction: Lectures and practical exercises in the analysis of Jezzel equipment, including basic procedures, intelligence, and interpretation
Credit Recommendation: Insufficient data for evaluation (3/74)

NV-1715-0276

BRIGHT RADAR INDICATOR TOWER EQUIPMENT MAINTENANCE, CLASS C

Course Number: Not available
Location: Air Technical Training Center, Glynco, GA
Length: 2 weeks (160 hours)
Exhibit Dates: 7/71-7/61
Objectives: To train electronics technicians to operate and maintain television indicator equipment
Instruction: Lectures and practical exercises in a descriptive treatment of television principles, cameras, and display units, placement indicators, and review of solid-state devices
Credit Recommendation: In the vocational certificate category, 3 semester hours in television technology (4/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in television technology, and in the lower-division baccalaureate/associate degree category, 1 semester hour in television technology, and in the lower-division baccalaureate/associate degree category, 1 semester hour in television technology, and in the lower-division baccalaureate/associate degree category, 1 semester hour in television technology

NV-1715-0277

AN/SQS-23, 23A, 23B, 23C MAINTENANCE AND ASPECT

Course Number: Not available
Location: Fleet Sonar School, Key West, FL, Fleet Sonar School, San Diego, CA
Length: 12 weeks (480 hours)
Exhibit Dates: 1/68-1/68
Objectives: To train enlisted personnel to maintain and repair the AN/SQS-23 series sonar set.
Instruction: Lectures and practical exercises in the maintenance of the AN/SQS-23 series sonar set, including systems components and power supply, circuitry, generator operation, introductory transistor principles, and operation of applicable electronic circuits (vacuum tube), and beam receiver and control circuits.
Credit Recommendation: In the vocational certificate category, 6 semester hours in electricity or electronics laboratory (4/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in electricity or electronics laboratory (4/74); in the upper-division baccalaureate category, credit in electrical laboratory on the basis of institutional evaluation (4/74).

NV-1715-0278

TALOS RADAR AN/SPW-2B, CLASS C

Course Number: Not available
Location: Naval Schools Command, Mare Island, CA
Length: 16 weeks (480 hours)
Exhibit Dates: 1/68-1/68
Objectives: To train fire control technicians and engineers to maintain and operate the TALOS radar system.
Instruction: Lectures and practical exercises in the maintenance of the TALOS radar system, including system components, data flow and maintenance procedures, range data and pulse transmitter output instruction, and power distribution and mode switching circuits for specific equipment.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, credit in advanced circuits laboratory on the basis of institutional evaluation (4/74), in the upper-division baccalaureate category, credit in electrical laboratory on the basis of institutional evaluation (4/74).

NV-1715-0279

A-3 RELATED AVIONICS SYSTEM (AT/AQ) ORGANIZATIONAL MAINTENANCE (A-3 RELATED AVIONICS SYSTEM (AT/AQ) ORGANIZATIONAL MAINTENANCE)

Course Number: C-102-3706
Location: Air Maintenance Training Detachment, Alameda, CA
Length: 2-3 weeks (80-120 hours)
Exhibit Dates: 11/72-11/72
Objectives: To train maintenance personnel to maintain specific aircraft electronic systems.
Instruction: Lectures, demonstrations, and practical exercises in A-3 (AT/AQ) aircraft familiarization, avionics systems organizational maintenance, general-purpose line test equipment, operating procedures made safety precautions, radar systems components maintenance and troubleshooting, various radio sets and navigation system's components, operation, and troubleshooting procedures.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0280


Course Number: Not available
Length: 3-4 weeks (120-160 hours)
Exhibit Dates: 1/68-1/68
Objectives: To train maintenance personnel to maintain and service the AN/APG-53A radar.
Instruction: Lectures and practical exercises in the maintenance of the AN/APG-53A radar maintenance, including system familiarization, components operation, power supply, transmitter, RF plumbing and duplexer theory of operation, and various component maintenance procedures.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0281

A3B AN/ASB-1A SYSTEM MAINTENANCE (LESS COMPUTER CP-44A)

Course Number: Not available
Location: Air Maintenance Training Detachment, Whidbey Island, WA
Length: 2 weeks (320 hours)
Exhibit Dates: 1/68-1/68
Objectives: To train maintenance personnel to maintain the AN/ASB-1A bomb director-set on an intermediate level.
Instruction: Lectures and practical exercises in the maintenance of the AN/ASB-1A director sets, including operating procedures, stabilization subsystem assembly and function, optical subsystems, and various component maintenance procedures.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0282

TALOS RADAR AN/SPG-49B, CLASS C

Course Number: A-104-0086
Location: Naval Schools Command, Mare Island, CA
Length: 24 weeks (720 hours)
Exhibit Dates: 1/68-1/68
Objectives: To train fire control technicians to maintain a specific radar set.
Instruction: Lectures and practical exercises in the maintenance of the TALOS radar AN/SPG-49B, including operation, data flow, circuit information, test methods and equipment, and various component maintenance procedures.
Credit Recommendation: In the vocational certificate category, credit in electrical laboratory on the basis of institutional evaluation (4/74), in the lower-division baccalaureate/associate degree category, credit in electrical laboratory on the basis of institutional evaluation (4/74), in the upper-division baccalaureate category, credit in electrical laboratory on the basis of institutional evaluation (4/74).

NV-1715-0283

AN/SPG-53A RADAR MAINTENANCE

Course Number: K-13-2027
Location: Fleet Training Center, San Diego, CA
Length: 3 weeks (60 hours)
Exhibit Dates: 7/68-7/68
Objectives: To train fire control technicians and designated strikers to maintain the AN/SPG-53A radar.
Instruction: Lectures and practical exercises in the maintenance of the AN/SPG-53A radar, including power distribution, synchronizing system, transmitting system, acquisition system, ranging and angle error systems, and adjustment and troubleshooting.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0284

AUTODIN/DSTE/DSSCS/MODE V MAINTENANCE, CLASS C

Course Number: A-100-0056
Location: Service School Command, Great Lakes, IL
Length: 11 weeks (320 hours)
Exhibit Dates: 5/73-5/73
Objectives: To train maintenance personnel to maintain the AUTODIN system.
NV-1715-0285

AN/ALQ-108 COUNTERMEASURE SET
INTERMEDIATE MAINTENANCE

Course Number: C-102-2076.
Location: Air Maintenance Training Detachment, Miramar, CA. Air Maintenance Training Detachment, Oceana, VA.
Length: 3 weeks (120 hours).
Exhibit Dates: 2/73-Present.
Objectives: To train fleet maintenance personnel to maintain and repair the AN/ALQ-108 countermeasures set at the intermediate level.

Instruction: Lectures and practical exercises in the maintenance of the AN/ALQ-108 countermeasures set, including basic system concepts, system component functions and description, synchronization and code generation, timing, various subsystems, control indicators, and power supplies, and testing and repair procedures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0286

ALL WEATHER CARRIER LANDING SYSTEM
EQUIPMENT MAINTENANCE
AN/SPN-42, CLASS C

(Automatic Carrier Landing System Equipment Maintenance AN/SPN-42 (E-2), Class C)

Course Number: C-103-2018.
Location: Logistics Technical Training Center, Glynd, GA. Air Technical Training Center, Memphis, TN.
Length: 11-15 weeks (440-500 hours).
Objectives: To train electronic technicians to operate and maintain the AN/SPN-42 all-weather carrier-landing system, including Univac 1219 computers.

Instruction: Lectures and laboratory on the review of computer technology, introduction, basic concepts, and power control of the all-weather carrier-landing system, radar subsystems; data stabilization subsystems, control and monitoring equipment, input and output buffers, Naval Tactical Data System (NTDS) buffers, data link monitors, and system analysis and maintenance procedures.

Credit Recommendation: Instruction covers the operation and maintenance of the AUTODIN system including peripheral equipment, logic elements, memory control, input-output paper tape readers and punches, card readers, data terminals, and line printers.

Credit Recommendation: In the vocational certificate category, 3 semester hours in computer hardware.

NV-1715-0287

AN/APS-82 RADAR SYSTEM
INTERMEDIATE MAINTENANCE
(E-1B AN/APS-82 Radar System Maintenance)

Course Number: C-102-3460, C-102-19.
Location: Air Maintenance Training Detachment, North Island, CA. Air Maintenance Training Detachment, Norfolk, VA.
Length: 8 weeks (320 hours).
Objectives: To train maintenance personnel to operate and maintain AN/APS-82 radar systems.

Instruction: Lectures and practical exercises in the maintenance of the AN/APS-82 radar system, including analysis of control circuits, power supply and RF circuits, block diagram analysis, receiver and video distribution circuits, auxiliary equipment (antenna and PPL indicator circuits; computer, height indicator, and synchronizer circuits); and system troubleshooting.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0288

A-4 TACTICAL AIR NAVIGATION
(TACAN).AN/ARN-52(51)

(A-4 Tactical Air Navigation AN/ARN-52 (51))

Course Number: Not available.
Length: 3 weeks (120 hours).
Exhibit Dates: 1/68-Present.
Objectives: To train maintenance personnel to maintain the AN/ARN-52 tactical TACAN radio system at the intermediate level.

Instruction: Lectures and practical exercises in the maintenance of the AN/ARN-52 navigational TACAN radio system, including theory of operation, bearing-measuring circuits, power supply and distribution, and components: input antenna, output transmitters and receivers, antenna selector circuits, and troubleshooting procedures.

Credit Recommendation: No credit because of the limited technical nature of the course (4/74).

NV-1715-0289

AVIATION ELECTRONICS TECHNICIAN.
CLASS A

Course Number: Not available.
Location: Technical Training Center, Memphis, TN.
Length: 9 weeks (352 hours).
Exhibit Dates: 7/67-12/68.
Objectives: To train enlisted personnel with a knowledge of avionics fundamentals to operate and maintain aircraft electronics systems.

Instruction: Lectures and practical exercises in the maintenance of a wide variety of aircraft electronics systems, including theory of operation; point-block diagram analysis; and solid-state electronics fundamentals, electronic concepts required for the maintenance of airborne search radar and identification, navigation, and communication equipment, radar, S-volta electronics, weapon system and associated radar equipment, network data flow of track radar, automatic targeting, and guidance radar, and primary and low-voltage power, special test equipment, and repair and transmitter circuits, and various operation of various circuits, operation of beacon receivers and missile loops, and tests and maintenance.

Credit Recommendation: In the vocational certificate category, credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0290

AN/SQQ-14 MAINTENANCE (ENLISTED)

Course Number: A-130-0014.
Location: Fleet and Mine Warfare Training Center, Charleston, SC.
Length: 5 weeks (150 hours).
Exhibit Dates: 3/73-Present.
Objectives: To train enlisted personnel with knowledge of mine-detecting theory and skills to test and maintain the AN/SQQ-14 mine classifying-detecting set.

Instruction: Lectures and practical exercises in the maintenance of the AN/SQQ-14 mine classifying-detecting set, including primary power distribution, test equipment, horn assembly and function, servo system, master timing, transmitters and receivers, various timing systems, and alignment and maintenance of systems and subsystems.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0291

TERRIER RADAR AN/SPQ-5A

Course Number: Not available.
Location: School Services Command, Great Lakes, IL.
Length: 24 weeks (720 hours).
Exhibit Dates: 1/73-Present.
Objectives: To train enlisted personnel to maintain and operate the AN/SPQ-5A radar system.

Instruction: Lectures and practical exercises in the maintenance of the Terrier weapon system and associated radar equipment, including system component fundamentals of operation, data flow of track radar, target tracking and guidance radar, and primary and low-voltage power, special test equipment, and repair and transmitter circuits, and operation of various circuits, operation of beacon receivers and missile loops, and tests and maintenance.

Credit Recommendation: In the vocational certificate category, credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0292

AIR TRAFFIC CONTROL EQUIPMENT
MAINTENANCE MANAGEMENT

Course Number: C-103-2025.
Location: Air Technical Training Center, Glynd, GA.
Length: 2 weeks (80 hours).
Exhibit Dates: 9/72-Present.
Objectives: To train traffic controllers and senior enlisted personnel to perform as ground electronic maintenance managers and to supervise the maintenance and installation of air traffic control systems.

Instruction: Lectures in the management of air traffic control systems associated with air traffic control facilities, including equipment operation, radio, radar, and navigational principles, records, supplies, safety, maintenance policies, and system siting and flight inspections.

Credit Recommendation: In the vocational certificate category, 3 semester hours in aerospace technology (4/74).
NV-1715-0293
CARRIER AIR TRAFFIC CONTROL CENTER
EQUIPMENT MAINTENANCE
(AN/SPN-6), CLASS C
Course Number: Not available.
Location: Air Technical Training Center, Glynhot, GA.
Length: 3 weeks (104 hours).
Exhibit Dates: 6/69-Present.
Objectives: To train electronics technicians to operate the AN/SPN-6 radar system.
Instruction: Lectures and practical exercises in the maintenance of the AN/SPN-6 radar system, including operation, components, transmitter and receiver circuits, antenna stabilization, system standards and troubleshooting, and alignment and adjustment.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0294
A-4 AN/AJB-1/1A ORGANIZATIONAL MAINTENANCE
Course Number: C-602-3723.
Location: Air Maintenance Training Detachment, Lemoore, CA; Air Maintenance Training Detachment, El Toro, CA, Air Maintenance Training Detachment, Beaufort, SC.
Length: 2 weeks (80 hours).
Exhibit Dates: 1/73-Present.
Objectives: To train maintenance personnel to maintain and operate the AN/AJB-1/1A and the remote standby attitude-indicating systems.
Instruction: Lectures and practical exercises in the maintenance of the AN/AJB-1/1A and the remote standby attitude-indicating systems, including theory of operation, sensor systems, components, power supply, system analysis, testing procedures and troubleshooting, and the attitude indicator system components, operation, and testing.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0295
AVIATION ELECTRONICS TECHNICIAN R
(RADAR), CLASS A
Course Number: Not available.
Location: Air Technical Training Center, Memphis, TN.
Objectives: To train enlisted personnel to maintain and operate the AN/AJB-1/1A and the remote standby attitude-indicating systems of air traffic control radars, including theory of operation, sensor systems, components, power supply, system analysis, testing procedures and troubleshooting, and the attitude indicator system components, operation, and testing.
Instruction: Lectures and practical exercises in the maintenance of the AN/AJB-1/1A and the remote standby attitude-indicating systems, including theory of operation, sensor systems, components, power supply, system analysis, testing procedures and troubleshooting, and the attitude indicator system components, operation, and testing.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0296
ELECTRONIC WARFARE TECHNICIAN, CLASS C
RADAR DATA RECORDER - REPRODUCER AN/SPH-2 AND VIDEO RECORDER-REPRODUCER 15-E-27
Course Number: A-102-0101.
Location: Naval Schools Command, San Francisco, CA.
Length: 8 weeks (240 hours).
Exhibit Dates: 1/72-Present.
Objectives: To train electronic warfare technicians to maintain and repair the AN/SPH-2 radar data recorder-reproducer and associated equipment, and the 15-E-27 video recorder-reproducer.
Instruction: Lectures and practical exercises in the maintenance of the AN/SPH-2 radar data recorder-reproducer and associated attachments, and the 15-E-27 video recorder-reproducer, including digital logic, test equipment, displays, and distribution systems, operation procedures, video and data channel recording and reproduction, power distribution, and magnetic tape recorder operation.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0297
A-6 PILOTS HORIZONTAL DISPLAY, DIRECT VIEW RADAR INDICATOR AND ASSOCIATED TEST SET INTERMEDIATE MAINTENANCE
Course Number: C-102-3774.
Location: Air Maintenance Training Detachment, Oceana, VA; Air Maintenance Training Detachment, Whidbey Island, WA.
Length: 2 weeks (80 hours).
Exhibit Dates: 9/71-Present.
Objectives: To train maintenance personnel to maintain the AN/APQ-92 search radar system.
Instruction: Lectures and practical exercises in AN/APQ-92 search radar system maintenance, including azimuth/elevation range indicators, a range indicator, and a control indicator.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0300
AN/SQS-26 A-AXR ELECTRONIC MAINTENANCE
Course Number: J-130-0835.
Location: Fleet Sonar School, Key West, FL.
Length: 24 weeks (960 hours).
Exhibit Dates: 1/70-Present.
Objectives: To train enlisted personnel to test and maintain the AN/SQS-26 sonar system.
Instruction: Lectures and practical exercises in maintenance and testing procedures for the AN/SQS-26 sonar system and associated equipment, including system operation, auxiliary equipment, components, signal processing, range and bearing, and test maintenance.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0301
ELECTRONICS TECHNICIAN, CLASS C
(AN/SPS-37, 37A RADAR SETS AND AN/SPA-63 COUNTERMEASURES RECEIVING GROUP)
Course Number: A-104-0051.
Location: Service Schools Command, Great Lakes, IL.
Length: 2 weeks (80 hours).
Exhibit Dates: 3/77-Present.
Objectives: To train personnel in the operation and maintenance of the AN/SPS-37, 37A radar systems and the AN/SPA-63 countermeasures receiving group.
Instruction: Lectures and practical exercises in the maintenance of the AN/SPS-37, 37A radar systems and the AN/SPA-63 countermeasures receiving group, including radar set and control equipment (antennas, range indicator, oscilloscopes), and systems operation, troubleshooting, technical maintenance, and repair.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0303
AN/APN-187 DVARS INTERMEDIATE MAINTENANCE
Course Number: C-102-3574.
Location: Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA.
Length: 5 weeks (200 hours).
Exhibit Dates: 1/73-Present.
Objectives: To train enlisted personnel to maintain the AN/APN-187 DVARS radar system.
Instruction: Lectures and practical exercises in maintenance and testing procedures for the AN/APN-187 DVARS radar system (consisting of a specific receiver-transmitter-antenna, a computer frequency tracker, and a control indicator), including operation, circuit analysis, alignment, and test procedures, and use of special test equipment and repair techniques.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0305
60/400 Hz POWER CONVERTER MAINTENANCE, CLASS C
Course Number: A-652-0077.
Location: Service School Command, Great Lakes, IL.
Length: 2 weeks (80 hours).
Exhibit Dates: 3/77-Present.
Objectives: To train personnel in the operation and maintenance of the 60/400 Hz power converter.
Instruction: Lectures and practical exercises in troubleshooting and repair of faulty electrical circuits and the cooling system.
Exhibit Dates: 10/64-12/68.

Objectives: To train electronics personnel to operate and maintain AN/SPS-8 radar equipment and associated test equipment.

Instruction: Lectures and laboratories in introduction and familiarization with radar systems; transmitting systems and magnetron care and handling, power distribution, receiving systems, antenna control systems, VL-1 repeaters, video indicators, preventive maintenance, and troubleshooting procedures.

Credit Recommendation: In the vocational certificate category, credit in electrical laboratory on the basis of institutional evaluation (4/74), in the upper-division baccalaureate/associate degree category, credit in electrical laboratory on the basis of institutional evaluation (4/74).

NV-1715-0306

AN/SPG-50 MAINTENANCE

Course Number: K-113-2026.
Location: Fleet Training Center, San Diego, CA.
Length: 2 weeks (60 hours).
Exhibit Dates: 10/72-Present.

Objectives: To train enlisted personnel to maintain and repair AN/SPG-50 radar sets.

Instruction: Lectures and practical exercises in radar set familiarization; power distribution; synchronizing, transmitting, receiving, presentation, ranging, and angle error systems; radar set adjustments; and radar set maintenance.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0307

AN/BQQ-3A SONAR MAINTENANCE

Course Number: F-130-016.
Location: Submarine School, Groton, CT.
Length: 2 weeks (60 hours).
Exhibit Dates: 11/72-Present.

Objectives: To train enlisted personnel with a background in transistor theory to test and maintain AN/BQQ-3A sonar systems.

Instruction: Lectures and practical exercises in basic theory of operation, and routine preventive and technical corrective maintenance procedures for sonar systems.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0308

F-18 WEAPON SYSTEM SPECIALIST

ORGANIZATIONAL MAINTENANCE

Course Number: C-112-3810.
Location: Air Maintenance Training Detachment, Whidbey Island, WA.
Length: 6 weeks (240 hours).
Exhibit Dates: 3/73-Present.

Objectives: To train maintenance personnel who have backgrounds in electronics to maintain communications, navigation, and radar equipment.

Instruction: Lectures and practical exercises in the maintenance of communications, navigation, and radar equipment, including communication and navigation equipment components and functions, integrated electronic central equipment, the TACAN system, search radar components and functions, vertical display indicator group analysis, and systems troubleshooting.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).
NV-1715-0312
1. RADAR AN/BPS-12, 13, 14 COMBINED MAINTENANCE
2. AN/BPS-13 RADAR MAINTENANCE
(A/BPS-12, 13, 14 Radar System Maintenance)
Course Number: A-106-0165
Version 2: L-104-0010
Location: Submarine Training Center, Charleston, SC
Length: 3 weeks (90 hours)
Exhibit Dates: Version 1: 5/73-Present; Version 2: 1/77-4/73
Objectives: To provide the theory and skills to perform operational and maintenance procedures on Naval radar systems.
Instruction: Version 1: Topics cover basic radar principles at the quantitative and block diagram levels including sweep generators, sweep generators, strobes, CRTs, and synchros, and fault isolation and maintenance procedures. Version 2: Lectures and practical exercises in AN/BPS-12 and -14 radar systems operation and preventive and corrective maintenance, including system theory of operation; echo box, frequency power meter, and range error test operation, and maintenance board operation for computations.
Credit Recommendation: Version 1: In the vocational certificate category, 3 semester hours in electronics technical training (9/77); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics engineering technology (9/77). All Versions: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0313
UNDERWATER FIRE CONTROL SYSTEMS TECHNICIAN (MK 113 MOD 9)
(3/74)
Course Number: A-113-0047
Location: Guided Missiles School, Dam Neck, VA
Length: 6 weeks (163 hours)
Exhibit Dates: 1/72-Present
Objectives: To train experienced fire control technicians to maintain analyzer fire control systems.
Instruction: Lectures and laboratories in analyzer fire control system maintenance, including digital computer, D/A and A/D converters, data storage, interfacing, and cathode ray* tube operation and maintenance.
Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics (4/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics (4/74).

NV-1715-0314
490 TYPE I/A ANTENNA COUPLER INTERMEDIATE MAINTENANCE
Course Number: C-102-3012
Location: Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA; Air Maintenance Training Detachment, New River, NC; Air Maintenance Training Detachment, San Antonio, TX; Air Maintenance Training Detachment, C. Pendleton, CA; Air Maintenance Training Detachment, Quonset Point, RI; Air Maintenance Training Detachment, North Island, CA
Length: 2 weeks (80 hours)
Exhibit Dates: 10/72-Present
Objectives: To train fleet maintenance personnel to maintain the 490T-1/1A antenna coupler.
Instruction: Lectures and practical exercises in 490T-1/1A antenna coupler maintenance, including circuit analysis, test equipment usage, publications usage, and components and modules testing and repairing procedures.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0315
TARGET DESIGNATION SYSTEM MK 5 SHIPBOARD MAINTENANCE
Course Number: J-113-0199, J-113-1291, J-113-1292
Location: Fleet Anti-Air Warfare Training Center, Dam Neck, VA
Length: 2 weeks (70 hours)
Exhibit Dates: 10/72-Present
Objectives: To train fire control technicians to test, adjust, and maintain the MK 5 target designation system.
Instruction: Lectures and practical exercises in target designation system maintenance, including system power distribution and power supplies, multivibrators, servo loops, timing and deflection circuits, pulse generators, and amplifiers.
Credit Recommendation: In the vocational certificate category, 1 semester hour in computer science (4/74).

NV-1715-0316
SUBMARINE RADIOMAN ELECTRICITY AND ELECTRONICS
Course Number: A-101-0053
Location: Submarine School, Groton, CT
Length: 16 weeks (480 hours)
Exhibit Dates: 11/70-Present
Objectives: To train enlisted personnel to become submarine radiomans.
Instruction: Lectures and laboratories in electrical and electronic theory, basic and advanced circuit theory, computer principles; various instruments and testers operation, using procedures, and elementary circuits; vacuum tubes, amplifiers, and transistors operation.
Credit Recommendation: In the vocational certificate category, 9 semester hours in electronics (4/74), in the lower-division baccalaureate/associate degree category, 6 semester hours in electronics (4/74), in the upper-division baccalaureate category, 1 semester hour in electronics for engineering majors, 3 for nonmajors (4/74).

NV-1715-0317
1. RADOMAN, CLASS C7
   (Radoman, Class C)
2. RADOMAN, CLASS B
   (Class B, Radioman)
Course Number: A-201-0019
Location: Service Schools Command, San Diego, CA; Service, Schools Command, Bainbridge, MD
Length: Version 1: 18 weeks (540 hours)
Version 2: 30-37 weeks (900-1110 hours)
Exhibit Dates: Version 1: 5/72-Present; Version 2: 1/75-4/72
Objectives: To train radioman in technician-level electricity and electronics and in management skills.
Instruction: Lectures and practical exercises in basic electricity and electronics, basic transistor theory, troubleshooting a practical communications superheterodyne receiver, test equipment operation and special circuits, various transmitters and receivers, and troubleshooting, radio teletype terminal set and frequency shift keyer and converter equipment operation and troubleshooting, and electronics administration.
Credit Recommendation: Version 1: In the vocational certificate category, 3 semester hours in electronics laboratory (3/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in electronics laboratory (3/74), in the upper-division baccalaureate category, 1 semester hour in electronics laboratory (3/74) Version 2: In the vocational certificate category, 12 semester hours in electricity or electronics (3/74), in the lower-division baccalaureate/associate degree category, 6 semester hours in electricity or electronics (12/68), in the upper-division baccalaureate category, 6 semester hours in electricity and electronics for non-engineering students, 2 in electronic laboratory for engineering students (3/74).

NV-1715-0318
E-1A COMPUTER INDICATOR (C1) SEMI-AUTOMATIC CHECK-OUT EQUIPMENT (SACE) OPERATION AND MAINTENANCE
Course Number: Version 1: C-150-3479
Version 2: C-150-15
Location: Air Maintenance Training Detachment, North Island, CA
Length: Version 1: 11 weeks (440 hours)
Version 2: 5 weeks (240 hours)
Exhibit Dates: Version 1: 6/70-Present
Version 2: 7/66-5/70
Objectives: To train enlisted personnel who have backgrounds in digital and transistor fundamentals to operate and troubleshoot the computer indicator test console.
Instruction: Lectures and practical exercises in computer indicator test console operation and maintenance, including logic, circuits, interconnection of logic elements and flip-flops, programming console operation, components, and maintenance, and logic testing procedures.
Credit Recommendation: Version 1: In the vocational certificate category, 2 semester hours in electrical laboratory (4/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in electrical laboratory (4/74), in the upper-division baccalaureate category, 1 semester hour in electrical laboratory on the basis of institutional evaluation (4/74). Version 2: In the vocational certificate category, 2 semester hours in electrical laboratory (3/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in electrical laboratory (3/74); in the upper-division baccalaureate category, 1 semester hour in electrical laboratory (3/74).

NV-1715-0319
INTEGRATED ANNOUNCING SYSTEM AN/WIC-1 COMBINED MAINTENANCE
Course Number: A-623-0015; F-623-014
Location: Submarine School, New London, CT; Fleet Ballistic Missile Submarine Training Center, Charleston, SC; Submarine Training Center, Pacific, Pearl Harbor, HI
Length: 2-3 weeks (60-90 hours)
Exhibit Dates: 4/68-Present
Objectives: To train maintenance personnel to operate, troubleshoot, and repair shipboard interior communication equipment.

Instruction: Lectures in shipboard interior communications equipment operation, troubleshooting, and repair, including block-diagram analysis, circuit theory, components description, alarm generator circuitry, and test panel, maintenance and material management system, electrical safety precautions, power supply, generation, and distribution systems, and color code and circuit tree construction.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics laboratory (9/77).

NV-1715-0320

SONAR AN/SOS-54B/SKR-4 MAINTENANCE

(SONAR AN/SOS-54B Organizational Maintenance)

Location: Air Maintenance Training Detachment, North Island, CA.

Length: 6 weeks (240 hours)

Exhibit Dates: 1/68-Present

Objectives: To train maintenance personnel to diagnose, troubleshoot, maintain, repair and functionally test AN/ASA-13A navigational computer groups at the intermediate maintenance level.

Instruction: Lectures and practical exercises in operation, circuitry, and troubleshooting procedures and the operation and maintenance of specification analyzers.

Credit Recommendation: In the vocational certificate category, 1 semester hour in advanced instrumentation (8/77).

NV-1715-0321

SPECIAL TECHNOLOGY (ENLISTED)

Course Number: F-000-0014

Location: Submarine School, Groton, CT

Length: 6 weeks (180 hours)

Exhibit Dates: 1/69-10/68

Objectives: To train maintenance personnel to diagnose and maintain, and service P-3 navigational computer sets

Instruction: Lectures and laboratories in functional tie-in between shipboard electrical networks, vacuum tubes, amplifiers, transmitters and receivers, and transmitter electronics.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics (3/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in electricity or electronics (12/68), in the upper-division baccalaureate category, 1 semester hour in electricity or electronics for non-engineering majors (3/74)

NV-1715-0322

P-3 SYNCHROPHASES/TRUE AIRSPEED

OFFICER/SIGNAL LIGHTS CONTROL

INTERMEDIATE MAINTENANCE

Course Number: Not available

Location: Air Maintenance Training Detachment, Patuxent River, MD, Air Maintenance Training Detachment, Moffett Field, CA.

Length: 2 weeks (80 hours)

Exhibit Dates: 3/71-Present

Objectives: To train maintenance personnel to maintain P-3 synchrophases, true airspeed computers, and signal lights control at the intermediate maintenance level.

Instruction: Lectures and practical exercises in normal operation of systems components, operation of general and special test equipment, operation of synchronscopes, and waveforms identification.

Credit Recommendation: In the vocational certificate category, 1 semester hour in computer maintenance (3/74)

NV-1715-0323

E-2A INERTIAL NAVIGATION SYSTEM SEMI-AUTOMATIC CHECK-OUT EQUIPMENT (SACE) AND ENCODER TEST CONSOLE OPERATION AND MAINTENANCE

Course Number: Not available

Location: Air Maintenance Training Detachment, North Island, CA.

Length: 4 weeks (160 hours)

Exhibit Dates: 1/68-Present

Objectives: To provide avionics personnel with training in the operation, circuitry, and maintenance of inertial navigation systems adapters and ancillary equipment.

Instruction: Lectures and laboratories in test console familiarization, inertial navigation hardware, encoders and servos, and programming and maintenance procedures.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics (3/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics (3/74); in the upper-division baccalaureate category, 1 semester hour in electronics laboratory (3/74).

NV-1715-0324

P-3 AN/ASN-42 NAVIGATIONAL COMPUTER SET ORGANIZATIONAL LEVEL MAINTENANCE, NO 15

Course Number: Not available

Location: Air Maintenance Training Detachment, Patuxent River, MD, Air Maintenance Training Detachment, Moffett Field, CA.

Length: 6 weeks (240 hours)

Exhibit Dates: 1/68-Present

Objectives: To train maintenance personnel to diagnose and maintain, and service P-3 navigational computer sets

Instruction: Lectures and laboratories in gyroscope theory and assembly, basic block-diagram analysis and signal, test console familiarization, electronic circuitry analysis, navigational computers and related components, signal data converters and related components, power supplies, and maintenance troubleshooting procedures.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics laboratory (3/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics laboratory (3/74), in the upper-division baccalaureate category, 1 semester hour in electronics laboratory (3/74).

NV-1715-0325

AN/FRT-83, 84 AND 85 RADIO TRANSMITTERS MAINTENANCE

Course Number: A-101-0052

Location: Service School Command, Great Lakes, IL

Length: 30 weeks (300 hours)

Exhibit Dates: 1/68-Present

Objectives: To train personnel to maintain, operate and adjust the AN/FRT-83, 84, 85 radio transmitter series.

NY-1715-0326

AN/ASA-13A NAVIGATIONAL COMPUTER GROUP INTERMEDIATE MAINTENANCE

(UH-2A/B AN/ASA-13A Navigation Computer Group Intermediate Maintenance)

Course Number: C-682-3379

Location: Air Maintenance Training Detachment, Lakehurst, NJ, Air Maintenance Training Detachment, Imperial Beach, CA.

Length: 2 weeks (80 hours)

Exhibit Dates: 8/68-Present

Objectives: To train maintenance personnel to maintain, repair, and functionally test AN/ASA-13A navigational computer groups at the intermediate maintenance level.

Instruction: Lectures and practical exercises in operation, circuitry, calibration and adjustment, troubleshooting, and bench testing of navigational computer groups.

Credit Recommendation: In the vocational certificate category, 1 semester hour in computer maintenance (3/74).
NV-1715-0328
TERRIER FIRE CONTROL AND MISSILE SYSTEM MAINTENANCE

Course Number: A-2F-0014
Location: Guided Missiles School, Dam Neck, VA.
Length: 13 weeks (420 hours).
Exhibit Dates: 10/72-Present.
Objectives: To provide officers with instruction in the duties of the Terrier weapon, fire control, and missile battery officers.

Instruction: Lectures and laboratories in operation, responsibilities, and characteristics of weapon system components; system alignment; telecommunications; fire control systems; and familiarization with missile search radar systems and fire control systems. Emphasis is on weapons system employment, electromagnetic compatibility, and firing considerations, and weapons system management techniques.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0329
P-3C INTEGRATED AVIONICS SYSTEM TECHNICIAN

Course Number: C-102-3575.
Location: Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA.
Length: 12 weeks (480 hours).
Exhibit Dates: 4/73-Present.
Objectives: To train maintenance personnel to maintain P-3C integrated avionics systems.

Instruction: Lectures and laboratories in logic, data displays, radar scan systems, television, pulse generators, and radar.

Credit Recommendation: In the vocational certificate category, 8 semester hours in electronics (3/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics (3/74), in the upper-division baccalaureate category, 1 semester-hour in electronics laboratory (3/74).

NV-1715-0330
P-3C DIGITAL DATA HANDLING ORGANIZATIONAL MAINTENANCE

Course Number: C-102-3599.
Location: Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA.
Length: 13 weeks (520 hours).
Exhibit Dates: 1/71-Present.
Objectives: To train avionics personnel to maintain P-3C data-handling systems.

Instruction: Lectures and laboratories in basic computer components, data flow in computers, diagnostics, addressing and instruction codes, input/output operations, and system maintenance.

Credit Recommendation: In the vocational certificate category, 7 semester hours in electronics or computers (3/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in electronics or computers (3/74); in the upper-division baccalaureate category, 1 semester-hour in electronics or computers laboratory (3/74).

NV-1715-0331
S-1/D/E AN/ASN-10 NAVIGATIONAL COMPUTER DISPLAY UNIT AND AN/ASQ-40 COORDINATE DATA SET SYSTEM MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, North Island, CA; Air Maintenance Training Detachment, Key West, FL.
Length: 6 weeks (240 hours).
Exhibit Dates: 1/66-Present.
Objectives: To train maintenance personnel to operate and maintain the AN/ASN-10 navigational computer display unit and the AN/ASQ-40 coordinate data set system.

Instruction: Lectures and practical exercises in the operation and maintenance of the AN/ASN-10 navigational computer display unit and the AN/ASQ-40 coordinate data set system, including power distribution, synchronization, linear transformers, servo test sets, system operations, and components, review of rotary control systems, block diagram and circuit analysis, and system alignment.

Credit Recommendation: In the vocational certificate category, 4 semester hours in electronics (3/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics (3/74), in the upper-division baccalaureate category, 1 semester-hour in industrial technology (3/74).

NV-1715-0332
INTELLIGENCE/ELECTRONIC WARFARE OFFICER

Course Number: F-4B-011.
Location: Submarine School, Groton, CT.
Length: 2 weeks (68 hours).
Exhibit Dates: 1/68-Present.
Objectives: To train submarine intelligence/electronic warfare officers to supervise intelligence collection, reporting, and assessment, and to operate submarine electronics sensors.

Instruction: Lectures and practical exercises in the selection, reporting, and assessment of intelligence and in the operation of submarine electronics sensors, including principles of electronics, antennas, transmitters, and radar; physics of electromagnetic radiation; Soviet missile systems; radio wave propagation; scope electronics; signal analysis; ASW equipment; watchstanding procedures; and mission planning.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0333
SH-3A AN/ASA-13A NAVIGATIONAL COMPUTER MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Oceana, VA.
Length: 4 weeks (160 hours).
Exhibit Dates: 2/70-Present.
Objectives: To train maintenance personnel who have had training in digital fundamentals to operate and maintain the right-hand unit alignment test set and the encoder tape dial test set associated with the ballistic computer set.

Instruction: Lectures and practical exercises in the maintenance and operation of the right-hand unit alignment test set and the encoder tape dial test set, including logic circuits, servo amplifiers, pulse generators, power supplies, block diagram and circuit analysis, and testing procedures.

Credit Recommendation: Insufficient data for evaluation (3/74).

NV-1715-0334

1. TERRIER COMPUTER MARK 119 MOD 5 (FLEET INPUTS)

Course Number: A-150-001; A-150-0032.
Location: All Vectors: Guided Missiles School, Dam Neck, VA. Version 2: Naval Schools Command, Mare Island, CA.
Length: Version 1: 10 weeks (400 hours). Version 2: 20 weeks (600-603 hours).

Objectives: To teach maintenance personnel the fundamentals of missile fire control computer groups.

Instruction: All Vectors: Lectures and laboratories in Terrier weaponization, missile fire control problems; maintenance and material management systems; maintenance turn-on, power distribution, and power supplies, and block diagram, circuit, and maintenance flows. Version 2: Additional time is spent on modified systems and their differences.

Credit Recommendation: Version 1: In the vocational certificate category, 5 semester hours in electronics or missile systems (3/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics or missile systems (3/74); in the upper-division baccalaureate category, 1 semester hour in electronics or missile systems (3/74). Version 2: In the vocational certificate category, 5 semester hours in electronics or missile systems (3/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics or missile systems (3/74), in the upper-division baccalaureate category, 1 semester hour in electrical laboratory for non-engineering majors (3/74).

NV-1715-0335
A-6 RIGHT HAND UNIT ALIGNMENT TEST SET, AND ENCODER TAPE DIAL TEST SET INTERMEDIATE MAINTENANCE

Course Number: C-102-3765.
Location: Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Oceana, VA.
Length: 4 weeks (160 hours).
Exhibit Dates: 2/70-Present.
Objectives: To train maintenance personnel who have had training in digital fundamentals to operate and maintain the right-hand unit alignment test set and the encoder tape dial test set associated with the ballistic computer set.

Instruction: Lectures and practical exercises in the maintenance and operation of the right-hand unit alignment test set and the encoder tape dial test set, including logic circuits, servo amplifiers, pulse generators, power supplies, block diagram and circuit analysis, and testing procedures.

Credit Recommendation: Insufficient data for evaluation (3/74).
NV-1715-0336
A-6 CARD MODULE ANALYZER TEST CONSOLE. AN/ASM-118.
Intermediate Maintenance
Exhibit Date: 2/68-6/69.

Course Number: Not available.
Location: Air Traffic Control Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Oceana, VA.
Length: 4 weeks (160 hours).
Exhibit Dates: 2/68-6/69-

Objectives: To train maintenance personnel to operate and maintain card module analyzer test consoles and to test, maintain, and repair cards associated with ballistic computer sets.

Instruction: Lectures and practical exercises in digital numbering systems, logic circuits, in amplifiers, and digital computer basics, and maintenance procedures for module analyzers.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics (3/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics (3/74); in the upper-division baccalaureate category, 1 semester hour in industrial technology (3/74).

NV-1715-0337
CARRIER AIR TRAFFIC CONTROL CENTER EQUIPMENT MAINTENANCE AN/SPN-10, CLASS C

Course Number: Not available.
Location: Air Technical Training Center, Glenview, IL.
Length: 15 weeks (600 hours).

Objectives: To train electronic technicians to operate and maintain automatic carrier landing systems and auxiliary equipment.

Instruction: Lectures and practical exercises in analog and digital computer basics, servo systems, power supplies, operational amplifiers, resolvers, transducers, and systems operation.

Credit Recommendation: Version 1: In the vocational certificate category, 10 semester hours in electronics (3/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in electronics (3/74); in the upper-division baccalaureate category, 2 semester hours in electronics for non-electronics majors (3/74). Version 2: In the vocational certificate category, 10 semester hours in electronics (3/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in electronics (3/74); in the upper-division baccalaureate category, credit in electrical laboratory on the basis of institutional evaluation (3/74).

NV-1715-0338
LORAN MAINTENANCE (ENLISTED)

Course Number: I-102-600.
Location: Fleet Training Center, Norfolk, VA.
Length: 2 weeks (60 hours).
Exhibit Dates: 9/72-Present.

Objectives: To train enlisted personnel with backgrounds in basic electronics theory to maintain the AN/UPN-12 and AN/UPN-10, and AN/UPN-10A, utilizing the forecast concept of troubleshooting.

Instruction: Lectures and practical exercises in the maintenance of the AN/UPN-12/Loran-A, AN/UPN-10, and AN/UPN-10A, including block-diagram analysis, waveform comparison problems, component troubleshooting, operational theory, and alignment and calibration.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0339
MK 3 MOD 6 SHIPS INERTIAL NAVIGATION SYSTEM (SINS) OPERATIONS (ENLISTED)

Course Number: F-193-082.
Location: Guided Missiles School, Groton, CT.
Length: 4 weeks (120 hours).
Exhibit Dates: 8/69-Present.

Objectives: To train enlisted personnel to operate and maintain the MK 3 Mod 6 Ships Inertial Navigation System (SINS).

Instruction: Lectures and practical exercises in the operation and monitoring of automated navigation equipment (SINS-MK 3 Mod 6), including gyro principle, digital filtering, circuit analysis, basic navigational components, MINDAC Micrologics and characteristics, computer layout and initialization, data interpretation and monitoring, and operation modes.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics or navigation (3/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics or navigation (3/74); in the upper-division baccalaureate category, 1 semester hour in electronics or navigation laboratory (3/74).

NV-1715-0340
E-2A COMPUTER DETECTOR (CP-411/ASA-27) AND COMPUTER DETECTOR TEST CONSOLE (OA-371/ASM-66) INTERMEDIATE MAINTENANCE

Course Number: C-150-3480; C-150-36.
Location: Air Maintenance Training Detachment, North Island, CA.
Length: 12 weeks (480 hours).
Exhibit Dates: 2/68-6/74.

Objectives: To train enlisted personnel who have backgrounds or aptitude in avionics and digital fundamentals to operate and maintain computers used in conjunction with target detection systems.

Instruction: Lectures and practical exercises in the maintenance of computer detectors and computer detector test consoles, including system fundamentals and timing, digital circuits, IFF detection, target computation, confidence testing, and data acquisition.

Credit Recommendation: In the vocational certificate category, 5 semester hours in electronics or computers (3/74); in the upper-division baccalaureate category, 1 semester hour in electronics or computer laboratory (3/74).

NV-1715-0341
FIRE CONTROL TECHNICIAN MK 88 REPLACEMENT

Course Number: A-121-0245; A-121-0136.
Length: 18 weeks (398 hours).
Exhibit Dates: 10/72-Present.

Objectives: To train enlisted personnel to operate and maintain the MK 88 fire control system and associated non-electrical equipment.

Instruction: Lectures and practical exercises in the operation and maintenance of fleet ballistic missile weapon systems, MK 88 fire control system, digital geoballistic computer, digital transmitters-receivers, armor-magnetic disk file, including theory of operation, mental guidance components, digital-to-analog/analog-to-digital conversion, component analysis, and data flow.

Credit Recommendation: In the vocational certificate category, 7 semester hours in electronics (3/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics (3/74); in the upper-division baccalaureate category, 1 semester hour in electronics laboratory (3/74).

NV-1715-0342
A-6 BALLISTICS COMPUTER TEST CONSOLE INTERMEDIATE MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Oceana, VA.
Length: 17 weeks (280 hours).
Exhibit Dates: 1/68-Present.

Objectives: To train maintenance personnel to maintain ballistic computer test consoles at the intermediate level.

Instruction: Lectures and practical exercises in the maintenance of ballistic computer test consoles, including digital circuitry, block-diagram analysis, logic flow, digital logic circuitry, coding, checkout equipment, timing controls, order and information registers, practical applications, and aircraft replaceable assemblies checkout.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics (3/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics (3/74); in the upper-division baccalaureate category, 1 semester hour in electronics laboratory for non-electronics majors (3/74).

NV-1715-0343
TARTAR COMPUTER MK 118 MOD 0 (Tartar Computer Mk 118)

Course Number: A-150-0028.
Location: Guided Missiles School, Dam Neck, VA.
Length: 14-15 weeks (399-420 hours).
Exhibit Dates: 1/68-Present.

Objectives: To train technicians to maintain, align, adjust, and preserve Tartar Mk 118 computer.

Instruction: Lectures and laboratories in computer operation, analog and digital devices, electromechanical devices, voltage regulators, power supplies, computer interface, and systems testing and maintenance.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics and controls (3/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics and controls (3/74), in the upper-division baccalaureate category, 1 semester hour in electronics and controls (3/74).

NV-1715-0344
MK 9 MOD 4 DEAD RECKONING ANALYZER INDICATOR (DRAI) AND MK 6 MOD 4B DEAD RECKONING TRACER (DRT), CLASS C

Location: Service School Command, Norfolk, VA; Service School Command, San Diego, CA.
Length: 2 weeks (90 hours).
Exhibit Dates: 9/71-Present.
OBJECTIVES: To train maintenance personnel to operate and repair dead-reckoning analyzer-indicators and tracers.

Instructors: Lectures and practical exercises in the operation and repair of the Mk 9 Mod 4 dead-reckoning analyzer-indicator and the Mk 6 Mod 4B dead-reckoning analyzer-indicator including a review of the 3-M system, synchrons, control transformers, resolvers, servo loops, and test equipment, operation of the specified equipment, components and function of the basic training of circuits, block diagrams, analysis, and troubleshooting and preventive maintenance.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0345
ELECTRONICS TECHNICAL OFFICER, CLASS 0

Course Number: None.
Location: Air Technical Training Center, Memphis, TN.
Length: 52 weeks (2,080 hours).
Exhibit Dates: 9/57-12/68.

Objectives: To provide basic engineering education to career Naval officers with extensive high-level background.

Instruction: Course covers the basic mathematics, physics, and electricity required for an understanding of electrical or mechanical engineering.

Credit Recommendation: In the vocational certification category, 9 semester hours in mathematics, 9 in electronic circuit theory, 6 in electrical circuit theory, 6 in physics, 3 in basic science, and 3 in electricity and electronics laboratory (7/4), in the lower-division baccalaureate associate degree category, 9 semester hours in electronic circuit theory, 6 in mathematics, 6 in physics, 6 in electrical basic theory, and 3 in electricity and electronics laboratory (7/4), in the upper-division baccalaureate category, 4 semester hours in mathematics, 4 in physics, 2 in technical writing, and 15 as an elective in engineering (12/68).

NV-1715-0346
P-3 AN/ARC-12 UHF COMMUNICATIONS SYSTEMS MAINTENANCE, NO. 21

Course Number: Not available.
Location: Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA.
Length: 2 weeks (96 hours).
Exhibit Dates: 1/68-12/68.

Objectives: To train maintenance personnel who have completed a course in transistor fundamentals to maintain the AN/ARC-52 UHF communication system of the P-3 aircraft.

Instruction: Lectures and practical exercises in the maintenance of the AN/ARC-52 UHF communication system of the P-3 aircraft, including power circuits, control system, components, power supply, and troubleshooting procedures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0347
E-2A DIGITAL DATA COMMUNICATIONS SYSTEM (AN/ASW-14A), INTERMEDIATE MAINTENANCE

Course Number: C-150-447.
Location: Air Maintenance Training Detachment, North Island, CA.

Length: 3 weeks (120 hours).
Exhibit Dates: 1/68-Present.

Objectives: To train maintenance personnel who have had previous training in basic avionics and digital fundamentals to maintain the E-2A digital data communication system (AN/ASW-14A).

Instruction: Lectures and practical exercises in the latest maintenance procedures for the AN/ASW-14A digital data communication system, including special equipment, theory of operation, circuit analysis, programming, power supply, real input, data storage, and output; radio receiver and transmitter components, and troubleshooting procedures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0348
E-2A SEMI-AUTOMATIC CHECK-OUT EQUIPMENT (SACE) (OA-3738/ASA-48) PROGRAMMER MAINTENANCE

Course Number: C-150-247.
Location: Air Maintenance Training Detachment, North Island, CA.
Length: 9 weeks (360 hours).
Exhibit Dates: 1/68-Present.

Objectives: Lectures and practical exercises in the maintenance and operation of the E-2A semi-automatic check-out equipment, theory of operation, block diagrams of components, programming routines, power distribution, analysis of specialized equipment components, various logic systems, timers, and module test sets.

Credit Recommendation: In the vocational certification category, credit in computers on the basis of institutional evaluation (3/74).

NV-1715-0349
E-2A COMPUTER DETECTOR SEMI-AUTOMATIC CHECK-OUT EQUIPMENT (SACE) (OA-3731/ASM-76) OPERATIONS AND MAINTENANCE

Course Number: C-150-247.
Location: Air Maintenance Training Detachment, North Island, CA.
Length: 3 weeks (120 hours).
Exhibit Dates: 1/68-Present.

Objectives: To train enlisted personnel who have had previous training or experience in avionics, computer detector maintenance, and digital fundamentals to operate computer detector semiautomatic check-out equipment.

Instruction: Lectures and practical exercises in the maintenance and theory of the computer detector semiautomatic check-out equipment, including equipment functions, basic components, power supply, timing and message registers, confidence tests and switching, and troubleshooting procedures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0350
AN/AWG-10 RECEIVER, INTERMEDIATE MAINTENANCE (F-4J AN/AWG-10 Receiver Intermediate Maintenance)

Course Number: C-102-3812.
Location: Air Maintenance Training Detachment, Whidbey Island, WA.
Length: 3 weeks (120 hours).
Exhibit Dates: 1/70-Present.

Objectives: To train enlisted personnel to operate and maintain the AN/AWG-10 receiver.

Instruction: Lectures and practical exercises in receiver circuitry, receiver waveguides, IF amplifiers, clearance trackers, signal generators, test sets, and maintenance procedures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0351
AN/AWG-21 UHF RADIO SET INTERMEDIATE MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, Whidbey Island, WA.
Length: 2 weeks (64 hours).
Exhibit Dates: 6/70-Present.

Objectives: To train maintenance personnel to operate and maintain the AN/AWG-21 UHF radio set.

Instruction: Lectures and practical exercises in the operation, theory of operation, various circuits, power distribution, alignment, and troubleshooting.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0352
ELECTRICAL/ELECTRONICS FUNDAMENTALS, CLASS P

Course Number: None.
Location: Class P Aviation Fundamentals School, Norman, OK; Class P Aviation Fundamentals School, Jacksonville, FL.
Length: 4-6 weeks (162-240 hours).

Objectives: To teach nonrated naval aviation personnel and some fleet personnel the fundamentals of electricity and electronics.

Instruction: Lectures and practical exercises in the fundamentals of electricity and electronics, including basic mathematics, elementary trigonometry, basic physics, AC and DC electrical theory, basic magnetism, and instruments.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0353
FIRE CONTROL SYSTEM (FCS) MK 88 MOD 1 DIGITAL CONTROL COMPUTER

Course Number: A-121-0288; F-121-083.
Location: FBM Submarine Training Center, Charleston, SC.
Length: 4 weeks (120 hours).
Exhibit Dates: 1/70-Present.

Objectives: To train enlisted personnel to operate the MK 88 digital control computer.

Instruction: Lectures and practical exercises in the operation and maintenance of the MK 88 digital control computer, including memory, arithmetic, control, and
input/output sections (covered at a detailed logic level); and machine language, programs, subroutines, and preventive maintenance.

Credit Recommendation: In the vocational certificate category, 2 semester hours in computer laboratory (3/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in computer laboratory (3/74); in the upper-division baccalaureate category, credit in computer laboratory on the basis of institutional evaluation (3/74).

NV-1715-0354

PHOTOGRAPHIC ELECTRONICS SYSTEMS, CLASS C
1. PHOTOGRAPHIC ELECTRONICS SYSTEMS, CLASS C
(Camera Repair, Class C)
Course Number: C-670-2101
Location: Air Technical Training Center, Pensacola, FL
Length: Version 1: 9-12 weeks (376-476 hours); Version 2: 15-19 weeks (600-760 hours).
Objectives: To train photographer's mates to operate, test, and maintain electronically operated photographic equipment.

Instruction: Lectures and practical exercises in diagnosis and repair of electronic and photographic equipment, including basic electronics; DC and AC circuits, electronic equipment, photographic equipment, basic camera control equipment, and an aerial camera control equipment.

Credit Recommendation: Version 1: In the vocational certificate category, 12 semester hours in electricity or electronics (3/74); in the lower-division baccalaureate/associate degree category, 6 semester hours in electricity or electronics (3/74); in the upper-division baccalaureate category, 2 semester hours in electricity or electronics (3/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in electricity or electronics (12/68); in the upper-division baccalaureate category, 2 semester hours in electricity or electronics (3/74).

NV-1715-0355

FIRE CONTROL TECHNICIAN CLASS C, GUN FIRE CONTROL SYSTEM (GFCS); MK 37

Course Number: A-113-0023
Location: Service Schools Command, Bainbridge, MD; Service Schools Command, Great Lakes, IL
Length: 13-15 weeks (376-450 hours).
Exhibit Dates: 2/68-10/75
Objectives: To train fire control technicians with submarine experience to operate, maintain, and repair the Mk 37 gun fire control system at an advanced level.

Instruction: Lectures and practical exercises in the operation and maintenance of the Mk 37 gun fire control system, including power drives and maintenance management of the director; theory, construction, operation, and maintenance of the Mk 37 gun fire control system; instruction; and analog computer theory, construction, and maintenance; and components and circuitry of the specified equipment.

Credit Recommendation: Insufficient data for evaluation (3/74).

NV-1715-0356

COMMUNICATIONS RECEIVER SITE SYSTEMS MAINTENANCE, CLASS C1

Course Number: A-101-0070
Location: Service School Command, Great Lakes, IL
Length: 8-12 weeks (240 hours).
Exhibit Dates: 4/74-Present
Objectives: To train personnel to operate, maintain, troubleshoot and repair specific communications equipment.

Instruction: Areas of instruction include the use of special test equipment (spectrum analyzer, RF and AF generators and other equipment); test, align, and repair complex communications hardware including telephone, radio and microwave channels.

Credit Recommendation: In the vocational certificate category, 3 semester hours in radio electronics and 2 in radio electronics laboratory (9/77); in the lower-division baccalaureate/associate degree category, 3 semester hours in radio electronics (3/77).

NV-1715-0357

RF-B AN/ASQ-88 and AN/ASQ-108 COMMUNICATION NAVIGATION IDENTIFICATION (CNI) LINE MAINTENANCE

Course Number: C-102-3841
Location: Air Maintenance Training Detachment, El Toro, CA.
Length: 4 weeks (160 hours).
Exhibit Dates: 3/71-Present
Objectives: To train maintenance personnel to maintain specific electronic/radio equipment in the RF-4B aircraft.

Instruction: Lectures and practical exercises in the maintenance of electronic and radio equipment in the RF-4B aircraft system, including analysis of operation; communications systems components; navigation and identification equipment; integration of aircraft, CNI, and electronic systems; and practical applications of line maintenance.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0358

P-3J AN/AXR-13 LOW LIGHT LEVEL TELEVISION CAMERA INTERMEDIATE MAINTENANCE

Course Number: C-102-3597.
Location: Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA.
Length: 3 weeks (120 hours).
Exhibit Dates: 2/73-Present.
Objectives: To train maintenance personnel to operate, calibrate, and maintain the AN/AXR-13 low-light-level television camera.

Instruction: Lectures and practical exercises in the operation, calibration, and maintenance of the AN/AXR-13 low-light-level television camera, including block-diagram analysis, test equipment, system circuit analysis, components, power supply, and assembly.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0359

AN/APN-171 (V) RADAR ALTIMETER (HIGH LEVEL) INTERMEDIATE MAINTENANCE

Course Number: C-102-3036.
Location: Air Maintenance Training Detachment, New River, NC; Air Maintenance Training Detachment, Santa Ana, CA.
Length: 2 weeks (80 hours).
Exhibit Dates: 11/72-Present.
Objectives: To train maintenance personnel to operate and maintain the AN/APN radar altimeters.

Instruction: Lectures and practical exercises in pulse radar maintenance procedures, including theory and analysis of various circuits and working components of the AN/APN radar altimeter.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0560

AN/APM 341 (V) DOPPLER TEST SET INTERMEDIATE MAINTENANCE

Course Number: C-104-3786; C-102-3800.
Location: Air Maintenance Training Detachment, Cecil Field, FL, Air Maintenance Training Detachment, Lemoore, CA.
Length: 5 weeks (200 hours).
Exhibit Dates: 12/72-Present.
Objectives: To train selected personnel to operate, maintain, troubleshoot the AN/APM 341 (V) Doppler test set.

Instruction: Lectures and practical exercises in maintenance procedures for the AN/APM 341 (V) Doppler test set, including instruction on logic concepts, operation of a signal simulator and spectrum analyzer, microwave converter and digital readout monitor, standing-wave ratio meter, and quick-replaceable assemblies.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0361

EKA-B AN/ALQ-93 COUNTERMEASURES SET INTERMEDIATE MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, Whidbey Island, WA.
Length: 6 weeks (240 hours).
Exhibit Dates: 12/69-Present.
Objectives: To train electronics maintenance personnel to maintain and operate the AN/ALQ-92 electronic countermeasures set.

Instruction: Lectures and laboratories in the AN/ALQ-92 countermeasures set operation, including transmission of receiver modulator, relay assembly, and display unit; and laboratory procedures, including performance test, trouble analysis, functional checkout, and alignment procedures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0362

F-4B AIRBORNE MISSILE CONTROL SYSTEM E. AERO-1-A, ORGANIZATIONAL MAINTENANCE

Course Number: C-112-3611, C-112-3809, C-112-12.
Location: Air Maintenance Training Detachment, Miramar, CA; Air Maintenance Training Detachment, Oceana, VA, Air Maintenance Training Detachment, Cherry Point, NC, Air Maintenance Training Detachment, El Toro, CA.
Length: 5-9 weeks (200-360 hours).
Exhibit Dates: 1/69-Present.
Objectives: To train maintenance personnel to maintain and service Aero I-A airborne control systems.
1-202 COURSE EXHIBITS

Instruction: Lectures, and practical exercises in systems familiarization, test equipment, and maintenance procedures, including power supplies, transmitters, electrical frequency controls, receiver and automatic gain controls, range tracking system, transmitters, and harmonization, vertical reference system, antenna, power supply, indicators, and guns. AN/APN-32 and AN/AM-15 test sets, and AN/APA-157 block diagram analysis, transmitter, modulator, steering functions, and launch functions.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74)

NV-1715-0363
A&B AS-7 RADAR STABILIZATION AND AUXILIARY SUBSYSTEMS MAINTENANCE (LESS CP-109 AND AN/APN-1-22)

Course Number: Not available.
Location: Air Maintenance Training Detachment, Whidbey Island, WA.
Length: 6 weeks (240 hours)
Exhibit Dates: 1/68-Present
Objectives: To train enlisted personnel to maintain AS-7 radar, stabilization, and auxiliary systems.

Instruction: Lectures and practical exercises in operational procedures; bombing and navigational problems; stabilization subsystems, and associated servo loops, optics, perspectors, and photography, radar theory, and application, and maintenance and systematic troubleshooting procedures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0364
ELECTRONICS TECHNICIAN, CLASS C, AN/SPN-38 LORAN RECEIVING SET MAINTENANCE

Course Number: C-102-3745.
Location: Air Maintenance Training Detachment, Albany, GA.
Length: 6 weeks (160 hours)
Exhibit Dates: 7/69-Present.
Objectives: To train maintenance personnel to operate and maintain the AN/SPN-38 high-frequency communication system, including antennas and receivers at various bands, frequency and direction finders, pulse measurement, prograhner, power distribution, circuits, and associated test sets.

Credit Recommendation: In the vocational certificate category, semester hours in electronics (3/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics (3/74).

NV-1715-0367
RA-5C AN/ALQ-61 PASSIVE ELECTRONICS COUNTERMEASURES ORGANIZATIONAL MAINTENANCE

Course Number: C-102-3745.
Location: Air Maintenance Training Detachment, Sanford, FL.
Length: 11 weeks (440 hours)
Exhibit Dates: 1/68-Present.
Objectives: To train maintenance personnel to operate, maintain, and service AN/ALQ-61 passive electronics countermeasures sets and to perform shop maintenance.

Instruction: Lectures and laboratories in the operation and maintenance of receivers, frequency encoders, direction encoders, programmers, coded-pulse detectors, and signal data recorders. Circuit analysis, operating procedures, performance testing, system alignment, system troubleshooting, and component repair.

Credit Recommendation: In the vocational certificate category, semester hours in electronics laboratory (3/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in HF electronics (3/74); in the upper-division baccalaureate category, 1 semester hour in HF electronics (3/74).

NV-1715-0370
A-6A AN/ASQ-57 COMMUNICATION, NAVIGATION, IDENTIFICATION (CN1) SYSTEM AND AN/AIC-14 INTERCOMMUNICATION SYSTEM INTERMEDIATE MAINTENANCE

Course Number: C-102-3766, C-102-228.
Location: Air Maintenance Training Detachment, Oceana, VA.
Length: 7 weeks (280-320 hours)
Exhibit Dates: 1/68-Present.
Objectives: To train maintenance personnel to operate, maintain, and test AN/ASQ-57 integrated electronic central and AN/AIC-14 intercommunications systems.

Instruction: Lectures and practical exercises in system familiarization, power supplies, amplifiers, transceiver electronics, alignment procedures, test shop; and troubleshooting.

Credit Recommendation: In the vocational certificate category, semester hours in electronics laboratory (3/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in electronics laboratory (3/74); in the upper-division baccalaureate category, 1 semester hour in electronics laboratory (3/74).
NV-1715-0371
F-1 AN/AVQG-10 and ELECTRONIC COUNTER COUNTERMEASURE CIRCUITRY, INTERMEDIATE MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, Miramar, CA; Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Oceana, VA; Air Maintenance Training Detachment, Cherry Point, NC.
Length: 4 weeks (160 hours).
Exhibit Dates: 8/68-11/68.
Objectives: To train maintenance personnel to operate and maintain the electronic counter-countermeasures circuitry of AN/AVQG-10 missile control systems.
Instruction: Lectures and laboratories in pulse Doppler circuitry, radio circuitry, antenna control, waveform and voltage analysis, system familiarization, and maintenance and troubleshooting procedures.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics (3/74).

NV-1715-0372
RADIO AIDS UNIT (DEVICE 1-D-31), CLASS C

Course Number: Not available.
Location: Air Technical Training Center, Memphis, TN.
Length: 10 weeks (400 hours).
Exhibit Dates: 1/68-4/68.
Objectives: To train maintenance personnel to operate and maintain, and instruct other personnel on radio aids units.
Instruction: Lectures and practical exercises in theory, operation, maintenance, and troubleshooting of radio aids units.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0373
RT 648/698 AND AN/ARC-84 COMMUNICATIONS SYSTEM MAINTENANCE, NO. 1

Course Number: Not available.
Location: Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA.
Length: 12 weeks (480 hours).
Exhibit Dates: 8/68-11/68.
Objectives: To train maintenance personnel to maintain the AN/ARC-94 transmitter in the P-3 aircraft, including block diagram and circuit analysis, various transfer modules within the system, stabilizers, power supplies, antenna operation, and associated test sets.
Instruction: Lectures and practical exercises in the maintenance of the AN/ARC-94 transmitter in the P-3 aircraft, including block diagram and circuit analysis, various transfer modules within the system, stabilizers, power supplies, antenna operation, and associated test sets.
Credit Recommendation: In the vocational certificate category, 2 semester hours in circuit analysis or electronics (3/74).

NV-1715-0374
P-3 AN/ARC-94 COMMUNICATIONS SYSTEM MAINTENANCE, NO. 19

Course Number: Not available.
Location: Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA.
Length: 5 weeks (200 hours).
Exhibit Dates: 1/68-4/68.
Objectives: To train maintenance personnel to maintain the AN/ARC-94 transmitter in the P-3 aircraft, including block diagram and circuit analysis, various transfer modules within the system, stabilizers, power supplies, antenna operation, and associated test sets.
Instruction: Lectures and practical exercises in the maintenance of the AN/ARC-94 transmitter in the P-3 aircraft, including block diagram and circuit analysis, various transfer modules within the system, stabilizers, power supplies, antenna operation, and associated test sets.
Credit Recommendation: In the vocational certificate category, 2 semester hours in circuit analysis or electronics (3/74).

NV-1715-0375
E-1A AN/ASQ-15 INTEGRATED ELECTRONIC CENTRAL TACAN—MULTI-PURPOSE COMMUNICATIONS (AN/ASQ-52) AND POWER SUPPLY—AM-2310/ASQ INTERMEDIATE MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, North Island, CA.
Length: 10 weeks (400 hours).
Exhibit Dates: 4/68-7/68.
Objectives: To train maintenance personnel to maintain the E-2A IFF KY-308/ASQ integrated electronic central and AM-2310/ASQ power supply at the intermediate level.
Instruction: Lectures and practical exercises in the maintenance of E-2A IFF KY-308/ASQ integrated electronic central and AM-2310/ASQ power supply, including theory of operation, system components, power supply, receiver, power distribution, transmitter, and decoder circuits; and alignment and troubleshooting procedures.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics (3/74).

NV-1715-0376
E-1A INTEGRATED ELECTRONIC CENTRAL (AN/ASQ-52) INTERMEDIATE MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, North Island, CA.
Length: 6 weeks (240 hours).
Exhibit Dates: 4/68-7/68.
Objectives: To train maintenance personnel to maintain E-2A integrated electronic controls (AN/ASQ-58).
Instruction: Lectures and practical exercises in the maintenance of E-2A integrated electronic controls (AN/ASQ-58), including system components, theory of operation, receiver, keying circuits, four-phase bridge rectifier circuits, AC power, distribution, transmitter, and decoder circuits.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics (3/74).

NV-1715-0377
E-2A AN/ASQ-58 INTEGRATED ELECTRONIC CENTRAL IFF—KY-308/ASQ AND POWER SUPPLY—AM-2310/ASQ INTERMEDIATE MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, North Island, CA.
Length: 2 weeks (80 hours).
Exhibit Dates: 4/68-7/68.
Objectives: To train maintenance personnel to maintain E-2A IFF KY-308/ASQ integrated electronic central and AM-2310/ASQ power supply, including theory of operation, system components, power supply, receiver, power distribution, transmitter, and decoder circuits; and alignment and troubleshooting procedures.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics (3/74).

NV-1715-0378
RADIO TRANSMITTING SET AN/UH-23 AN/UH-21 MAINTENANCE (ENLISTED)

Course Number: F-101-025.
Location: Submarine School, Groton, CT.
Length: 3 weeks (90 hours).
Exhibit Dates: 4/68-9/68.
Objectives: To train maintenance personnel to operate and maintain the AN/UH-23 (V) radio transmitting set and the AN/UH-21 antenna group, including circuit analysis, block diagram and signal flow, amplifiers, oscillators, keying circuits, power supplies, theory of operation, power distribution, and alignment and troubleshooting procedures.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics (3/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics (3/74).

NV-1715-0379
E-2A MULTI-PURPOSE COMMUNICATIONS SYSTEM (AN/ASQ-52) INTERMEDIATE MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, North Island, CA.
Length: 10 weeks (400 hours).
Exhibit Dates: 1/68-4/68.
Objectives: To train maintenance personnel with knowledge of or aptitude in avionics to operate and maintain the AN/ASQ-52 multipurpose communications system.
Instruction: Lectures and practical exercises in the operation and maintenance of the AN/ASQ-52 multipurpose communications system, including instruction in electronic controls in the transceiver, power supply, electronic radio frequency circuits, communications, data transmission, UNISYN synchronization circuits, IFPM circuits, servo controls, and associated test sets.
Credit Recommendation: In the vocational certificate category, 7 semester hours in electronics or radio (3/74), in the lower-division baccalaureate/associate degree cate-
NV-1715-0380

1. AVIONICS TECHNICIAN (AV), CLASS A
2. AVIONICS TECHNICIAN, CLASS A
3. AVIONICS FUNDAMENTALS, CLASS A
4. AVIONICS FUNDAMENTALS, CLASS A
5. AVIATION ELECTRONICS


Objectives: To provide selected Navy and Marine Corps personnel with training in electronics fundamentals.

Instruction: Lectures and laboratories in electronics and electronic circuits, introduction to the Mk 309 Mod 0 control panel, data communications maintenance course with training in data communications system, including theory of operation, alignment, and operational procedures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0382

E-2A AN/ASQ-32 DATA COMMUNICATION SYSTEM SPECIAL SUPPORT EQUIPMENT INTERMEDIATE

Course Number: A-101-0069.

Location: Air Technical Training Center, Pacific, CA.

Length: 3 weeks (80 hours).


Objectives: To provide maintenance personnel with training in the intermediate and advanced data communications maintenance courses with training in data communications system support equipment.

Instruction: Lectures and practical exercises in functions, block diagrams, modes of operation, input and output supplies, and preventative maintenance of signal data converters, functional block diagrams, radio transmitters and receivers block diagram and circuits, logic elements, memory and data modulation, tone level and audio adjustments, frequency synthesizers, response and analysis modules, RC correlation, and comparison and control modules, Bats, and maintenance and testing procedures.

Credit Recommendation: Credit is recommended because of the limited technical nature of the course (4/74).

NV-1715-0383

A-4/F/L/TA-4F COMMUNICATION NAVIGATION IDENTIFICATION (CNI) WEAPONS SYSTEMS ORGANIZATION MAINTENANCE

Course Number: A-113-0037.

Location: Submarine School, Groton, CT.

Length: 4 weeks (160 hours).


Objectives: To train selected personnel to operate and maintain airborne navigation, communication, and identification systems.

Instruction: Lectures and practical exercises in the operation and maintenance of these systems.

Credit Recommendation: Credit is recommended because of the limited technical nature of the course (4/74).

NV-1715-0384

ADVANCED FIRE CONTROL SYSTEM (FCS) MK 106 MOD 3

Course Number: A-113-0037.

Location: Submarine School, Groton, CT.

Length: 5 weeks (200 hours).

Exhibit Dates: 5/74-8/74.

Objectives: To train fire control techni- cians to maintain Mk 106 Mod 3 fire control systems and associated equipment.

Instruction: Lectures and practical exercises in troubleshooting and maintenance techniques for torpedo data computer, sound bearing computers, target designation systems, and depth, enabling, and station control circuits.

Credit Recommendation: Credit is recommended because of the limited technical nature of the course (4/74).

NV-1715-0385

DATA SYSTEMS TECHNICIAN, CLASS C, WEAPON DIRECTION SYSTEM MK XI MOD 2/1 MAINTENANCE TRAINING

Course Number: A-150-0059.

Location: Submarine School Command, Mare Island, CA.

Length: 5 weeks (200 hours).


Objectives: To train enlisted personnel to operate and maintain weapons direction systems.

Instruction: Lectures and laboratories in system familiarization, isolation and repair of malfunctions, and utilization of tools and test equipment.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0386

SH-3 AN/AQS-13 SONAR MAINTENANCE

Course Number: A-101-0069.

Location: Air Maintenance Training Detachment, Ream Field, CA; Air Maintenance Training Detachment, Key West, FL.

Length: 4 weeks (160 hours).


Objectives: To train enlisted personnel to maintain and repair the AN/AQS-13 sonar.

Instruction: Lectures and laboratories in sound and semiconductor theory, cathode ray tubes, and the theory of operation of the AN/AQS-13 sonar.

Credit Recommendation: Credit is recommended because of the limited technical nature of the course (4/74).

NV-1715-0387

COMMUNICATIONS TRANSMITTER SITE SYSTEMS MAINTENANCE, CLASS C1

Course Number: A-101-0069.

Location: Service School Command, Great Lakes, IL.

Length: 6 weeks (240 hours).


Objectives: To train personnel to operate and maintain specific communication systems.

Instruction: Lectures and practical exercises in the operation and maintenance of these systems.
equipment including microwave radio assemblies, transmitter fundamentals, micro-wave multiplexing, telephone terminals, telegraph terminals, and multichannel tele-gra.ph.
Credit Recommendation: In the vocational certificate category, 2 semester hours in communications equipment troubleshooting (9/77)

NV-1715-0388
AN/ASN-90 INERTIAL MEASUREMENT SET INTERMEDIATE MAINTENANCE
(A-7 AN/ASN-90 Inertial Measurement Set Intermediate Maintenance)
Course Number: C-102-3788.
Location: Air Maintenance Training Detachment, Lemoore, CA; Air Maintenance Training Detachment, Cecil Field, FL.
Length: 4 weeks (152-160 hours).
Exhibit Dates: 9/71-Present.
Objectives: To train enlisted personnel who have had previous training in digital fundamentals and electronics to maintain, assemble, and troubleshoot inertial measurement units; test and calibration procedures; and fault isolation techniques.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/774).

NV-1715-0389
RELAY TRANSMITTER Mk 60 Mod 0 MAINTENANCE—UFCG Mk 114 MOD 9-12
Course Number: A-130-0060.
Location: Fleet Sonar School, Key West, FL.
Length: 3 weeks (105 hours).
Exhibit Dates: 9/71-Present.
Objectives: To train enlisted personnel to operate and maintain Mk 60 Mod 0 relay transmitters.
Instruction: Lectures and laboratories in block-diagram and circuit analysis and system operation and maintenance procedures, with emphasis on system test functions; and highly specialized equipment course.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/774).

NV-1715-0390
AN/WPN-4 MAINTENANCE
Course Number: F-102-014.
Location: Submarine School, Groton, CT.
Length: 4 weeks (120 hours).
Exhibit Dates: 10/67-Present.
Objectives: To train enlisted personnel to operate and maintain the AN/WPN-4 Loran C receiving set.
Instruction: Lectures and laboratories in AN/WPN-4 Loran C receiver fundamentals, system components and operation, including data flow, indicator subassembly, delay switches and network pulse delay, pulse generator, and cycle, envelope and amplitude, and guard and signal-monitoring channels; use of schematics and technical manuals; and troubleshooting procedures.
Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics (4/774).

NV-1715-0391
TERRIER MARK 152 COMPUTER COMPLEX
Course Number: A-150-0085.
Location: Guided Missiles School, Dam Neck, VA.
Length: 9 weeks (360 hours).
Exhibit Dates: 11/72-Present.
Objectives: To train enlisted personnel to operate and maintain missile fire control equipment and electronic test equipment.
Instruction: Lectures in fire control system functions and characteristics; fire control computer turn-on, load, and turn-off procedures; interface requirements and word formation; digital data recorder, master clock, and digital control; logic flow of writing operations and data flow of read operations; input/output control and operation; signal data conversion, A/D and D/A converters; dual-trace oscilloscopes operation; magnetic tape storage elements; and operation and use of digital clocks, digital voltmeters, AC/DC differential volt-meters, VOMs, VTMs, and electronic counter.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics, digital logic, and electronics laboratory on the basis of institutional evaluation (4/774).

NV-1715-0392
READ ONLY MEMORY (ROM) ENCODER ELEVATOR CONTROL MAINTENANCE, CLASS CI
Course Number: A-690-0018.
Location: Service School Command, Great Lakes, IL.
Length: 2 weeks (67 hours).
Exhibit Dates: 7/77-Present.
Objectives: To familiarize trained personnel in the operation and troubleshooting techniques needed for a computer controlled elevator system.
Instruction: Includes the operation of the elevator control system, troubleshooting techniques in a digital PDP-14 computer and component replacement in the computer.
Credit Recommendation: In the vocational certificate category, 1 semester hour in computer servicing (9/77).

NV-1715-0393
F-4J SHOEHORN ORGANIZATIONAL MAINTENANCE
Course Number: C-102-3819.
Location: Air Maintenance Training Detachment, Cherry Point, NC, Air Maintenance Training Detachment, Miramar, CA; Air Maintenance Training Detachment, El Toro, CA.
Length: 3-5 weeks (120-200 hours).
Exhibit Dates: 8/70-Present.
Objectives: To train fleet maintenance personnel to install, remove, and service aircraft electronic countermeasures equipment.
Instruction: Lectures and practical exercises in F-4J Shoehorn electronic countermeasures equipment installation, removal, and servicing, including radar homing and warning equipment, fire control equipment, power sources, ALQ-51/100 and ALQ-91A countermeasures sets and associated circuits, aircraft ECM systems locations and operational checks, and system maintenance procedures.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/774).

NV-1715-0395
F-4B/J-R/F-4B AN/ALQ-88 COUNTERMEASURES SET INTERMEDIATE MAINTENANCE
Course Number: C-102-3071.
Location: Air Maintenance Training Detachment, El Toro, CA.
Length: 4 weeks (160 hours).
Exhibit Dates: 11/72-Present.
Objectives: To train fleet maintenance personnel to operate, troubleshoot, and repair, the F-4B/J-R/F-4B AN/ALQ-88 countermeasures set.
Instruction: Lectures and practical exercises in AN/ALQ-88 countermeasures set operation, troubleshooting, and repair, including logic review, DECAM principles and techniques, theory of operation, block diagram, power control and power supply, various component assembly procedures, hydraulic, cooling unit operation, and test equipment usage.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/774).

NV-1715-0396
TARTAR RADAR TEST SET Mk 474 MOD 2
Course Number: A-104-0112; A-104-0113.
Location: Guided Missiles School, Dam Neck, VA; Guided Missiles School, Mare Island, CA.
Length: 3 weeks (74 hours).
Exhibit Dates: 11/72-Present.
Objectives: To train enlisted personnel to operate the Mk 474 test set.
Instruction: Lectures and practical exercises in Mk 474 test set operation, including functional block diagram, systems dynamic tester introduction, angle error circuits, pulse delay network, target modifier, and countermeasures signal simulator operation; and System flow diagram, testing, and adjustment procedures.
COURSE EXHIBITS

Credit Recommendation: No credit because of the limited technical nature of the course (4/74).

NV-1715-0397

CABLE TESTER ALFRED MODEL 9000 INTERMEDIATE MAINTENANCE

Course Number: C-102-3058

Location: Air Maintenance Training Detachment, Oceana, VA; Air Maintenance Training Detachment, Miramar, CA.

Length: 4 weeks (960 hours).

Exhibit Dates: 10/72-Present.

Objectives: To train fleet maintenance personnel to maintain and repair the Alfred Model 9000 cable tester.

Instruction: Lectures and practical exercises in basic transmission principles, cable tester circuit analysis, and system maintenance procedures, including testing, alignment, and troubleshooting.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0398

TERRIER COMPUTER MK 100 MOD 2

Course Number: Not available.

Location: Service Schools Command, Great Lakes, IL.

Length: 20 weeks (600 hours).

Exhibit Dates: 2/68-Present.

Objectives: To train enlisted personnel to maintain the MK 100 Mod 2 Terrier missile weapon system.

Instruction: Lectures and practical exercises in the maintenance of the MK 100 Mod 2 Terrier missile system, including the control system function, operational sequence of launching system, control computer, power distribution circuits, computer amplifiers, controls and indicators, test equipment use, basics of analog computers, servomechanisms, summing operation in analog computer, associated equipment in deck-tilt and radar position modes, shipboard and shore fire control, and troubleshooting of computer and weapons director circuits.

Credit Recommendation: In the vocational certificate category, credit in electronics on the basis of institutional evaluation (3/74); in the upper-division baccalaureate/associate degree category, credit in electronics on the basis of institutional evaluation (3/74); in the upper-division baccalaureate/associate degree category, credit in electrical laboratory on the basis of institutional evaluation (3/74).

NV-1715-0399

RF-4B AN/APQ-101 SIDE LOOKING RADIAR INTERMEDIATE MAINTENANCE

Course Number: C-100-3831

Location: Air Maintenance, Training Detachment, El Toro, CA.

Length: Version 1: 13 weeks (360 hours).

Version 2: 2 weeks (240 hours).

Exhibit Dates: Version 1: 8/70-Present; Version 2: 1/68-7/70.

Objectives: To train maintenance personnel to maintain, service, and troubleshoot AN/APQ-101 (A) side-looking radar.

Instruction: All Versions: Lectures and practical exercises in side-looking radar maintenance, AN/APQ-101 (A) subsystems operation, synchronization block-diagram analysis, receiver block-diagram analysis, and RF and IF circuit theory.

Credit Recommendation: Credit in electronics on the basis of institutional evaluation (3/74).

NV-1715-0401

RADARMAN CLASS A: BASIC PREVENTIVE MAINTENANCE AND OPERATORS

Course Number: Not available.

Location: Class A Radarmen School, Great Lakes, IL; Class A Radarmen School, Norfolk, VA.

Length: 24 weeks (960 hours).

Exhibit Dates: 9/67-12/68.

Objectives: To train enlisted personnel to maintain and determine the operational readiness of radar equipment.

Instruction: Lectures and practical exercises in the maintenance of radar equipment, including combat information center functions, surface search radar and associated remote repeaters, air search and altitude determination, airborne and associated remote repeaters, operational procedures of information friend-or-foe (IFF) equipment, shipboard radar countermeasures equipment, and associated audio and voice equipment in internal communications, air plotting, relative motion and the maneuvering board, formation plotting and tactics, radar navigation and remote repeater operation and plotting.

Credit Recommendation: In the vocational certificate category, credit in electricity or electronics laboratory on the basis of institutional evaluation (3/74).

NV-1715-0402

RADAR SIGNAL PROCESSING EQUIPMENT (RSPE) MAINTENANCE

Course Number: J-113-2033

Location: Fleet Training Center, San Diego, CA.

Length: 4 weeks (114-120 hours).

Exhibit Dates: 10/72-Present.

Objectives: To train fire control technicians to maintain the radar signal-processing equipment associated with specific radar systems.

Instruction: Lectures and practical exercises in the maintenance of radar signal-processing equipment, including operating modes of the equipment, IF detection and amplification, video detection, jamming detection, automatic range acquisition and tracking, logic circuits, systems readiness checks, adjustments and fault isolation.

Credit Recommendation: In the vocational certificate category, credit in electricity or electronics on the basis of institutional evaluation (3/74).

NV-1715-0403

RADAR SIGNAL PROCESSING EQUIPMENT (RSPE) MAINTENANCE MK I AND MODS

Course Number: J-113-0111; J-113-1112

Location: Fleet Anti-Air Warfare Training Center, Dam Neck, VA.

Length: 7 weeks (145 hours).

Exhibit Dates: 10/72-Present.

Objectives: To train fire control technicians to operate and maintain specific radar signal processing equipment (RSPE).

Instruction: Lectures and practical exercises in the operation and maintenance of radar signal processing equipment (MK I and MODS) including fundamentals of solid-state diodes, transistors, and logic theory; RSPE operating modes; IF detection and amplification; jamming detection; automatic range acquisition and tracking, electronic counter-countermeasures, system interfacing, system readiness, and troubleshooting procedures.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electricity or electronics laboratory on the basis of institutional evaluation (3/74).

NV-1715-0404

SONAR AN/SQS-38 MAINTENANCE (USCG)

Course Number: A-130-0071.

Location: Fleet Anti-submarine Warfare Training Center, San Diego, CA; Fleet Sonar School, Key West, FL.

Length: 10 weeks (338-400 hours).

Exhibit Dates: 1/73-Present.

Objectives: To train Coast Guard sonar equipment maintenance, calibrate, and operate the AN/SQS-38 sonar, the WQC2 underwater telephone, and associated equipment.
Instruction: Lectures and practical exercises in the operation and maintenance of the AN/SQS-38 sonar set, WQC2 understanding, telephone, and built-in test equipment, including special circuits, power supplies and distribution, transmission signal development, transmitter modules, transducers, and transducer switching; and receiving subsystem, including classification, position-indicator system timing and detection circuitry, primary cursor generation, and servos.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronic troubleshooting (8/77).

**NV-1715-0405**

SONAR AN/SQS-26CX AND AN/SQS-53 MAINTENANCE
(Sonar Detecting-Range Set AN/SQS-26CX)

Course Number: A-130-0102, A-130-0047, A-130-0103
Location: Fleet Sonar School, Key West, FL, Fleet Anti-Submarine Warfare School, San Diego, CA.
Length: 24-30 weeks (798-900 hours).
Exhibit Dates: 7/68-9/69.
Objectives: To train enlisted personnel to operate, maintain, troubleshoot and repair specified sonar detecting-range equipment.

Instruction: Lectures and practical exercises in the operation and maintenance of the AN/SQS-26CX and, beginning February 1977, the AN/SQS-53 sonar detecting-range set, including fundamental mathematics and logic, test equipment, modes of operation, sound propagation, primary power distribution, sonar monitor, block diagrams, fault-finding monitor, mode selection and generation, simulated targets and target control, surface duct programmer and transmitter, B-scan receiver and display, various circuits, variable depression components, range measuring and servos.

Credit Recommendation: In the vocational certificate category, 6 semester hours in electronic troubleshooting (8/77).

**NV-1715-0406**

A-6 ASSOCIATED RADAR TEST EQUIPMENT INTERMEDIATE LEVEL MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Oceana, VA.
Length: 8 weeks (320 hours).
Exhibit Dates: 5/70-9/70.
Objectives: To train maintenance personnel to operate, troubleshoot, and maintain search radars and associated test equipment.

Instruction: Lectures and laboratories in theory of operation and system functions of radar set controls, azimuth/elevation/range indicators, search radar antenna/receivers, and computer consoles.

Credit Recommendation: In the vocational certificate category, credit in electronics on the basis of institutional evaluation (3/74); in the lower-division baccalaureate/associate degree category, credit in electronics on the basis of institutional evaluation (3/74); in the upper-division baccalaureate/associate degree category, credit in electricity and electronics on the basis of institutional evaluation (3/74).

**NV-1715-0407**

CLOSED CIRCUIT TELEVISION MAINTENANCE, CLASS 1
Course Number: A-198-0025
Location: Service School Command, Great Lakes, IL
Length: 4 weeks (120 hours).
Exhibit Dates: 1/74-Present.
Objectives: To provide detailed instruction in the components of closed circuit television and to train personnel in operation and corrective maintenance.

Instruction: Demonstrations in parts identification and operation of the closed circuit television system utilizing a small amount of test procedures.

Credit Recommendation: In the vocational certificate category, 2 semester hours in closed circuit television (9/77).

**NV-1715-0408**

A-7 AN/APQ-116 RADAR SET INTERMEDIATE MAINTENANCE

Course Number: C-104-3782
Location: Air Maintenance Training Detachment, Lemoore, CA
Length: 6 weeks (240 hours).
Exhibit Dates: 9/68-Present.
Objectives: To train maintenance personnel to operate, maintain, service, and repair AN/APQ-116 radar sets.

Instruction: Lectures and laboratories in AN/APQ-116 set familiarization, security, radiation hazards, and special circuits; transmitter circuit analysis, power supplies, antenna systems, and transponder modules; general component theory, receiver circuit analysis, antenna receivers, command computers, and alarm monitors, display analysis, sweep generators, and indicator systems, and system maintenance, troubleshooting procedures, and performance testing.

Credit Recommendation: In the vocational certificate category, credit in electricity and electronics on the basis of institutional evaluation (3/74); in the lower-division baccalaureate/associate degree category, credit in electricity and electronics on the basis of institutional evaluation (3/74); in the upper-division baccalaureate/associate degree category, credit in electricity and electronics on the basis of institutional evaluation (3/74).

**NV-1715-0410**

WEAPON SYSTEM SPECIALIST (CREW LEADER) MAINTENANCE
Course Number: Not available.
Location: Air Maintenance Training Detachment, Miramar, CA.
Length: 7 weeks (280 hours).
Exhibit Dates: 1/70-Present.
Objectives: To train crew members to maintain aircraft weapon control systems.

Instruction: Lectures and practical exercises in weapon control systems functional analysis, including data transmission, power subsystems, radar and infrared systems, and computer controls and displays, systems identification and functional analysis, modes analysis, including tactical programs, navigation, air-to-air and air-to-ground modes analysis, data link, transmitter, radar, and IR, computer, and display maintenance, armament controlling maintenance, and calendar inspection.

Credit Recommendation: In the vocational certificate category, credit in electricity and electronics on the basis of institutional evaluation (3/74); in the lower-division baccalaureate/associate degree category, credit in electricity and electronics on the basis of institutional evaluation (3/74); in the upper-division baccalaureate category, credit in electricity and electronics on the basis of institutional evaluation (3/74).

**NV-1715-0411**

WEAPONS SYSTEMS TECHNICIAN (CREW MEMBER) ORGANIZATIONAL MAINTENANCE
Course Number: Not available.
Location: Air Maintenance Training Detachment, Miramar, CA.
Length: 10 weeks (360 hours).
Exhibit Dates: 1/70-7/70.
Objectives: To train maintenance personnel to test, troubleshoot, and maintain F-14 weapons systems.

Instruction: Lectures and laboratories in operating modes and functional design of the R-14 system; power, radar, and infrared operation, control displays, and reception; computer controls and displays, weapons control system maintenance and calendar inspection and procedures, and aircraft maintenance, weapons systems, and weapon checkout.

Credit Recommendation: In the vocational certificate category, credit in electricity and electronics on the basis of institutional evaluation (3/74); in the lower-division baccalaureate/associate degree category, credit in electricity and electronics on the basis of institutional evaluation (3/74).

**NV-1715-0412**

FIRE CONTROL SYSTEM (FCS) MK 113 MOD 9 (TOWDOES AND TARGET MOTION ANALYSIS)
Course Number: A-113-0060.
Location: Guided Missiles School, Dam Neck, VA.
Length: 23 weeks (758 hours).
Exhibit Dates: 1/70-Present.
COURSE EXHIBITS

Objectives: To train enlisted personnel to operate, maintain, and test underwater fire control systems.

Instruction: Lectures and laboratories in introduction to Mk 113 Mod 7 underwater fire control systems, terminology, data flow, and power distribution; analog computer, missile, and launch controls; computer, radar set assembly, and functional analysis; organizational maintenance utilizing test sets, frequency counters, oscilloscopes, and frequency analyzers; and intermediate maintenance of target control systems.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0418
QH-50C TARGET CONTROL SYSTEM AN/SWR-4B INTERMEDIATE MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, Dam Neck, VA; Air Maintenance Training Detachment, North Island, CA.
Length: 3 weeks (120 hours).
Exhibit Dates: 1/68-Present.
Objectives: To train personnel to maintain AN/SWR-4B target control system support equipment.

Instruction: Lectures and practical exercises in target control system familiarization, system description, and operation of transmitter controls; demonstration of radio transmitting sets; functional analysis of amplifier modules, amplifier frequency multipliers, coders, and power supplies; and intermediate maintenance of target control system test sets, transmitter controllers, and transmitters.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics (3/74).

NV-1715-0419
TALOS COMPUTER MK 111 MOD 1, CLASS C

Course Number: Not available.
Location: Guided Missiles School, Dam Neck, VA, Naval Schools Command, Mare Island, CA.
Length: 16 weeks (465 hours).
Exhibit Dates: 1/68-Present.
Objectives: To train enlisted personnel to maintain Talos computers.

Instruction: Lectures and practical exercises in Talos weapon system, system description, basics of analog computers, and Mk 111 Mod 1 computer components and circuitry, system functioning, physical description, data flow maintenance, intercept display, and evaluation/display.

Credit Recommendation: Insufficient data for evaluation (3/74).

NV-1715-0420
SONAR AN/SQS-26 SERIES SONAR OPERATOR BASIC

(Sonar AN/SQS-26 AX(R) and CX Operators Basic)

AN/SQS-26 AX(R) & CX Operator

Course Number: A-130-0068; J-130-0875.
Location: Army Anti-submarine Warfare Training Center, San Diego, CA; Army Sonar School, Key West, FL.
Length: 3 weeks (91-94 hours).
Exhibit Dates: 7/69-Present.
Objectives: To train sonar technicians to operate AN/SQS-26 (AX(R) & CX) sonars.

Instruction: Lectures and practical exercises in system description, modes of operation, performance prediction, and search,
procedures, and deep-water sound transmission, including physical properties of seawater, acoustic ray theory, reverberation, measurement of sound, and propagation losses.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (8/77).

NV-1715-0421
TARTAR RADAR AN/SPG-11 B OR RADAR AN/SPQ-3(C) CLASS C
Course Number: A-10-0137.
Location: Guided Missiles School, Dam Neck, VA; Naval Schools Command, Mare Island, CA.
Length: 24 weeks (720 hours).
Exhibit Dates: 2/68—Present.
Objectives: To train fire control technicians to maintain AN/SPG-11 B/C radars.
Instruction: Lectures and practical exercises in Tartar weapons system familiarization, fire control systems, search radar, launching systems, and countermeasures; equipment safety and radar test setups; track radar, block diagrams, Doppler effect, track radar transmitters, power supplies, modulators, power amplifiers, and klystron theory; receiver circuits, spectrum analyzers, tuning and adjustment of transmitter and receivers; data converters; radar set consoles, casual analysis, specialized test set operation, and Tartar missile guidance systems.
Credit Recommendation: Insufficient data for evaluation (3/74).

NV-1715-0422
S-2/D/E AN/APN-122 DOPPLER RADAR NAVIGATION SYSTEM MAINTENANCE Course Number: Not available.
Location: Air Maintenance Training Detachment, North Island, CA; Air Maintenance Training Detachment, Key West, FL.
Length: 4 weeks (160 hours).
Exhibit Dates: 1/68—Present.
Objectives: To train maintenance personnel to maintain, troubleshoot, and repair AN/APN-122 Doppler radar navigation systems.
Instruction: Lectures and practical exercises in Doppler radar theory; power distribution; signal data converters; conversion of beam coordinates to ground speed and drift angles; generator speed computers; vertical rate; reference systems; signal loops; drift angles; location and replacement of malfunctioning components; special test equipment; and system troubleshooting.
Credit Recommendation: In the vocational certificate category, credit in electricity or electronics on the basis of institutional evaluation (3/74); in the lower-division baccalaureate/associate degree category, credit in electricity or electronics on the basis of institutional evaluation (3/74); in the lower-division baccalaureate/associate degree category, credit in electricity or electronics on the basis of institutional evaluation (3/74).

NV-1715-0423
BASIC SURFACE SONAR TECHNICIAN, CLASS A CORE PHASE
(Surface Sonar Technician Class A-1 (Surface))
(Surface Sonar Technician, Class A)
Course Number: A-130-0037; A-130-0038; J-130-0055.
Location: Fleet Nonsubmarine Warfare School, San Diego, CA; Fleet Sonar School, Key West, FL.
Length: 6–12 weeks (14j–228 hours).
Exhibit Dates: 7/72—Present.
Objectives: To train enlisted personnel to operate and use the underwater fire control systems.
Instruction: Lectures and practical exercises in operation and maintenance of underwater fire control systems; instruction on general and special support equipment.
Credit Recommendation: In the vocational certificate category, 1 semester hour in basic electronic test equipment (8/77).

NV-1715-0424
RA/C AN/AAY-4 SENSOR DATA CONVERTER GROUP INTERMEDIATE MAINTENANCE
Course Number: C-100-3746.
Location: Air Maintenance Training Detachment, Sanford, FL.
Length: 5 weeks (200 hours).
Exhibit Dates: 1/68—Present.
Objectives: To train maintenance personnel to operate and maintain, and service RA/C sensor data converter groups at the intermediate maintenance level and to utilize naval air maintenance training units and appropriate general and special support equipment.
Instruction: Lectures and practical exercises in theory of operation and maintenance of signal data converters, data transmitters, photo channel data processing, transmitter data channels, recording head amplifiers, and optical viewers.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-1715-0425
AN/UQ-4 SONAR SOUNDING SET MAINTENANCE
(AN/UQ-4 Echo Sounder Maintenance)
(AN/UQ-4 Sonar Sounder AN/UQ-4)
Course Number: A-130-0074; F-130-018.
Location: Service School Command, San Diego, CA; Fleet Training Center, Norfolk, VA; Submarine School, Groton, CT.
Length: 2–3 weeks (60–90 hours).
Exhibit Dates: 11/72—Present.
Objectives: To train enlisted personnel with knowledge of sonar and solid-state theory to operate and maintain the AN/UQ-4 sonar sounding set.
Instruction: Lectures and practical exercises in maintenance of the AN/UQ-4 sonar sounding set, including the 3-M system; computer mathematics and logic; solid-state devices; power supplies, frequency generation and selection circuits; recorder panel assembly and drive motor control; keying and transmitter circuits; pulse generator; remote indicator; keel reference counter, decoder, and clearing control; digital readout, test train, and storage control circuits; receiver circuits; and troubleshooting and alignment.
Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics laboratory (4/79).

NV-1715-0426
SSN MK 3 MOD 6 SHIPS INERTIAL NAVIGATION SYSTEM (SINS) MAINTENANCE
Course Number: A-193-0302, F-193-032; F-193-080.
Location: Submarine School, Groton, CT.
Length: 10–12 weeks (570–750 hours)
Exhibit Dates: 4/69—Present.
Objectives: To train electronics technicians to operate, evaluate, and maintain the Mk 3 Mod 6 ship's inertial navigation system.
Instruction: Lectures and practical exercises in tracing electrical and mechanical loops and performing specified checks and tests, Mk 3 Mod 6 systems malfunctions isolation and repair, MINDAC computer familiarization, transistor theory review, analog system components, oscilloscope operation, and computer mathematics.
Credit Recommendation: In the vocational certificate category, credit in electricity or electronics on the basis of institutional evaluation (3/74).

NV-1715-0427
SSBN NAVIGATION DATA ASSIMILATION COMPUTER MK 3 MOD 4 STABILIZATION DATA COMPUTER MK 3 MOD 1
Course Number: A-193-017.
Location: Guided Missiles School, Dam Neck, VA.
Length: 5 weeks (905 hours).
Exhibit Dates: 11/72—Present.
Objectives: To train electronics technicians to operate and maintain type 11 periscope systems, Mk 1 stabilization data computer (SDC), and specific navigation data assimilation computers and control consoles.
Instruction: Lectures and practical exercises in the maintenance of specific periscope systems, stabilization data computers, navigation data assimilation computers and control consoles, including celestial navigation, hydraulic systems, periscope optical system, relay controlled sequencing, complex servomechanism theory, optical monopulse and error determination, general computer principles and programming, circuit analysis, various input and output theories and techniques, and fault isolation.
Credit Recommendation: Insufficient data for evaluation (3/74).

NV-1715-0428
AN/APQ-124A RADAR SET INTERMEDIATE MAINTENANCE
(F-8 AN/APQ-124A Radar Intermediate Maintenance)
Course Number: C-102-3855.
Location: Air Maintenance Training Detachment, Miramar, CA.
Length: 5–6 weeks (200–240 hours).
Exhibit Dates: 9/69—Present.
Objectives: To train fleet maintenance personnel who have had previous training in electronics to maintain the AN/APQ-124A radar set.
Instruction: Lectures and practical exercises in the maintenance of the AN/APQ-124A radar set, including review of basic electronics and circuit analysis and troubleshooting of components; power systems; transmitters; receiver; transmitter display; antenna system; and computer system.
Credit Recommendation: In the vocational certificate category, credit in electronics on the basis of institutional evaluation (3/74).
COURSE EXHIBITS

in the lower-division baccalaureate/associate degree category, credit in electronics on the basis of institutional evaluation (3/74); in the upper-division baccalaureate/associate degree category, credit in electrical laboratory on the basis of institutional evaluation (3/74).

**NV-1715-0431**

A-6A AN/APQ-92 SEARCH RADAR AND MODULE ANALYZER TEST BENCH INTERMEDIATE MAINTENANCE

Course Number: Not available.

Location: Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Oceana, VA.

Length: 13 weeks (320 hours).

Exhibit Dates: 1/70-Present.

Objectives: To train maintenance personnel who have had previous training in basic radar fundamentals, and subminature repair to operate and maintain the AN/APQ-92 search radar and associated search radar and module analyzer test consoles.

Instruction: Lectures and practical exercises in the maintenance and operation of the AN/APQ-92 search radar and associated test consoles, including search radar displays, systems operation; analysis of the control, electrical synchronizer, video processor, azimuth/range/elevation indicators, servo sensor, and data processor unit; servo electronics unit; transmit circuit; antenna/receiver; terrain clearance processor; and maintenance.

Credit Recommendation: In the vocational certificate category, credit in electronics on the basis of institutional evaluation (3/74).

**NV-1715-0432**

UH-2A AN/APN-130 RADAR NAVIGATION CONSOLE AND DETAILED RADAR INTERMEDIATE MAINTENANCE

Course Number: Not available.

Location: Air Maintenance Training Detachment, Ream Field, CA; Air Maintenance Training Detachment, Lakehurst, NJ.

Length: 4 weeks (160 hours).

Exhibit Dates: 1/68-Present.

Objectives: To train maintenance personnel to maintain the UH-2A helicopter's navigational system.

Instruction: Lectures and practical exercises in the maintenance of the navigational system of the UH-2A helicopter, including an introduction to Doppler radar, transistors, power supply, receiver-transmitter, and liquid cooler analysis; hover, auto, and manual control; data processor, and maintainance.

Credit Recommendation: Insufficient data for evaluation (3/74).

**NV-1715-0433**

CLUTTER SUPPRESSOR AND AUTOMATIC ALARM FOR THE AN/SPS-10

Course Number: A-104-0132.

Location: Naval Schools Command, San Francisco, CA.

Length: 4 weeks (120 hours).

Exhibit Dates: 6/8-Present.

Objectives: To train electronic technicists who have had previous training or experience in AN/SPS-10 radars, transmitter, integrated circuitry, circuit board repair to maintain the clutter suppressor and automatic alarm units and associated equipment of the AN/SPS-10 radar system.

Instruction: Lectures and practical exercises in the maintenance of the clutter suppressor and automatic alarm units of the AN/SPS-10 radar system and associated equipment, including basic operation, signal flow, functional, module and circuit analysis of the equipment, and functional troubleshooting.

Credit Recommendation: In the vocational certificate category, credit in electronics on the basis of institutional evaluation (3/74).

**NV-1715-0434**

A-6A AN/APX-67A AIR/INDIFF INTERROGATOR SET INTERMEDIATE MAINTENANCE

Course Number: C-102-306X.

Location: Air Maintenance Training Detachment, Miramar, CA; Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Oceana, VA; Air Maintenance Training Detachment, Whidbey Island, WA.

Length: 3 weeks (120 hours).

Exhibit Dates: 8/70-Present.

Objectives: To train fleet maintenance personnel who have backgrounds in IFF systems and digital fundamentals to operate and maintain the AN/APX-67A interrogator set at the intermediate level.

Instruction: Lectures and practical exercises in the operation and maintenance of the AN/APX-67A interrogator set, including block-diagram analysis of the transmit and receiver section and performance monitor, and analysis of various circuits.

Credit Recommendation: In the vocational certificate category, credit in electronics on the basis of institutional evaluation (3/74).

**NV-1715-0435**

A-6A AN/APQ-112 TRACK RADAR TEST CONSOLE AND DETAILED RADAR INTERMEDIATE MAINTENANCE

Course Number: Not available.

Location: Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Oceana, VA.

Length: 11 weeks (440 hours).

Exhibit Dates: 1/70-Present.

Objectives: To train maintenance personnel who have had previous training in basic radars and associated test consoles.

Instruction: Lectures and practical exercises in the operation of AN/APQ-112 track radars and associated test consoles, including block-diagram analysis, control and power circuits, receiving and video processing, servo amplifier, antenna control, test console analysis, and repair procedures.

Credit Recommendation: In the vocational certificate category, credit in electronics on the basis of institutional evaluation (3/74).
the Tartar weapon control system, power system, simulation, sweep generation, sweep deflection, display system, tracking and target evaluation, WDE MK 1 adjustments, design verification, data converting system, and weapon assignment system.

Credit Recommendation: In the vocational certificate category, credit in electrical laboratory on the basis of institutional evaluation (3/74), in the lower-divison baccalaureate/associate degree category, credit in electronics laboratory on the basis of institutional evaluation (3/74).

**NV-1715-0437**

**TARTAR WEAPON DIRECTION SYSTEMS**

**(WDS)** MK 4 Mod 0, CLASS C

**Course Number:** A-121-0039; A-121-0030

**Location:** Guided Missiles School, Dam Neck, VA, Naval Schools Command, Mare Island, CA.

**Length:** 20 weeks (549 hours).

**Exhibit Dates:** 1/68-Present.

**Objectives:** To train enlisted personnel to maintain the MK 4 Mod 0, weapons direction system.

**Instruction:** Lectures and practical exercises in the operation and maintenance of the MK 4 Mod 0 weapons direction system, including equipment operation; target selection and tracking; target control; director and weapon assignment and display switched circuits; power circuits; and ancillary equipment use.

**Credit Recommendation:** In the vocational certificate category, credit in electricity or electronics on the basis of institutional evaluation (3/74); in the lower-divison baccalaureate/associate degree category, credit in electricity or electronics on the basis of institutional evaluation (3/74); in the upper-divison baccalaureate category, credit in electricity or electronics on the basis of institutional evaluation (3/74).

**NV-1715-0438**

**S-3D/E AN/APS-88/88A RADAR SET MAINTENANCE**

**Course Number:** Not available

**Location:** Air Maintenance Training Detachment, Sanford, FL; Air Maintenance Training Detachment, North Island, CA.

**Length:** 4 weeks (160 hours).

**Exhibit Dates:** 1/68-Present.

**Objectives:** To train enlisted personnel to maintain the AN/APS-88/88A Radar Sets at the intermediate level.

**Instruction:** Lectures and practical exercises in the operation and maintenance of the MK 2 Mod 0 ship's inertial navigation system, the MK 3 Mod 3 multireceiver, the AN/BQR-3 sonar sounding set, and the MK 6 Mod 1 interconnecting box, including system test-and associated test equipment operation, fleet ballistic missile systems operation system, analysis of the sonar sounding set, and repair procedures.

**Credit Recommendation:** In the vocational certificate category, 5 semester hours in physics, 1 in electronics (3/74); in the lower-divison baccalaureate/associate degree category, 1 semester hour in physics, 2 in electronics (3/74).

**NV-1715-0440**

**SSBN SHIPS INERTIAL NAVIGATION SYSTEM (SINS) MK 2 MOD 4 TECHNICIAN**

**Course Number:** A-193-014

**Location:** Guided Missiles School, Dam Neck, VA.

**Length:** 25 weeks (840 hours).

**Exhibit Dates:** 11/72-Present.

**Objectives:** To train electronics technicians who have backgrounds in Polaris or fleet ballistic missile electronics to operate and maintain specific ship's inertial navigation systems, multispeed repeaters, sonar sounding sets, and interconnecting boxes.

**Instruction:** Lectures and practical exercises in the operation and maintenance of the MK 2 Mod 4 ship's inertial navigation system, the MK 3 Mod 3 multireceiver, the AN/BQR-3 sonar sounding set, and the MK 6 Mod 1 interconnecting box, including subsystem test-in and associated test equipment operation, fleet ballistic missile systems operation system, analysis of the sonar sounding set, and repair procedures.

**Credit Recommendation:** In the vocational certificate category, 5 semester hours in electronics and electronics laboratory (4/74).

**NV-1715-0441**

**AN/SRN-9A, RADIO NAVIGATION SET, OPERATION AND MAINTENANCE**

**Course Number:** F-193-0072

**Location:** Submarine School, Groton, CT

**Length:** 3 weeks (90 hours).

**Exhibit Dates:** 5/71-Present.

**Objectives:** To train submarine electronics technicians to operate the navigation satellite system and to operate and maintain the AN/SRN-9A radio navigation set.

**Instruction:** Lectures and practical exercises in the operation and maintenance of the navigation satellite system and the AN/SRN-9A radio navigation set, including specialized treatment of equipment and systems, computation, logic circuits, test signal generator, symbolic integrated maintenance, receiver and message demodulator, digital processing unit, power supply, electrolytic capacitor, and software.

**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (4/74).

**NV-1715-0442**

**TERRIER WEAPON SYSTEM MISSILE FIRE CONTROL SYSTEM (MFS) MK 13**

**Course Number:** Not available

**Location:** Service Schools Command, Great Lakes, IL

**Length:** 6 weeks (180 hours).

**Exhibit Dates:** 5/68-Present.

**Objectives:** To train senior petty officers to supervise Terrier missile weapons system technical operations.

**Instruction:** Lectures and practical exercises in the operation of Terrier weapons systems, including system data flow, specific system description, target detection, selection, and tracking, director assignment, target acquisition, missile control, and support procedures. Credit Recommendation: In the upper-divison baccalaureate/associate degree category, credit in electrical laboratory on the basis of institutional evaluation (4/74).

**NV-1715-0443**

**TERRIER WEAPON SYSTEM MISSILE FIRE CONTROL SYSTEM (MFS) MK 76**

**Course Number:** Not available

**Location:** Guided Missiles School, Dam Neck, VA; Naval Schools Command, Mare Island, CA.

**Length:** 10 weeks (300 hours).

**Exhibit Dates:** 5/68-Present.

**Objectives:** To train senior petty officers to supervise Terrier missile weapons systems technical operations.

**Instruction:** Lectures and practical exercises in the operation of Terrier weapons systems, including specific system description, target detection, selection, and tracking, director assignment, target acquisition, missile control, and support procedures. Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

**NV-1715-0444**

**TALOS WEAPON SYSTEM MK 77 MOD 2**

**CLASS C**

**Course Number:** Not available

**Location:** Guided Missiles School, Dam Neck, VA; Naval Schools Command, Mare Island, CA.

**Length:** 10 weeks (300 hours).

**Exhibit Dates:** 2/68-Present.

**Objectives:** To train fire control technicians to lead Talos missile weapons systems technical operations.

**Instruction:** Lectures and practical exercises in the operation of Talos missile weapons systems technical operations. Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

**NV-1715-0445**

**NAVY:**

**1-211**
**NV-1715-0445**

AN/BRD-7, AN/WYQ-1, AN/BRQ-1

**BASIC OPERATOR, CLASS C1**

**Course Number:** A-233-0029

**Location:** Submarine School, New London, CT; Submarine Training Center, Pacific, Pearl Harbor, HI.

**Length:** 1/2 weeks (Present hours)

**Exhibit Dates:** 3-90

**Objectives:** To train an individual to operate and maintain a surveillance receiver and digital display unit.

**Instruction:** Course trains the individual to operate and maintain a surveillance receiver (two receivers and a display unit) and includes basic theory, physical description, and function of all controls, indicators, displays, and interface connections.

**Credit Recommendation:** No credit is recommended because of military-specific nature of the course (9/77).

---

**NV-1715-0446**

AN/DSM-12 SPARROW III GUIDED MISSILE TEST EQUIPMENT

**INTERMEDIATE MAINTENANCE**

**Course Number:** Not available

**Location:** Air Maintenance Training Detachment, Jacksonville, FL; Air Maintenance Training Detachment, Miramar, CA.

**Length:** 4 weeks (160 hours)

**Exhibit Dates:** 9/67-Present

**Objectives:** To train enlisted personnel to maintain and operate the Sparrow III missile and associated test equipment at the intermediate level.

**Instruction:** Lectures and practical exercises in the operation and maintenance of the Sparrow III and associated test equipment, including check-out procedures, test sets, and components, calibration and testing, and troubleshooting and repair procedures.

**Credit Recommendation:** In the vocational certificate category, 3 semester hours in electronics, 1 in electronics laboratory (4/74).

---

**NV-1715-0447**

**MARDAN COMPUTER THEORY AND MAINTENANCE**

**Course Number:** A-193-0288

**Location:** Fleet Ballistic Missile Submarine Training Center, Charleston, SC; Naval Submarine School, New London, CT; Naval Submarine Training Center, Pacific, Pearl Harbor, HI.

**Length:** 2-3 weeks (60-75 hours)

**Exhibit Dates:** 10/72-Present

**Objectives:** To provide theory of operation of specific military equipment and to train in fault isolation and repair of the equipment.

**Instruction:** Lectures and laboratories in the theory of equipment operation, including power supply sequencing, relay logic, and system failure and component repair.

**Credit Recommendation:** In the vocational certificate category, 1 semester hour in electronics (9/77).

---

**NV-1715-0448**

**MARDAN COMPUTER THEORY AND MAINTENANCE II**

**Course Number:** A-193-0289

**Location:** Fleet Ballistic Missile Submarine Training Center, Charleston, SC; Naval Submarine School, New London, CT; Naval Submarine Training Center, Pacific, Pearl Harbor, HI.

**Length:** 2 weeks (60 hours)

**Exhibit Dates:** 10/75-Present.

**Objectives:** To provide theory of operation of specific equipment and to train to perform fault isolation and repairs on the equipment.

**Instruction:** Lectures and laboratories on monitoring circuits, relay logic, microprocessor, digital motor control loops, the use of diagnostics to determine fault isolation, and to make repairs on specific equipment.

**Credit Recommendation:** In the vocational certificate category, 1 semester hour in electromechanical repair (9/77).

---

**NV-1715-0449**

AN/BRD-7 COMBINED MAINTENANCE, CLASS C1

**Course Number:** A-102-0217

**Location:** Submarine School, New London, CT; Submarine Training Center, Pacific, Pearl Harbor, HI.

**Length:** 12 weeks (360 hours)

**Exhibit Dates:** 1/70-Present

**Objectives:** To train the technician to operate and maintain a digitally controlled communication receiver that automatically processes the received information.

**Instruction:** This course covers a multiband receiver system that digitizes the input signal information and processes this data to optimize the antenna configuration and directional finding of air and surface vessels. The technician determines bearing information. This information is recorded in a digital memory system and is used to determine the direction of the target. The student covers the physical description of the equipment, all operating modes, block diagram description of the signal flow, and data control information, schematic diagrams of each circuit board, identifying test points and correct signal levels, preventive maintenance, troubleshooting to isolate faults to the IC board and in most cases to the actual component, using 4-trace oscilloscopes, AM-FM and FM receivers, frequency counters, spectrum analyzer, time domain reflectometer, digital voltmeters, differential voltmeters, and special test equipment for this system.

**Credit Recommendation:** In the vocational certificate category, 2 semester hours in electronics laboratory (4/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics laboratory (4/74).

---

**NV-1715-0450**

A-7/A/B INTEGRATED AVIONICS WEAPONS SYSTEM TECHNICIAN

**ORGANIZATIONAL MAINTENANCE**

**Course Number:** C-102-3794

**Location:** Air Maintenance Training Detachment, Lemoore, CA; Air Maintenance Training Detachment, Cecil Field, FL.

**Length:** 3 weeks (75 hours)

**Exhibit Dates:** 10/72-Present

**Objectives:** To train fleet maintenance personnel to troubleshoot and perform operational checks on the A-7/A/B weapon systems.

**Instruction:** Lectures and practical exercises in troubleshooting and operational checks on the A-7/A/B weapon systems, including ordnance familiarization, associated equipment and weaponry, integrated flight instrument system components and circuitry, gyroscope principles, air data equipment, delivery and release systems, weapon release computer, and associated radar sensor components and operation.

**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (4/74).

---

**NV-1715-0451**

A-5 ELECTRONIC MODULE TEST CONSOLE

**INTERMEDIATE MAINTENANCE**

**Course Number:** Not available

**Location:** Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Oceana, VA.

**Length:** 3 weeks (100 hours)

**Exhibit Dates:** 4/68-Present

**Objectives:** To train enlisted personnel who have backgrounds in avionics and transistor fundamentals to operate and maintain the AN/ASM-175 (XN-1) electronic module test console.

**Instruction:** Lectures and practical exercises in the operation and maintenance of the AN/ASM-175 (XN-1) electronic module test console, including transistor theory, AC and DC power distribution, logic circuits, test equipment, oscilloscope, and programming and testing of various components and modules.

**Credit Recommendation:** In the vocational certificate category, 2 semester hours in electronics laboratory (4/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics laboratory (4/74).

---

**NV-1715-0452**

A-4/E COMMUNICATION NAVIGATION IDENTIFICATION (CNI)/WEAPONS SYSTEMS ORGANIZATIONAL MAINTENANCE

**Course Number:** C-102-3724

**Location:** Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Beaufort, SC.

**Length:** 2 weeks (80 hours)

**Exhibit Dates:** 10/72-Present

**Objectives:** To train fleet maintenance personnel to maintain the communications, navigation, identification, and weapons systems of the A-4E Douglas Skyhawk aircraft.

**Instruction:** Lectures and practical exercises in flight-line maintenance of the A-4E Douglas Skyhawk aircraft communications, navigation, identification, and weapons systems, including system analysis, transmitters, radar fundamentals, digital computer principles, specific UHF equipment, Shrike improved display system, and system operation and analysis.

**Credit Recommendation:** In the vocational certificate category, 2 semester hours in electronics laboratory (4/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics laboratory (4/74).

---

**NV-1715-0453**

RA-5C FLIGHT CONTROL INTERMEDIATE MAINTENANCE

**Course Number:** Not available

**Location:** Air Maintenance Training Detachment, Sanford, FL.

**Length:** 5 weeks (200 hours)

**Exhibit Dates:** 4/68-Present

**Objectives:** To train maintenance personnel with knowledge of basic hydraulics and electricity to operate and maintain flight control systems at an intermediate level.
NV-1715-0454
RA-5C AIR DATA AND FLIGHT REFERENCE SYSTEMS
ORGANIZATIONAL MAINTENANCE
(RA-5C Air Data and Flight Reference Systems)
Course Number: C-602-3749.
Location: Air Maintenance Training Detachment, Albany, GA; Air Maintenance Training Detachment, Sanford, FL.
Length: 2-3 weeks (80-120 hours).
Exhibit Dates: 4/68-3/73.
Objectives: To train maintenance personnel to operate and maintain the RA-5C flight control system.
Instruction: Lectures and practical exercises in the operation and maintenance of the RA-5C flight control system, including hydraulic systems, primary and secondary airflow systems, and electronic, hydraulic, and aerial control systems.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0455
RA-5C FLIGHT CONTROL SYSTEM
ORGANIZATIONAL MAINTENANCE
Course Number: C-602-3744.
Location: Air Maintenance Training Detachment, Albany, GA; Air Maintenance Training Detachment, Sanford, FL.
Length: 4-5 weeks (160-200 hours).
Exhibit Dates: 3/69-Present.
Objectives: To train maintenance personnel to operate and maintain the RA-5C flight control system.
Instruction: Lectures and practical exercises in the operation and maintenance of the RA-5C flight control system, including hydraulic systems, primary and secondary airflow systems, and electronic, hydraulic, and aerial control systems.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0456
FLEET BALLISTIC MISSILE (FBM) NAVIGATION OFFICER
Course Number: Not available.
Location: Guided Missiles School, Dam Neck, VA.
Length: 13 weeks (360 hours).
Exhibit Dates: 3/65-12/68.
Objectives: To train officers as fleet ballistic missile navigation officers.
Instruction: Lectures and practical exercises in the functions of fleet ballistic missile navigation officers, including inertial navigation, training systems, electronics and transistors, computers, ship's inertial navigation system and hardware description, marine differential analyzer computer, system calibration techniques, navigational aids, administrative aspects of the F B M program, and Navs subsystem operational laboratory.
Credit Recommendation: In the vocational certificate category, 6 semester hours in electronics, 2 in data processing (4/74); in the lower-division baccalaureate category, 3 semester hours in electronics, 2 in data processing (4/74).

NV-1715-0457
F-4B SHOEHORN ORGANIZATIONAL MAINTENANCE
Course Number: C-102-3809.
Location: Air Maintenance Training Detachment, Miramar, CA; Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Oceana, VA; Air Maintenance Training Detachment, Cherry Point, NC.
Length: 4 weeks (160 hours).
Exhibit Dates: 1/71-Present.
Objectives: To train maintenance personnel with training on Shoehorn systems, including equipment, location, installation, removal, power distribution, interfacing, and use of line-test equipment.
Instruction: Lectures and laboratories in Shoehorn systems, components, locations, maintenance procedures, preflight, postflight, and periodic inspections; and system line maintenance.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics laboratory (4/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics laboratory (4/74).

NV-1715-0458
A-6A SHOEHORN ORGANIZATIONAL MAINTENANCE
Course Number: C-102-3761.
Location: Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Oceana, VA.
Length: 4 weeks (160 hours).
Exhibit Dates: 7/69-Present.
Objectives: To train fleet organic maintenance personnel to maintain A-6A/E Shoehorn electronic countermeasures systems.
Instruction: Lectures and laboratories in A-6 electronic countermeasures systems operation, interfacing, and R/C-2 cable and system line maintenance.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electrical laboratory (4/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in electrical laboratory (4/74).

NV-1715-0459
E-2A WEAPON SYSTEM SPECIALIST (E-2A Weapon System Special, No 5)
Course Number: Not available.
Location: Air Maintenance Training Detachment, North Island, CA.
Length: Version 1: 2 weeks (80 hours).
Version 2: 3 weeks (120 hours).
Objectives: To train enlisted personnel who have backgrounds in transistors to operate and maintain automatic flight control systems and air data computers.
Instruction: Lectures and practical exercises in the operation, circuitry, and maintenance of automatic flight control systems and air data computers, utilization of trainer panels and associated test equipment; maximum fudder and pitch feel systems, and sensor systems and amplifiers.
Credit Recommendation: Version 1: In the vocational certificate category, 2 semester hours in electronics laboratory (4/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics laboratory (4/74).
Version 2: In the vocational certificate category, 4 semester hours in electronics laboratory (4/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics laboratory (4/74).

NV-1715-0460
E-2A AUTOMATIC FLIGHT CONTROL SYSTEM (AN/ASW-15) AND AIR DATA COMPUTER (A/A24G-13)
INTERMEDIATE MAINTENANCE
Course Number: C-602-3492.
Location: Air Maintenance Training Detachment, North Island, CA.
Length: Version 1: 2 weeks (80 hours).
Version 2: 3 weeks (120 hours).
Objectives: To train enlisted personnel who have backgrounds in transistors to operate and maintain automatic flight control systems and air data computers.
Instruction: Lectures and practical exercises in the operation, circuitry, and maintenance of automatic flight control systems and air data computers, utilization of trainer panels and associated test equipment; maximum fudder and pitch feel systems, and sensor systems and amplifiers.
Credit Recommendation: Version 1: In the vocational certificate category, 2 semester hours in electronics laboratory (4/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics laboratory (4/74).
Version 2: In the vocational certificate category, 4 semester hours in electronics laboratory (4/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics laboratory (4/74).

NV-1715-0461
C-1A AUTOMATIC FLIGHT CONTROL SYSTEM (AN/ASW-15) AND AIR DATA COMPUTER (A/A24G-13)
INTERMEDIATE MAINTENANCE
Course Number: C-602-3492.
Location: Air Maintenance Training Detachment, North Island, CA.
Length: Version 1: 2 weeks (80 hours).
Version 2: 3 weeks (120 hours).
Objectives: To train enlisted personnel who have backgrounds in transistors to operate and maintain automatic flight control systems and air data computers.
Instruction: Lectures and practical exercises in the operation, circuitry, and maintenance of automatic flight control systems and air data computers, utilization of trainer panels and associated test equipment; maximum fudder and pitch feel systems, and sensor systems and amplifiers.
Credit Recommendation: Version 1: In the vocational certificate category, 2 semester hours in electronics laboratory (4/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics laboratory (4/74).
Version 2: In the vocational certificate category, 4 semester hours in electronics laboratory (4/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics laboratory (4/74).

NV-1715-0462
P-3 PB-20N AUTOPILOT SYSTEM
INTERMEDIATE MAINTENANCE
Course Number: C-602-3532.
Location: Air Maintenance Training Detachment, Patuxent-River, MD; Air Maintenance Training Detachment, Moffett Field, CA.
Length: 3 weeks (120 hours).
Exhibit Dates: 3/71-Present.
Objectives: To provide electrical maintenance personnel with training in intermediate-level maintenance, circuit analysis, operation, and test procedures for PB-20N autopilot systems.
Instruction: Lectures and practical exercises in theory of operation of autopilot systems, power supplies, amplifiers, test equip...
1-214  COURSE EXHIBITS

ment, bench testing, and troubleshooting procedures.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics laboratory (4/74); in the lower-
division baccalaureate/associate degree category, 1 semester hour in electronics lab-

atory (4/74).

NV-1715-0463

P-3 AN/ASA-16 DISPLAY SYSTEM INTERMEDIATE MAINTENANCE

Course Number: Not available.

Location: Air Maintenance Training Detachment, Patuxent River, MD; Air Mainte-
nance Training Detachment, Moffett Field, CA.

Length: 6 weeks (240 hours).

Exhibit Dates: 12/70-Present.

Objectives: To train enlisted personnel to maintain and align ASA-16 display groups
at the intermediate-maintenance level.

Instruction: Lectures and practical exercises in display system operation and main-

tenance, amplifiers, servo systems, and basic digital computer

Credit Recommendation: In the vocational certificate category, 4 semester hours in
electronics (4/74); in the lower-div-

ision baccalaureate/associate degree category, 2 semester hours in electronics (4/74)

NV-1715-0464

UH-2A/B AUTOMATIC STABILIZATION EQUIPMENT ORGANIZATIONAL MAINTENANCE

(UH-2A/B Automatic Stabilization Equipment Intermediate Maintenance)

(UH-2A/B Automatic Stabilization Equipment Maintenance)

Course Number: Not available.

Location: Air Maintenance Training Detachment, Lakehurst, NJ; Air Maintenance
Training Detachment, Ream Field, CA.

Length: 3-5 weeks (112-200 hours).

Exhibit Dates: 1/68-Present.

Objectives: To train maintenance personnel to operate, service, and maintain the

UH-2A/B's automatic stabilizing equip-

ment.

Instruction: Lectures and practical exercises in automatic stabilization equipment

familiarization, troubleshooting procedures, and main-

tenance.

Credit Recommendation: Credit is not recom-

mended because of the limited technical

nature of the course (4/74).

NV-1715-0465

RF-4B AN/ASN-46/74 NAVIGATION COMPUTER AND INERTIAL NAVIGATION SYSTEM INTERMEDIATE MAINTENANCE

(RF-4B Inertial Navigation System Inter-

mediate Maintenance)

Course Number: C-32-3339.

Location: Air Maintenance Training Det-

achment, El Toro, CA.

Length: 6-9 weeks (240-360 hours).

Exhibit Dates: 1/71-Present.

Objectives: To train maintenance personnel to test and repair AN/ASN-46A and

AN/ASN-74 inertial navigation system components.

Instruction: Lectures and practical exercises in inertial navigation system circuit

analysis, troubleshooting, and component repair and utilization of applicable test

equipment, publications, and procedures.

Credit Recommendation: In the vocational certificate category, 2 semester hours in
electrical laboratory (4/74); in the lower-di-

vision baccalaureate/associate degree cate-

gory, 1 semester hour in electrical labora-

tory (4/74).

NV-1715-0466

TARTAR WEAPONS CONTROL SYSTEM

Course Number: Not available.

Location: Guided Missiles School, Dam Neck, VA; Naval Schools Command, Mare

Island, CA.

Length: 10 weeks (300 hours).

Exhibit Dates: 2/68-Present.

Objectives: To train officers, warrant offi-
cers, and enlisted personnel to operate, maintain, test, adjust, align, and preserve

Tartar weapon systems.

Instruction: Lectures and practical exercises in test weapon control systems,

missile, and launcher, data flow block dia-

grams, missile fire control systems, weapon
direction equipment, and maintenance pro-

cedures.

Credit Recommendation: Credit is not recom-

mended because of the limited technical

nature of the course (4/74).

NV-1715-0467

TERRIER/TARTAR GUIDED MISSILE AND GUIDED MISSILE TEST SET MAINTENANCE

Course Number: Not available

Location: Guided Missiles School, Dam Neck, VA; Naval Schools Command, Mare

Island, CA.

Length: 23 weeks (690 hours).

Exhibit Dates: 2/68-Present.

Objectives: To train enlisted personnel to test and maintain Terrner and Tartar guided

missiles, and to operate and maintain Terri-
er and Tartar guided-missile test sets and

associated test equipment.

Instruction: Lectures and laboratories in physical description and capabilities of Ter-

rier and Tartar, missile control system,

guidance radar, signal comparators, guided

missile test sets, and radar test sets, causality

analysis and repair; and operation and main-

tenance of ground-stations.

Credit Recommendation: In the vocational certificate category, 2 semester hours in

electrical laboratory (4/74); in the lower-di-

vision baccalaureate/associate degree cate-

gory, 1 semester hour in electrical labora-

tory (4/74); in the upper-divi-

sion baccalaureate/associate degree category, credit in electrical labora-

tory on the basis of institutional evaluation (4/74).

NV-1715-0468

RF-4B AN/ASN-35 ATTITUDE HEADING REFERENCE SYSTEM MAINTENANCE

Course Number: C-102-3834.

Location: Air Maintenance Training De-

tachment, North Island, CA.

Length: 2 weeks (300 hours).

Exhibit Dates: 1/71-Present.

Objectives: To train maintenance personnel to test and repair AN/ASN-46A and

AN/ASN-74 inertial navigation system components.

Instruction: Lectures and practical exercises in theory of operation and maintenance pro-

cedures for attitude-heading reference sys-

tems.

Credit Recommendation: Credit is not recom-

mended because of the limited technical

nature of the course (4/74).

NV-1715-0469

ELECTRONIC SURVEILLANCE MAINTENANCE (ESM) AN/WLR-8(V)2 COMBINED MAINTENANCE

Course Number: A-233-0040.

Location: Submarine School, New London, CT; Submarine Training Center, Pacific, Pearl Harbor, HI.

Length: 10-12 weeks (350-420 hours).

Exhibit Dates: 12/76-Present.

Objectives: To study the theory of operation and perform maintenance on a com-
pound multichannel receiving system and digital data processor computer

system.

Instruction: Course includes analog-to-
digital and digital-to-analog conversion, multiplexing, demultiplexing, ALU units,

RF digital tuner control circuits, and dis-

plays, and teaches student to perform fault

isolation, alignment, adjustment, and cali-

bration and to make repairs on the compo-
nent.

Credit Recommendation: In the lower-di-

vision baccalaureate/associate degree cate-

gory, 5 semester hours in electronics or

computer technology (9/77)

NV-1715-0470

MISSILE TECHNICIAN POSEIDON LOGISTICS

Course Number: A-121-0140

Location: Guided Missiles School, Dam Neck, VA.

Length: 26 weeks (336 hours)

Exhibit Dates: 10/72-Present.

Objectives: To train enlisted personnel to perform as missile technicians on board Po-

seidon FBM submarine tenders.

Instruction: Lectures and laboratories in Poseidon missiles, missile guidance, missile
test and readiness equipment, guidance system test "sets, associated test equipment,

basic electronics," digital techniques, and

operational amplifiers.

Credit Recommendation: In the vocational certificate category, 6 semester hours in

electronics (4/74); in the lower-divi-

sion baccalaureate/associate degree category, 3 semester hours in electronics (4/74).

NV-1715-0471

E-2A AN/ASM-33A IN-FLIGHT PERFORMANCE MONITOR MAINTENANCE

Course Number: Not available.

Location: Air Maintenance Training De-

tachment, North Island, CA.

Length: 4 weeks (160 hours).

Exhibit Dates: 10/67-Present.

Objectives: To train enlisted personnel to maintain the E-2A AN/ASM-33A In-Flight

Performance Monitor at the intermediate level.

Instruction: Lectures and practical exercises in the maintenance of the E-2A in-

flight performance monitor AN/ASM-33A, including component analysis, oscilloscope

components and operation, mutlimeter use, and associated circuits and power supply,

and analysis of associated equipment.

Credit Recommendation: In the vocational certificate category, 2 semester hours in

electronics laboratory digital control; in the lower-
division baccalaureate/associate degree cate-

gory, 1 semester hour in electronics labora-

tory (4/74).
NV-1715-0472
S-1D/E MH-57 AUTO PILOT SYSTEM MAINTENANCE, No. 7
Course Number: Not available
Location: Air Maintenance Training Detachment, North Island, CA; Air Maintenance Training Detachment, Key West, FL.
Length: 2 weeks (80 hours).
Exhibit Dates: 1/70-Present.
Objectives: To train maintenance personnel to maintain the MH-67 A.F.C.S. autopilot system.
Instruction: Lectures and practical exercises in the maintenance of the MH-67 A.F.C.S. autopilot system, including basic, gyroscopes, transistors, amplifiers, and flight principle, equipment components and circuitry; synchronization and stabilization; and testing and troubleshooting procedures.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics laboratory (4/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics laboratory (4/74).

NV-1715-0473
TERRIER WEAPON DIRECTION SYSTEM Mk 7 (DDE Mk 41)
Course Number: Not available
Location: Guided Missile School, Dam Neck, VA; Naval Schools Command, Mare Island, CA.
Length: 20 weeks (600 hours).
Exhibit Dates: 2/68-Present.
Objectives: To train enlisted personnel to inspect and maintain the Mk 7 weapon direction system.
Instruction: Lectures and practical exercises in the maintenance of the Mk 7 weapon direction system, including Terrier weapon system theory and fundamentals, power supplies, radar fundamentals, simulation, sweep generation, video systems, target detection and assignment, symbol systems; data conversion, weapons systems different and associated test equipment.
Credit Recommendation: In the vocational certificate category, 6 semester hours in electronics (4/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in electronics (4/74); in the upper-division baccalaureate category, credit in electrical laboratory on the basis of institutional evaluation (4/74).

NV-1715-0474
A-6 AVIONICS SYSTEMS ORGANIZATIONAL LEVEL MAINTENANCE
Course Number: Not available
Location: Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Oceana, VA.
Length: 5-8 weeks (520-660 hours).
Exhibit Dates: 2/68-Present.
Objectives: To train avionics maintenance personnel to maintain and service the A-6 aircraft's avionics systems.
Instruction: Lectures and practical exercises in aircraft familiarization, search radar, track radar, inertial navigation systems, digital fundamentals, computer familiarization, computer line maintenance, the system operation and troubleshooting, and organizational test equipment.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0475
A-6 AN/ASN-31 INERTIAL NAVIGATION SYSTEM ORGANIZATIONAL LEVEL MAINTENANCE INTERMEDIATE MAINTENANCE
Course Number: Not available
Location: Air Maintenance Training Detachment, Oceana, VA; Air Maintenance Training Detachment, Whidbey Island, WA.
Length: 7-8 weeks (280-320 hours).
Exhibit Dates: 1/68-Present.
Objectives: To train maintenance personnel to maintain inertial navigation systems and to service inertial navigation test consoles.
Instruction: Lectures and practical exercises in basic, navigation systems, digital signal flow, power supplies and distribution, inertial test equipment, and system operation and maintenance.
Credit Recommendation: In the vocational certificate category, 4 semester hours in electronics, 4 in physics (4/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics, 2 in physics (4/74).

NV-1715-0476
A-6A AN/ASN-31 INERTIAL NAVIGATION ORGANIZATIONAL LEVEL MAINTENANCE
Course Number: Not available
Location: Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Oceana, VA.
Length: 3 weeks (120 hours).
Exhibit Dates: 1/68-Present.
Objectives: To train maintenance personnel to maintain and service the A-6A aircraft's inertial navigation system of the A-6 aircraft.
Instruction: Lectures and practical exercises in the maintenance of the AN/ASN-31 inertial navigation system of the A-6 aircraft, including general aircraft systems, theory and components of inertial navigation systems, air navigation, gyroscopes, accelerometers, analog computers, velocity information, test equipment, and line maintenance.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0477
P-3 ASA-16 SYSTEM MAINTENANCE, No. 50
Course Number: Not available
Location: Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA.
Length: 6 weeks (240 hours).
Exhibit Dates: 1/68-Present.
Objectives: To train maintenance personnel who have completed courses in transis tor fundamentals and P-3 aircraft familiarization to maintain the ASA-16 display group of the P-3 aircraft.
Instruction: Lectures and practical exercises in the maintenance of the ASA-16 display group of the P-3 aircraft, including block-diagram analysis, components, circuit analysis, servomechanisms, radar set amplifier, electronic gate generators, various subassemblies, range and bearing functions, power distribution, alignment procedures, and basic computer elements of the system.
Credit Recommendation: In the vocational certificate category, 4 semester hours in electronics laboratory (4/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics laboratory (4/74).

NV-1715-0478
E-2A AUTOMATIC FLIGHT CONTROL SYSTEM AND AIR DATA COMPUTER SEMI-AUTOMATIC CHECK-OUT EQUIPMENT OPERATION AND MAINTENANCE
Course Number: Not available
Location: Air Maintenance Training Detachment, North Island, CA.
Length: 4 weeks (120 hours).
Exhibit Dates: 1/68-Present.
Objectives: To train enlisted personnel who have background in avionics, automatic flight control systems, and air data computers to operate and maintain the programing test console and check-out equipment of the E-2A aircraft's automatic flight control system.
Instruction: Lectures and practical exercises in the operation and maintenance of the programming, test console and check-out equipment of the E-2A aircraft's automatic flight control system, including operation of various adapters, power supplies; amplifiers; block-diagram and component analysis; and associated test sets.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics laboratory (4/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics laboratory (4/74).

NV-1715-0479
RA-1C AN/APN-120 ELECTRONIC ALTIMETER INTERMEDIATE MAINTENANCE
Course Number: Not available
Location: Air Maintenance Training Detachment, Albany, GA.
Length: 3 weeks (120 hours).
Exhibit Dates: 4/68-Present.
Exhibit Dates: 4/68-Present.
Objectives: To train maintenance personnel to train the AN/APN-120 electronic altimeter and associated semiautomatic test equipment.
Instruction: Lectures and practical exercises in the operation and maintenance of the AN/APN-120 electronic altimeter and associated semiautomatic test equipment, including transmitter, radar fundamentals, power supplies, FM and AM review, low- and high-altitude systems components and circuit analysis, and test equipment functions.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics laboratory (4/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics laboratory (4/74).

NV-1715-0480
BASIC ELECTRONICS ORIENTATION
Course Number: D-100-015
Location: Fleet Airborne Electronics Training Unit, Atlantic, Norfolk, VA; Fleet Airborne Electronics Training Unit Detachment, Jacksonville, FL.
Length: 6 weeks (180 hours).
Exhibit Dates: 7/66-12/68.
Objectives: To train maintenance personnel in basic electronics.
Instruction: Lectures in AC and DC circuits, telegraphy, mathematics, electronics, physics of atomic structure, vacuum tube and transistor theory, and special test equipment usage, including meters, signal generators, and oscilloscopes.
Credit Recommendation: In the lower-division baccalaureate/associate degree category.
1-216  COURSE EXHIBITS

gory, 2 semester hours in electricity and
electronics (12/68).

NV-1715-0481
1. BASIC AIRBORNE RADIO
COMMUNICATIONS OPERATOR
2. AIRBORNE RADAR
COMMUNICATIONS OPERATOR (ARCO).

Course Number: Version 1: D-201-0010.
Version 2: D-201-010
Location: Fleet Airborne Electronics
Training Unit, Jacksonville, FL; Fleet Air
borne Electronics Training Unit, Bruns-
wick, ME.
Length: Version 1: 5 weeks (175 hours).
Version 2: 2 weeks (320 hours).
Exhibit Dates: Version 1: 1/70-Present.
Objectives: To train enlisted personnel to
be airborne radio communications opera-
tors.

Instruction: Lectures and laboratories in
international Morse code, communications
publications, naval communications pro-
ducesses, electronic equipment safety precau-
tions, naval patrol aircraft power supply
and communications systems operation and
in-flight maintenance procedures, and tele-
itywriter and radiotelephone operating
procedures.

Credit Recommendation: Version 1: In the
vocational certificate category, 2 semester
hours in radio operation or two-way commu-
nications (6/75).
Version 2: In the upper-
division baccalaureate category, credit in
electronics on the basis of institutional eval-
uation (4/74).

NV-1715-0482
AN/SPN-10 OPERATOR

Course Number: D-202-010, D-227-010.
Location: Fleet Airborne Electronics
Training Unit, Atlantic, Norfolk, VA.

Naval Air Station, Patuxent River, MD.
Length: 4 weeks (120 hours).
Exhibit Dates: 1/66-12/68.
Objectives: To train enlisted personnel to
operate automatic carrier landing system
equipment.

Instruction: Lectures and practical exer-
cises in AN/SPN-10 automatic, carrier
landing system equipment operational capa-
bilities and limitations, aircraft equipment
repair, radio frequency and associated
support equipment introduction, prepara-
tory procedures and subsystem checks, op-
erator maintenance, emergency procedures
and safety rules, and terminal training on the
AN/MFN-TI console and subsystems.

Credit Recommendation: Credit is not rec-
ommended because of the limited technical
nature of the course (4/74).

NV-1715-0483
AN/APN-122 MAINTENANCE TRAINING
(AN/APN-122 Doppler Navigation
System Maintenance)

Course Number: D-102-014.
Location: Fleet Airborne Electronics
Training Unit, Atlantic, Norfolk, VA.
Length: 4 weeks (120 hours).
Exhibit Dates: 1/63-12/68.
Objectives: To train maintenance person-
nel to conduct preventive and corrective
maintenance of the AN/APN-122 Doppler
radar navigation equipment.

Instruction: Lectures in AN/APN-122
Doppler radar navigational equipment, in-
cluding transmitter, antenna system, op-
eration; block diagram and circuit analysis; troubleshooting and
maintenance techniques; test equipment
usage; pre-amp, signal data converter, and
ground, speed computer alignment; and
trouble analysis, isolation and repair.

Credit Recommendation: In the upper-di-
vision baccalaureate category, credit in
electrical laboratory on the basis of institu-
tional evaluation (12/68).

NV-1715-0484
AN/APS-20E MAINTENANCE TRAINING
(AN/APS-20E Radar System Mainte-
nance)

Course Number: D-102-015.
Location: Fleet Airborne Electronics
Training Unit, Atlantic, Norfolk, VA.
Length: 6 weeks (180 hours).
Exhibit Dates: 11/63-12/68.
Objectives: To train electronics mainte-
nance personnel to maintain the AN/APS-
20E radar.

Instruction: Lectures on AN/APS-20E
radar, including theory of operation, system
description, low-voltage power supply, syn-
chronizer, modulator, transmitter, duplexer,
radar receiver, antenna, and operator indi-
cators; and practical applications, including
equipment operation, alignment, and trou-
bleleshooting.

Credit Recommendation: In the upper-di-
vision baccalaureate category, credit in
electrical laboratory on the basis of institu-
tional evaluation (12/68).

NV-1715-0485
AN/APS-38B MAINTENANCE TRAINING
(AN/APS-38B Radar System Mainte-
nance)

Course Number: D-102-016.
Location: Fleet Airborne Electronics
Training Unit, Atlantic, Norfolk, VA.
Length: 3 weeks (90 hours).
Exhibit Dates: 11/63-12/68.
Objectives: To train electronics mainte-
nance personnel to maintain the AN/APS-
38B radar.

Instruction: Lectures and practical exer-
cises in AN/APS-38B radar system oper-
ation, including description and function of
equipment, circuit analysis, and operating
procedures and techniques; and practical
applications, including equipment operation,
alignment, component location, associated
test equipment usage, and trouble location.

Credit Recommendation: In the upper-di-
vision baccalaureate category, credit in
electrical laboratory on the basis of institu-
tional evaluation (12/68).

NV-1715-0486
AN/ARC-94 MAINTENANCE TRAINING
(AN/ARC-38A SSB Transceiver Main-
tenance)

Course Number: D-102-021.
Location: Fleet Airborne Electronics
Training Unit, Atlantic, Norfolk, VA.
Length: 3 weeks (90 hours).
Exhibit Dates: 12/66-12/68.
Objectives: To train electronics mainte-
nance personnel to maintain the AN/ARC-
94 system.

Instruction: Lectures in AN/ARC-94 op-
eration, associated test equipment usage,
and alignment and troubleshooting proce-
dures.

Credit Recommendation: In the upper-di-
vision baccalaureate category, credit in
electrical laboratory on the basis of institu-
tional evaluation (12/68).

NV-1715-0487
AN/ARN-21D TACAN NAVIGATION SET
MAINTENANCE
(AN/ARN-21D Maintenance Training)
(AN/ARN-21D TACAN Receiver Main-
tenance)

Course Number: D-102-024.
Location: Fleet Airborne Electronics
Training Unit, Atlantic, Norfolk, VA.
Length: 4 weeks (120 hours).
Exhibit Dates: 12/66-12/68.
Objectives: To train maintenance person-
nel to operate, adjust, and troubleshoot AN/ARN-21D navigational radio equip-
ment.

Instruction: Lectures and practical experi-
ence in AN/ARN-21D navigational radio
equipment operation, basic electronics and
circuit theory, component failure system
analysis, and system adjustment and align-
ment procedures.

Credit Recommendation: In the upper-di-
vision baccalaureate category, credit in
electrical laboratory on the basis of institu-
tional evaluation (12/68).

NV-1715-0488
AN/ASA-16 DATA DISPLAY GROUP
MAINTENANCE TRAINING

Course Number: D-102-026.
Location: Fleet Airborne Electronics
Training Unit, Atlantic, Norfolk, VA.
Length: 4 weeks (120 hours).
Exhibit Dates: 3/64-12/68.
Objectives: To train electronics mainte-
nance personnel to maintain the AN/ASA-
16 display group.

Instruction: Lectures and practical exer-
cises in AN/ASA-16 data display group
theory of operation, including block-di-
agram and circuit analysis; equipment oper-
ation, calibration, and component location;
test equipment usage, and trouble loca-
tion.

Credit Recommendation: In the upper-di-
vision baccalaureate category, credit in
electrical laboratory on the basis of institu-
tional evaluation (4/74).

NV-1715-0489
AN/ARC-94 SINGLE SIDE BAND
TRANSCEIVER MAINTENANCE

Course Number: D-102-030.
Location: Fleet Airborne Electronics
Training Unit, Atlantic, Norfolk, VA.
Length: 3 weeks (90 hours).
Exhibit Dates: 1/60-12/68.
Objectives: To train electronics mainte-
nance personnel to maintain the AN/ARC-
94 system.

Instruction: Lectures in AN/ARC-94 op-
eration, associated test equipment usage,
and alignment and troubleshooting proce-
dures.

Credit Recommendation: In the upper-di-
vision baccalaureate category, credit in
electrical laboratory on the basis of institu-
tional evaluation (12/68).

NV-1715-0490
ALTERNATING CURRENT POWER SYSTEMS

Course Number: D-602-011.
Location: Fleet Airborne Electronics
Training Unit Detachment, Jacksonville,
FL.
Length: 4 weeks (120 hours).
Exhibit Dates: 1/66-12/68.
Objectives: To train airborne electricians
to maintain, analyze, and isolate malfunc-
tions in aircraft electrical systems.
Instructor: Lectures and practical exercises in alternating current theory, power systems, components, electron and magnetic principles review, DC current theory review, various types of reactance, transformers, and description, components, and troubleshooting procedures for brushless, and emergency generator systems.

Credit Recommendation: In the upper-division baccalaureate category, credit in electronics laboratory on the basis of institutional evaluation (12/68)

NV-1715-0491
AN/BPS-15 RADAR COMBINED MAINTENANCE
Course Number: A-102-0199
Location: Submarine Training Center, Pacific, Pearl Harbor, HI; Submarine School, New London, CT.
Length: 3/72 weeks (Present hours).
Exhibit Dates: 3-4-90-120.
Objectives: To provide instruction on the operation and maintenance of an installed submarine radar system.

Instruction: Course includes lectures on basic theory, including AC/DC power distribution, transmitter/receiver theory, video and control circuits. Course also covers troubleshooting and performance, and student learns principles of radar, technical theory of operation, preventive and corrective maintenance.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in electronics engineering technology (9/76).

NV-1715-0492
SATELLITE RECEIVER AN/SSN-6/A COMBINED MAINTENANCE
(Satellite Receiver AN/SSN-6/A, BRN-6 Combined Maintenance, Class 1)
Course Number: A-102-0168 & 2
Location: Submarine School, New London, CT; Submarine Training Center, Pacific, Pearl Harbor, HI.
Length: 12/70 weeks (Present hours).
Exhibit Dates: 12-60.
Objectives: To provide the necessary theory and skills to operate and maintain a navigation satellite receiver.

Instruction: This is a block-diagram-level course emphasizing physical, functional, and interface description as well as the basic maintenance of a radio receiver. Course provides an introduction to digital mathematics and digital circuits, and basic operation of integrated circuits.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics technology (9/77).

NV-1715-0493
AN/APN-111(V) RADAR ALTIMETER [LOW LEVEL] INTERMEDIATE MAINTENANCE (AN/APN-111(V) RADAR ALTIMETER)
Course Number: Not available.
Location: Air Maintenance Training Detachment, Quonset Point, RI; Air Maintenance Training Detachment, Imperial Beach, CA.
Length: 3 weeks (96 hours).
Exhibit Dates: 3/71-Present.
Objectives: To train maintenance personnel to operate and maintain the AN/APN-111(V) radar altimeter system.

Instruction: Lectures and practical exercises in the maintenance and operation of the AN/APN-111(V) radar altimeter system, including block-diagram analysis, transmitter, receiver, and range detection, output circuits, and testing and alignment.

Credit Recommendation: In the vocational certificate category, credit in electronics laboratory on the basis of institutional evaluation (4/74).

NV-1715-0494
ELECTRONIC SURVEILLANCE MAINTENANCE (ESM) AN/WYQ-1, AN/BRQ-1 COMBINED MAINTENANCE (AN/WYQ-1 and AN/BRQ-1 Combined Maintenance Class C-1)
Course Number: A-102-0128
Location: Submarine School, New London, CT; Submarine Training Center, Pacific, Pearl Harbor, HI.
Length: 5 weeks (150 hours).
Exhibit Dates: 5/68-Present.
Objectives: To teach the maintenance of a digital display unit and a specialized surveillance receiver.

Instruction: Course covers the maintenance of a display unit and a surveillance receiver. This equipment is made with transistors and IC logic boards. The course includes physical and functional characteristics and data on enrollment, adjustment, calibration, preventive maintenance, and troubleshooting to isolate faults to the IC board and component level, and to make repairs. Systems maintained are control display unit, printer recorder, magnetic tape transport, digital processor, power supply, superheterodyne receiver, timing module, and interfacing module.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in electronics technology (9/77).

NV-1715-0495
TRADEMAN'S (REPAIRMAN) CLASS A
Course Number: None.
Location: Air Technical Training Center, Memphis, TN.
Length: 17 weeks (680 hours).
Exhibit Dates: 6/76-7/65.
Objectives: To train enlisted personnel to install, operate, maintain, and repair training devices used in gunnery, aviation, and electronics instruction.

Instruction: Lectures and practical exercises in training devices operation, maintenance, and repair. Course includes electronic fundamentals, servomechanisms, vacuum and mechanical systems, computer basics, flight theory and performance, computer basics, flight theory and performance introduction, basic jet instrument training, basic navigation principles, radio aids to navigation, and flight simulator maintenance.

Credit Recommendation: Version 1: In the vocational certificate category, 2 semester hours in electricity or electronics (4/74); in the lower-division baccalaureate/associate degree category, credit in electricity or electronics on the basis of institutional evaluation (4/74). Version 2: In the vocational certificate category, 2 semester hours in electronic laboratory (4/74), in the lower-division baccalaureate/associate degree category, credit in electrical laboratory on the basis of institutional evaluation (4/74). Version 3: In the lower-division baccalaureate/associate degree category, 6 semester hours in electricity or electronics (12/68).

NV-1715-0497
E-1B ELECTRONIC SYSTEMS ORGANIZATIONAL MAINTENANCE (E-1B Integrated Electronic System Organizational Maintenance)
Course Number: C-608-3457, C-602-3457.
Location: Air Maintenance Training Detachment, Norfolk, VA; Air Maintenance Training Detachment, North Island, CA.
Length: 2 weeks (120-160 hours).
Exhibit Dates: 11/72-Present.
Objectives: To train flight maintenance personnel to maintain and operate the E-1B radar, communication, and navigation electronic systems.

Instruction: Lectures and practical exercises in the maintenance and operation of the E-1B radar, communication, and navigation electronic systems. Includes radar principles, block-diagram analysis of transmitters, R/F, circuits, and computer operations.
and control circuits, radar system associated equipment; and IFF systems operation.

Credit Recommendation: Version 1: In the lower-division baccalaureate/associate degree category, credit in electronics laboratory on the basis of institutional examination (4/74); in the upper-division baccalaureate/associate degree category, credit in electronics laboratory on the basis of institutional examination (4/74). Version 2: In the vocational certificate category, 3 semester hours in radar or HF circuits (4/74).

NV-1715-0499
F-4J DATA LINK SYSTEM INTERMEDIATE, MAINTENANCE
Course Number: Not available
Location: Air Maintenance Training Detachment, Miramar, CA; Air Maintenance Training Detachment, Oceana, VA; Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Cherry Point, NC
Length: 6 weeks (240 hours)
Exhibit Dates: 2/70-Present.

Objectives: To train maintenance personnel who have completed courses in transistor and digital fundamentals to maintain and operate the F-4J data link system.

Instruction: Lectures and practical exercises in the operation and maintenance of the F-4J data link system, including review of digital mathematics, logic circuits and functions, system evaluation by functional block description, descriptive theory of system components, message generator and display, discrete indicators, and radio indicators.

Credit Recommendation: In the vocational certificate category, 4 semester hours in electrical laboratory (4/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in electrical laboratory, and additional credit in electrical laboratory on the basis of institutional examination (4/74); in the upper-division baccalaureate/associate degree category, credit in electrical laboratory on the basis of institutional examination (4/74).

NV-1715-0500
ELECTRONIC SURVEILLANCE MAINTENANCE (ESM) AN/WLR-6, BASIC MAINTENANCE
Course Number: A-233-0042
Location: Submarine School, New London, CT; Submarine Training Center, Pacific, Pearl Harbor, HI
Length: 3 weeks (90 hours)
Exhibit Dates: 1/70-Present.

Objectives: To present the tasks required for four of the five operator positions required to handle a complex submarine surveillance receiver.

Instruction: Course offers general physical description, equipment interface, basic theory, and function of a complex receiver system; signal processing. Major emphasis is on learning to operate this equipment at four of the five operator positions of this equipment. These tasks include knowing the functions of all controls and connector terminals, the RF receivers, audio, video, and auxiliary equipment and correct patch plug interconnections.

Credit Recommendation: No credit is recommended because of the military-specific nature of the course (9/77).

NV-1715-0501
ELECTRONIC SURVEILLANCE MAINTENANCE (ESM) AN/WLR-6, COMBINED MAINTENANCE
Course Number: A-233-0041.
Location: Submarine School, New London, CT; Submarine Training Center, Pacific, Pearl Harbor, HI
Length: 16 weeks (480 hours)
Exhibit Dates: 9/69-Present.

Objectives: Course is designed to train technicians to operate and maintain a complex manually operated multichannel signal reception and processor radio receiver that can handle any type of transmitted signal.

Instruction: The student learns the functional description, block-diagram signal flow and operating modes of the system in some 255 hours of lecture and 225 hours of laboratory. Subjects covered are a multiple antenna system and its coupling and antenna switching circuits, a VHF panoramic manual receiver and its subsystems, basic digital concepts using resistor diode logic and transistor flip-flops, knowledge and application at db and noise figure, video and audio amplifiers, video and audio tape recorders, video and audio distribution panels, power supplies, power distribution system, characteristics and operation of traveling wave tubes and klystrons, VHF preamplifiers, relay switching circuits, signal generator, control unit, P-channel multplex display unit, FM-multiplexer and demultiplexer. Student learns to calibrate, align, adjust, and do performance tests on all this equipment.

Credit Recommendation: In the vocational certificate category, 10 semester hours in electronics (9/77).

NV-1715-0502
DATA GATHERING SET AN/BQH-51V12, BASIC MAINTENANCE
Course Number: A-130-0176
Location: Submarine School, New London, CT; Submarine Training Center, Pacific, Pearl Harbor, HI
Length: 4 weeks (160 hours)
Exhibit Dates: 2/70-Present.

Objectives: Course provides system-level approach to maintenance of data-gathering equipment.

Instruction: Course includes familiarization with the FR 1300 tape recorder and console as well as other highly specialized pieces of equipment. Most of the course is based on laboratory.

Credit Recommendation: No credit is recommended because of the limited technical nature of the course (9/77).

NV-1715-0503
SONAR CLASSIFICATION SET AN/BQH-10D/E COMBINED MAINTENANCE
Course Number: A-130-0161.
Location: Submarine School, New London, CT; Submarine Training Center, Pacific, Pearl Harbor, HI
Length: 2 weeks (60 hours)
Exhibit Dates: 5/74-Present.

Objectives: To provide the necessary theory and skills required to operate and maintain a sonar classification set.

Instruction: Course offers basic training of a highly specialized nature. Course presents field effect transistors, integrated circuits, and logic circuits; also teaches specifics of this equipment and includes operation of DC power supplies, a signal data recorder, a hydrophone amplifier, and a spectrum analysis.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics technician (9/77).

NV-1715-0504
AVIATION ELECTRONICS INTELLIGENCE, CLASS O/C
Course Number: Not available
Location: Air Technical Training Center, Glynco, GA
Length: 7 weeks (280 hours)
Exhibit Dates: 12/65-12/68.

Objectives: To train flight officers and enlisted personnel qualified as aircrewmembers to operate electronic countermeasures and electronic counter-countermeasures systems.

Instruction: Lectures and practical exercises in the operational functions associated with electronic countermeasures and electronic counter-countermeasures and associated systems, including general electronic warfare information, ECM equipment, radar processing procedures, in-flight training, basic receiver and oscilloscope principles, and operation of associated equipment.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (4/74).

NV-1715-0505
EKA-3B AN/ASN-66B NAVIGATIONAL COMPUTER SET INTERMEDIATE MAINTENANCE
Course Number: Not available
Location: Air Maintenance Training Detachment, Whidbey Island, WA
Length: 3 weeks (120 hours)
Exhibit Dates: 8/68-Present.

Objectives: To train maintenance personnel to operate and maintain the AN/ASN-66B navigational computer set.

Instruction: Lectures and practical exercises in the operation and maintenance of the AN/ASN-66B navigational computer set, including introduction to dead-reckoning navigation, operational analysis, astatyn theory, great-circle solutions using spherical trigonometry, introductory solid-state circuitry; amplifiers, logic and compensation circuits; air speed analysis; synchro theory; use of multimeters, phase angle voltmeter, oscilloscope, and digital voltmeter, and troubleshooting procedures.

Credit Recommendation: In the vocational certificate category, 1 semester hour in physics and electrical laboratory (4/74), in the lower-division baccalaureate/associate degree category, credit in physics and electrical laboratory on the basis of institutional examination (4/74); in the upper-division baccalaureate category, credit in physics and electrical laboratory on the basis of institutional examination (4/74).

NV-1715-0506
P-1A/B SENSOR STATION ONE AND TWO (ACOUSTIC SYSTEM TECHNICIAN)
ORGANIZATIONAL MAINTENANCE
Course Number: C-102-3559.
Location: Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA
Length: 4 weeks (160 hours)
Exhibit Dates: 3/73-Present.

Objectives: To train enlisted personnel to maintain and test specific acoustic sensor systems.

Instruction: Lectures and practical exercises in the maintenance of specific acoustic sensor systems, including physics, electronics, signal processing, and maintenance of specific acoustic sensor systems.
controls, signal flow and recorder operation, and repair procedures for sonobuoys, sound recorder systems, and computer recorders.

Credit Recommendation: Insufficient data for evaluation (4/74).

NV-1715-0507
AN/APN-153(V) DOPPLER RADAR NAVIGATION SYSTEM INTERMEDIATE MAINTENANCE
Course Number: C-102-3041.
Location: Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA; Air Maintenance Training Detachment, Kingsville, TX; Air Maintenance Training Detachment, Lemoore, CA; Air Maintenance Training Detachment, Cherry Point, NC; Air Maintenance Training Detachment, Cecil Field, FL; Air Maintenance Training Detachment, North Island, CA; Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Key West, FL; Air Maintenance Training Detachment, Beaufort, SC; Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Oceana, VA; Air Maintenance Training Detachment, Coming Field, TX; Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Webster Point, RI.
Length: 5-6 weeks (200-240 hours).
Exhibit Dates: 8/69-Present.
Objectives: To train maintenance personnel who have backgrounds in electronics and digital fundamentals to maintain the AN/APN-153(V) Doppler radar system.
Instruction: Lectures and practical exercises in the maintenance of the AN/APN-153(V) Doppler radar system, including circuit analysis of transmitters, logic systems, modulator assemblies, high-voltage power supplies, automatic frequency control assembly, antenna indicators; use of oscilloscopes, frequency counters, VTVM, sweep generator, audio oscillator, and signal generator; and repair techniques for system subassemblies.
Credit Recommendation: Insufficient data for evaluation (4/74).

NV-1715-0508
E-2B OA-630/ASA-27A DIFFERENCE ORGANIZATIONAL MAINTENANCE
Course Number: Not available.
Location: Air Maintenance Training Detachment, North Island, CA.
Length: Version 1: 3 weeks (120 hours). Version 2: 4 weeks (176 hours).
Objectives: To train E-2A weapons system specialists to operate and maintain OA-630/ASA-27A computers.
Instruction: All Versions: Lectures and practical exercises in general-purpose computers, system elements, power distribution, processor control and input/output operations, timing circuits, control units, displays, navigation interfaces, and maintenance procedures. Version 1: Includes magnetic tape handling. Version 2: Includes logic circuits and mechanization.
Credit Recommendation: Insufficient data for evaluation (4/74).

NV-1715-0509
INACTIVE DUTY RESERVE COMBAT INFORMATION CENTER (CIC) CLASS—BASIC, SUPERVISORY AND OFFICER TEAM TRAINING
Course: Lectures and practical exercises in the operation of specialized combat information centers, including introductory electronics, electronic warfare, search and rescue, communication, antiair warfare, and geographic plots, and weapon combat operations.
Objectives: To train inactive-duty reserve personnel to operate shipboard combat information centers.
Instruction: Lectures and practical exercises in the operation of specialized combat information centers, including introductory electronics, electronic warfare, search and rescue, communication, antiair warfare, and geographic plots, and naval combat operations.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (4/74).

NV-1715-0510
ELECTRONICS TECHNICIAN AN/SPA-25 INDICATOR GROUP CLASS C MAINTENANCE
Course Number: A-104-014; A-104-015.
Location: Electronics Technician, Class C School, San Diego, CA; Electronics Technician, Class C School, Norfolk, VA.
Length: 2 weeks (60 hours).
Exhibit Dates: 1/70-Present.
Objectives: To train enlisted personnel to operate and maintain the AN/SPA-25 indicator group and to use associated test equipment.
Instruction: Lectures and practical exercises in the operation and maintenance of the AN/SPA-25 indicator group and the use of associated test equipment, including location and identification of units, assemblies, and subassemblies; timing system, sweep circuit, servos system, gear train, power supply, and intensity modulator circuit analyses; and planned maintenance and maintenance data collection systems.
Credit Recommendation: In the vocational certificate category, 1 semester hour in electrical maintenance laboratory (4/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in basic electronics laboratory (4/74); in the upper-division baccalaureate category, 1 semester hour in basic electrical laboratory (4/74).

NV-1715-0511
P-3 AN/APX-7 RADAR RECOGNITION SYSTEM INTERMEDIATE MAINTENANCE
Course Number: C-102-3538.
Location: Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA.
Length: 2 weeks (80 hours).
Exhibit Dates: 12/70-Present.
Objectives: To train maintenance personnel with a basic knowledge of transistor theory to operate and maintain the AN/APX-7 radar recognition system.
Instruction: Lectures and practical exercises in the operation and maintenance of the AN/APX-7 radar recognition system, including functional block diagrams, circuit analyses, troubleshooting, alignment procedures, and repair techniques.
Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics laboratory (4/74).

NV-1715-0512
TARTAR RADAR SET AN/SPG-51C AND DIRECTOR MK 73 MODE I
Course Number: A-104-0119.
Location: Guided Missiles School, Dam Neck, VA.
Length: 26 weeks (763 hours).
Exhibit Dates: 1/70-Present.
Objectives: To train fire control technicians to operate and maintain the AN/SPG-51C radar set.
Instruction: Lectures and practical exercises in the maintenance and operation of the AN/SPG-51C radar set, including specialized test equipment, AC and DC power supplies, digital theory, block diagrams of track radar components, various circuits, data flow, missile guidance, signal comparator, and alignment, calibration, troubleshooting, and repair techniques.
Credit Recommendation: In the vocational certificate category, 6 semester hours in basic electrical laboratory (4/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in basic electrical laboratory (4/74); in the upper-division baccalaureate category, 1 semester hour in basic electrical laboratory (4/74).

NV-1715-0513
AN/APQ-126 RADAR SET SPECIAL SUPPORT EQUIPMENT INTERMEDIATE MAINTENANCE
Course Number: C-102-3797.
Location: Air Maintenance Training Detachment, Lemoore, CA; Air Maintenance Training Detachment, Cecil Field, FL.
Length: 7 weeks (280 hours).
Exhibit Dates: 4/73-Present.
Objectives: To train maintenance personnel to operate and maintain the AN/APQ-126 radar set special support equipment at the intermediate level.
Instruction: Lectures and practical exercises in the operation and maintenance of the AN/APQ-126 radar set special support equipment, including introduction to, and circuit analysis of, the interconnecting power supply; control indicator, relay, assembly and adapter boxes, circuit analysis of various generators; circuit analysis of modules, antenna/cover, and intercog system test sets; and alignment, troubleshooting, and check-out procedures.
Credit Recommendation: In the vocational certificate category, 1 semester hour in basic electronic test equipment maintenance (4/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in basic electronic test equipment maintenance on the basis of institutional evaluation (4/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in basic electronics laboratory (4/74).

NV-1715-0514
A-6 AN/APQ-92 RADAR ANTENNA/COVER AND ASSOCIATED TEST SET INTERMEDIATE MAINTENANCE
Course Number: C-102-3773.
Location: Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Oceana, VA.
Length: 2 weeks (80 hours).
Exhibit Dates: 10/71-Present.
Objectives: To train maintenance personnel who have backgrounds in general electronics and maintenance of specific search radar systems to maintain and repair the AN/APQ-92 search radar antenna/cover and associated equipment.
Instruction: Lectures and practical exercises in the maintenance of the AN/APQ-
COURSE EXHIBITS

92 search radar antenna/receiver and associated equipment, including use of block diagrams and signal tracing in system fault diagnosis and correction, function analysis of terrain clearance, microwave and radiating, search receiving, and AFC and local oscillator groups, test set operation, and component selection and search receiver checkout and repair.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics laboratory (4/74), in the lower-division baccalaureate/associate degree category, credit in electronics laboratory on the basis of institutional evaluation (4/74).

NV-1715-0515
AN/ASQ-17B INTEGRATED ELECTRONICS CENTRAL INTERMEDIATE MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, Lemoore, CA; Air Maintenance Training Detachment, Cecil Field, FL; Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA.
Length: 6 weeks (210 hours).
Exhibit Dates: 1/68-Present.
Objectives: To train maintenance personnel to maintain and repair the AN/ASQ-17B integrated electronics central.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (4/74).

NV-1715-0516
AN/APS-13 SEARCH RADAR SYSTEM INTERMEDIATE MAINTENANCE

Course Number: C-100-3571.
Location: Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA.
Length: 4 weeks (160 hours).
Exhibit Dates: 2/73-Present.
Objectives: To train fleet maintenance personnel to operate and maintain the AN/APS-115 radar system.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics (4/74), in the lower-division baccalaureate/associate degree category, credit in electronics on the basis of institutional evaluation (4/74).

NV-1715-0517
VS A W SENSOR OPERATOR S2G

Course Number: D-210-0010.

Location: Fleet Battle Station Specialized Operational Training Group, Quonset Point, RI.
Length: 5 weeks (210 hours).
Exhibit Dates: 10/72-Present.
Objectives: To train flight personnel to operate the passive sensor equipment in the AW S2G aircraft.

Instruction: Lectures and practical exercises in the operation of ASW equipment carried in the S2G aircraft, including MAD fundamentals, operation, signal interpretation; radar fundamentals; target interpretation; navigation computer, ESM equipment and tactics, introductory oceanography; Javelin operation; background, passiveline techniques and equipment, active acoustical equipment; and signature interpretation.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (4/74).

NV-1715-0518
AN/ARN-11B/D TACAN INTERMEDIATE MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, Lemoore, CA; Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Cecil Field, FL; Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Cherry Point, NC.
Length: 3 weeks (120 hours).
Exhibit Dates: 6/69-Present.
Objectives: To train maintenance personnel to operate and maintain the AN/ARN-21B/D TACAN receiver at the intermediate level.

Instruction: Lectures and practical exercises in the operation and maintenance of the AN/ARN-21B/D TACAN receiver, including theory of operation, special test equipment and circuit analyses of system components, block diagrams, and troubleshooting and alignment procedures.

Credit Recommendation: In the vocational certificate category, credit in electronics on the basis of institutional evaluation (4/74).

NV-1715-0519
AN/ARN-321 V TACAN RECEIVER - INTERMEDIATE MAINTENANCE

Course Number: C-102-3034.
Location: Air Maintenance Training Detachment, Meridian, MS; Air Maintenance Training Detachment, Miramar, CA; Air Maintenance Training Detachment, Leesburg, VA; Air Maintenance Training Detachment, New River, NC; Air Maintenance Training Detachment, Jacksonville, FL; Air Maintenance Training Detachment, Cecil Field, FL; Air Maintenance Training Detachment, Key West, FL; Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Imperial Beach, CA; Air Maintenance Training Detachment, North Island, CA; Air Maintenance Training Detachment, Moffett Field, CA; Air Maintenance Training Detachment, Cherry Point, NC; Air Maintenance Training Detachment, El Toro, CA.
Length: 3 weeks (120 hours).
Exhibit Dates: 5/68-Present.

Objectives: To train maintenance personnel with backgrounds in transistor fundamentals to operate and maintain the AN/ARN-321 V TACAN receiver.

Instruction: Lectures and practical exercises in the operation and maintenance of the AN/ARN-321 V TACAN receiver, including theory of operation, circuit analysis and block diagrams of system components, channel servo operation, power supply, range-measuring and bearing-measuring circuitry, and troubleshooting and alignment procedures.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronic equipment maintenance (4/74); in the lower-division baccalaureate/associate degree category, credit in electronic equipment maintenance on the basis of institutional evaluation (4/74).

NV-1715-0520
A-5A RA-JC AN/ASB-12 LINE AND SHOP MAINTENANCE

Course Number: Not available.
Location: Air Technical Training Center, Memphis, TN.
Length: 12 weeks (480 hours).
Exhibit Dates: 1/68-Present.
Objectives: To train maintenance personnel to service and maintain the AN/ASB-12 bomb-directing set.

Instruction: Lectures and practical exercises in the servicing, maintenance and modification of the AN/ASB-12 bomb-directing set, including introductory navigation and auto navigation techniques and systems components, video scanners, radar techniques, tie-in equipment, bombing computer elements, all-weather and visual modes, and overall system analysis.

Credit Recommendation: In the vocational certificate category, 3 semester hours in aircraft navigation systems (4/74).

NV-1715-0522
AVIATION ELECTRONICS OFFICERS, CLASS O

Course Number: Not available.
Location: Air Technical Training Center, Memphis, TN.
Length: 40 weeks (1420 hours).
Objectives: To train aviation ground officers or aviators and warrant officers to supervise electrical and electronic maintenance activities.

Instruction: Lectures and practical exercises in the supervision of electrical and
electronic maintenance activities, including basic electricity and electronic theory, introduction to radar, avionic systems operation, administrative procedures, and automatic flight control and special systems.

Credit Recommendation: In the vocational certificate category, 3 semester hours in basic electricity, 3 in electronics, 3 in electronic systems laboratories, 5 in electronics systems laboratory (4/74), in the lower-division baccalaureate/associate degree category, 6 semester hours in electricity and electronics, 5 in engineering electronics (12/68); in the upper-division baccalaureate category, 3 semester hours in basic electricity and electronics (4/74).

NV-1715-0523

ELECTRONICS TECHNICIAN, CLASS C, INDUSTRIAL SYNTHESIZED INDEPENDENT SIDEBAND RECEIVER

Course Number: A-101-039
Location: Naval Training Center, Great Lakes, IL.
Length: 4 weeks (160 hours)
Exhibit Dates: 5/68-12/68.
Objectives: To train electronic technicians and radio men to operate and maintain the AN/FRR-60(V) model DRR-5M synthesized independent sideband receiver and ancillary equipment.

Instruction: Lectures and practical exercises in the operation and maintenance of the AN/FRR-60(V) model DRR-5M synthesized independent sideband receiver and ancillary equipment, including introduction to communications systems, receiver equipment, circuit analysis, the 3M system, component analysis, and power supplies.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electrical laboratory (4/74), in the lower-division baccalaureate/associate degree category, credit in electrical laboratory on the basis of institutional evaluation (4/74), in the upper-division baccalaureate category, credit in electrical laboratory on the basis of institutional evaluation (4/74).

NV-1715-0524

AN/SPS-37 RADAR SET

Course Number: Not available.
Location: Naval Schools Command, Mare Island, CA.
Length: 28 weeks (840 hours)
Exhibit Dates: 2/68-Present.
Objectives: To train enlisted personnel to operate and maintain the AN/SPS-32 radar set.

Instruction: Lectures and practical exercises in the operation and maintenance of the AN/SPS-32 radar set, including system capabilities and function, block-diagram analysis, digital computer troubleshooting procedures, power distribution system, major units of the Tartar weapon system, other radar and missile system operations, detailed description of mathematics, operation of test equipment, and functional description of the digital-to-analog converter.

Credit Recommendation: In the vocational certificate category, 3 semester hours in digital logic (4/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in digital logic on the basis of institutional evaluation (4/74), credit in electrical lab on the basis of institutional evaluation (4/74).

NV-1715-0525

A1B, RAB, EA1B, AN/ALQ-35 DECISION SUPPORT EQUIPMENT INTERMEDIATE MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, Whidbey Island, WA.
Length: 4 weeks (168 hours)
Exhibit Dates: 4/68-10/68.
Objectives: To train fleet personnel to maintain the AN/ALQ-35 electronics countermeasures system and associated special support equipment at the intermediate level.

Instruction: Lectures and practical exercises in the maintenance of the AN/ALQ-35 electronics countermeasures system and associated special support equipment, including brief review of radar and electronic countermeasures, functional description of the system and all component subsystems, use of standard and specialized electronic test equipment, and alignment, troubleshooting, and repair procedures.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronic equipment maintenance (4/74).

NV-1715-0526

TERBER SET AN/SPG-5B MOD 5

Course Number: A-104-0991, A-104-0992
Location: Naval Schools Command, Mare Island, CA.
Length: 30 weeks (900-973 hours)
Exhibit Dates: 2/66-12/68.
Objectives: To train fire control technicians to maintain the AN/SPG-5B radar system and to use associated test equipment for evaluation of system performance.

Instruction: Lectures and practical exercises in the maintenance of the AN/SPG-5B radar system and the use of associated test equipment for evaluation of system performance, including organization of radar systems, general radar principles and circuits, analysis of system components, track generation, track receiver, range and angle tracking, pulsed radar monitoring, signal flow, electronic counter-countermeasures, and troubleshooting and alignment.

Credit Recommendation: In the vocational certificate category, 15 semester hours in electrical laboratory (4/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in electrical laboratory and 2 additional credits in electrical laboratory on the basis of institutional evaluation (4/74); in the upper-division baccalaureate category, credit in electrical laboratory on the basis of institutional evaluation (4/74).

NV-1715-0527

E-2A AN/ASQ-31 DATA COMMUNICATIONS SYSTEM SPECIAL SUPPORT EQUIPMENT INTERMEDIATE MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, North Island, CA.
Length: 4 weeks (160 hours)
Objectives: To train personnel in the maintenance of AN/ASQ-31 communications system special support equipment.

Instruction: Lectures and practical exercises in the operation and maintenance of the AN/ASQ-31 communications system's special support equipment, including block- and logic-diagram analysis of data communications system test equipment, modes of operation, power supply, flight-line test set components and operation, various module analyses, and testing procedures.

Credit Recommendation: In the vocational certificate category, 2 semester hours in digital communication equipment (4/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in digital communication equipment on the basis of institutional evaluation (4/74).

NV-1715-0528

AN/ALQ-51A COUNTERMEASURES SET

Course Number: Not available.
Location: Air Maintenance Training Detachment, Oceana, VA; Air Maintenance Training Detachment, Sanford, FL; Air Maintenance Training Detachment, Lemoore, CA; Air Maintenance Training Detachment, Cherry Point, NC; Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Cecil Field, FL; Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Mira- mar, CA.
Length: 4 weeks (160 hours)
Exhibit Dates: 10/67-Present.
Objectives: To train maintenance personnel in AN/ALQ-51A countermeasures set theory and maintenance procedures.

Instruction: Lectures and practical exercises in AN/ALQ-51A countermeasures set introduction, block-diagram analysis, programmer, video delay, electronic gate, systems blanking, modulation control, interfer scan/scan, and output and helix modulator assemblies, low-intermediate, and high-voltage power supplies, control circuits, location, use, and theory; and intermediate maintenance procedures, including line checks, power supply checks, module checks, and troubleshooting procedures.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronic equipment maintenance (4/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in electronic equipment maintenance (4/74).

NV-1715-0529

AN/ASM-39 PROJECTED MAP DISPLAY SET (PMD) INTERMEDIATE MAINTENANCE

Course Number: C-150-3783.
Location: Air Maintenance Training Detachment, Lemoore, CA; Air Maintenance Training Detachment, Cecil Field, FL.
Length: 5 weeks (200 hours)
Exhibit Dates: 9/72-Present.
Objectives: To train electronic maintenance personnel in AN/ASM-399 projected map display sets.

Instruction: Lectures in AN/ASM-399 projected map display set servicing, including analog and digital computer hardware, theory and operation, basic logic theory and microcircuit, publications, programming description, and procedures, self-test fault isolation, test set calibration, and associated test equipment operation.

Credit Recommendation: In the vocational certificate category, 3 semester hours in digital computer hardware (4/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in digital computer hardware, and additional credits in digital computer hardware on the basis of institutional evaluation (4/74); in the upper-division baccalaureate category, credit in...
digital computer hardware on the basis of institutional evaluation (4/74).

NY-1715-0530
A-6 SEARCH RADAR MODULE ANALYZER
Test Console
Course Number: Not available.
Location: Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Oceana, VA.
Length: 10 weeks (400 hours).

Exhibit Dates: 9/70-Present.
Objectives: To train maintenance personnel to operate and maintain circuit/system module-level test and repair facilities for search radar sets.

Instruction: Lectures and practical exercises in circuit and functional analysis of search radar system modules, including a variety of circuit types and modes of operation, and troubleshooting, maintenance, and repair procedures using standard and specialized electronic test equipment.

Credit Recommendation: In the vocational certificate category, 7 semester hours in electronic equipment maintenance (4/74); in the lower-division baccalaureate/associate degree category, credit in electronic equipment maintenance on the basis of institutional evaluation (4/74)

NY-1715-0531
RADIO TRANSMITTER AN/WRC-1 FAMILY EQUIPMENT (AN/UR-23(V) Radio Transmitter Maintenance)
Location: Submarine Training Center, Pacific, Pearl Harbor, HI; Fleet Ballistic Missile Submarine Training Center, Charleston, SC.
Length: 4 weeks (120 hours).

Exhibit Dates: 10/72-Present.
Objectives: To train electronics technicians and radio technicians to operate and maintain the AN/UR-23(V) transmitter.

Instruction: Lectures and practical exercises in the operation function and location of test points and subassemblies including block diagrams and schematics for signal tracing analysis of RF, IF, audio and power amplifiers, balance modulator, oscillators, keying circuits, power supplies, power distribution, and monitoring circuits. Preventive maintenance, alignment, troubleshooting and coercive maintenance procedures to replace defective vacuum tubes are given.

Credit Recommendation: In the vocational certificate category, 7 semester hours in electronic communications and systems maintenance (4/74), in the lower-division baccalaureate/associate degree category, credit in communications and systems maintenance on the basis of institutional evaluation (4/74).

NY-1715-0534
AN/ASN-50 ATTITUDE HEADING REFERENCE SYSTEM INTERMEDIATE MAINTENANCE
Course Number: Not available.
Location: Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA.
Length: 9 weeks (360 hours).

Exhibit Dates: 11/72-Present.
Objectives: To train maintenance personnel who have had previous training in basic electronics to operate, test, and troubleshoot the P-3C communications and navigation systems.

Instruction: Lectures and practical exercises in the operation, testing, and troubleshooting of the P-3C communications and navigation systems, radar, air altimeters, radio navigation systems, teletype, teleprinter, digital data link, and computer general information.

Credit Recommendation: In the vocational certificate category, 6 semester hours in communications and systems maintenance (4/74), in the lower-division baccalaureate/associate degree category, credit in communications and systems maintenance on the basis of institutional evaluation (4/74).

NY-1715-0535
AN/ASN-50 ATTITUDE HEADING REFERENCE SYSTEM ADVANCED MAINTENANCE
Course Number: Not available.
Location: Air Maintenance Training Detachment, Moffett Field, CA.
Length: 16 weeks (608 hours).

Exhibit Dates: 10/73-Present.
Objectives: To train maintenance personnel to operate and maintain the attitude-heading reference system.

Instruction: Lectures and practical exercises in the operation and maintenance of the attitude-heading reference system, including special and general test equipment, component operation, and testing and repair procedures.

Credit Recommendation: In the vocational certificate category, 8 semester hours in electronics on the basis of institutional evaluation (4/74).

NY-1715-0536
AN/ASN-50 ATTITUDE HEADING REFERENCE SYSTEM INTEGRAL MAINTENANCE
Course Number: Not available.
Location: Air Maintenance Training Detachment, Moffett Field, CA.
Length: 16 weeks (608 hours).

Exhibit Dates: 10/73-Present.
Objectives: To train maintenance personnel to operate and maintain the attitude-heading reference system.

Instruction: Lectures and practical exercises in fire control systems.

Credit Recommendation: In the vocational certificate category, 8 semester hours in electronics on the basis of institutional evaluation (4/74).

NY-1715-0537
AVIATION FIRE CONTROL TECHNICIAN
Course Number: Not available.
Location: Air Technical Training Center, Memphis, TN.
Length: 11 weeks (440 hours).

Exhibit Dates: 6/66-12/68.
Objectives: To train graduates of the Avionics Fundamentals School to operate fire control equipment.

Instruction: Lectures and practical exercises in weapon system radar fundamentals, including alignment and troubleshooting techniques, basic test equipment, synchros and servos, gyroscopes, magnetic amplifiers, and accelerometers, transmitters, receivers, antennae, power supplies, analog and digital computer operation and maintenance, and airborne weapon system radars, maintenance, bomb director systems, and safety procedures.

Credit Recommendation: In the vocational certificate category, 3 semester hours in radar principles, 1 in analog computers, 1 in...
digital computer fundamentals (4/74); in the lower-degree baccalaureate/associate degree category, 1 semester hour in digital computer fundamentals, and, on the basis of institutional examination, additional credit computer fundamentals, and, in analog computer, 1 in digital computer fundamentals, and, on the basis of institutional examination, additional credit in digital computer fundamentals, and in analog computers on the basis of institutional examination (4/74).

**NV-1715-0540**

AN/ASQ-56A INTEGRATED ELECTRONICS CENTRAL AND RELATED SYSTEMS - INTERMEDIATE MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, Sanford, FL.
Length: 7 weeks (280 hours).
Exhibit Dates: 9/67-Present.
Objectives: To train maintenance personnel to operate and maintain AN/ASQ-56A integrated electronic control systems.

Instruction: Lectures and practical exercises in AN/ASQ-56A electronic control equipment operation and maintenance, including UHF transmitters, receivers, amplifiers, servos, antennas, and controls, IFF/SIF systems; power supply; TACAN system operation and maintenance, AGC and video circuits, block-diagram and circuit analysis, and troubleshooting procedures.

Credit Recommendation: In the vocational certificate category, 4 semester hours in electronic equipment (4/74); in the lower-division baccalaureate/associate degree category, 4 semester hours in electronic equipment, and credit in maintenance laboratory on the basis of institutional examination (4/74).

**NV-1715-0541**

AVIATION SUPPORT EQUIPMENT MOBILE ELECTRIC POWER PLANT - INTERMEDIATE MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, North Island, CA.
Length: 3 weeks (96 hours).
Exhibit Dates: 2/68-Present.
Objectives: To train military personnel to maintain mobile electric power plants and control systems.

Instruction: Lectures and practical exercises in DC generator system, including maintenance publications, component repair, power system circuit analysis, and inspection and troubleshooting procedures; AC generator system, including power system circuit analysis, transformer-transformer power, component repair, and inspection and troubleshooting procedures; AC generator system, including power system circuit analysis, transformer-transformer power, component repair, and inspection and troubleshooting procedures; AC generator system, including power system circuit analysis, transformer-transformer power, component repair, and inspection and troubleshooting procedures; and AC generator system, including control circuit components, circuit analysis, power supply, component repair, and inspection and troubleshooting procedures.

Credit Recommendation: In the vocational certificate category, 4 semester hours in basic electricity and electronics, in the lower-division baccalaureate/associate degree category, 4 semester hours in basic electricity and electronics, in the upper-division baccalaureate category, 4 semester hours in basic electricity and electronics, in the upper-division baccalaureate category, 2 semester hours in basic electricity and electronics, and additional credit in basic electricity or electronics on the basis of institutional examination (4/74).

**NV-1715-0542**

RA-5C SEMI-AUTOMATIC TEST EQUIPMENT AIR DATA, FLIGHT REFERENCE, AND FLIGHT CONTROL INTERMEDIATE MAINTENANCE

Course Number: C-100-3743.
Location: Air Maintenance Training Detachment, Sanford, FL.
Length: 3 weeks (120 hours).
Exhibit Dates: 9/67-12/68.
Objectives: To train maintenance personnel to operate, calibrate, and maintain RA-5C semiautomatic air data, flight reference, and flight control equipment.

Instruction: Lectures in flight control test bench introduction, flight control simulator, pressure and vacuum group and flight parameter simulator testing, flight reference analyzers testing, flight control simulator and control panel test bench, control and guidance test set group introduction, and flight control analyzer testing.

Credit Recommendation: In the vocational certificate category, 4 semester hours in flight control simulator and control (4/74).

**NV-1715-0543**

RA-5C PHOTO SYSTEMS ELECTRONICS

Course Number: Not available.
Location: Air Maintenance Training Detachment, Sanford, FL.
Length: 3 weeks (120 hours).
Exhibit Dates: 12/65-12/68.
Objectives: To provide maintenance personnel with training in basic electricity and electronics.

Instruction: Lectures and practical exercises in basic electricity, including Ohm's law, Simpson's law, power, series and parallel circuits, relay schematics, and schematic reading: basic electronics, including resistors, inductance, capacitance, electron tubes introduction, power supplies filtering and regulation, amplifiers, oscillators, and coupling and tuned circuits; and transistors, including junction transistors, basic transistor circuitry, semiconductors, circuits schematic tracing, special maintenance considerations, and test equipment.

Credit Recommendation: In the vocational certificate category, 4 semester hours in basic electricity and electronics, in the lower-division baccalaureate/associate degree category, 4 semester hours in basic electricity and electronics, in the upper-division baccalaureate category, 4 semester hours in basic electricity and electronics, in the upper-division baccalaureate category, 2 semester hours in basic electricity and electronics, and additional credit in basic electricity or electronics on the basis of institutional examination (4/74).

**NV-1715-0544**

COMMUNICATIONS TECHNICIAN (M), CLASS A

Course Number: Not available.
Location: Naval School, Treasure Island, CA; Naval School, Great Lakes, IL.
Length: 11 weeks (385 hours).
Exhibit Dates: 1/72-1/75.
Objectives: To train interior communications electricians to operate, maintain, and repair automatic telephone systems.

Instruction: Lectures and practical exercises in automatic telephone system operation, maintenance, and repair, including troubleshooting line circuits, multilin systems installation and troubleshooting; telephone equipment, circuit tracing, wiring, line finder and line controls analysis, connector trouble analysis and test set operation, various line dial telephonic systems operation, power equipment, and switches and relays.

Credit Recommendation: In the vocational certificate category, 6 semester hours in telephone repair, installation and maintenance (4/74), in the lower-division baccalaureate/associate degree category, 6 semester hours in telephone repair, installation, and maintenance, and additional credit in telephone repair, installation, and maintenance on the basis of institutional examination (4/74).
NV-1715-0547
RA-SC SEMI-AUTOMATIC TEST EQUIPMENT
BOMB DIRECTOR
Course Number: F-502-820
Location: Air Maintenance Training Detach-
ment, Sanford, FL.
Length: 2 weeks (300 hours)
Exhibit Dates: 4/74-Present
Objective: To train maintenance personnel to operate, maintain, and cal-
borate a bomb director test group and test set

Instruction: Lectures and practical exercises in bomb director test group equipment
and missile initialization system. Involves basic components, theory of operation,
radar and TV test equipment, and navigation and operational procedures.

Credit Recommendation: Credit is not recommended because of the limited technical
nature of the course (4/74).

NV-1715-0511
Mk V ATMOSPHERE ANALYZERS
Course Number: F-623-031
Location: Air Maintenance Training Detach-
ment, Groton, CT.
Length: 2 weeks (60 hours)
Exhibit Dates: 6/71-Present
Objective: To train electricians and ship-
yard maintenance technicians to operate, maintain, troubleshoot, and repair equipment.

Instruction: Lectures and practical exercises in bomb director test group equipment
and missile initialization system. Involves basic components, theory of operation, radar and TV

Credit Recommendation: Credit is not recommended because of the limited technical
nature of the course (4/74).

NV-1715-0552
F-4/B/J AIR DATA COMPUTER SET
INTERMEDIATE MAINTENANCE
Course Number: C-602-3810
Location: Air Maintenance Training Detach-
ment, Miramar, CA.
Length: 2 weeks (96 hours)
Exhibit Dates: 3/74-1974
Objective: To train maintenance personnel to maintain the computer on the F-4/B/J aircraft.

Instruction: Lectures and practical exercises in the maintenance of the air data
computer set on the F-4/B/J aircraft. Includes components and functional analysis of
the computer, test equipment, and component repair and calibration.

Credit Recommendation: Not recommended because of the limited technical
nature of the course (4/74).

NV-1715-0553
AN/APN-130 RADAR NAVIGATION SET
INTERMEDIATE MAINTENANCE
Course Number: C-502-3810
Location: Air Maintenance Training Detach-
ment, Key West, FL.
Length: 3-4 weeks (132-160 hours)
Exhibit Dates: 4/74-Present
Objective: To train maintenance personnel to maintain the ANP-130 radar navigational
system at the intermediate level.

Instruction: Lectures and practical exercises in the maintenance of the ANP-130 radar navigational
system. Includes Doppler theory and system operation, power supply and test set operation,
signal data converter, and advanced navigation.

Credit Recommendation: Credit is not recommended because of the limited technical
nature of the course (4/74).

NV-1715-0554
ELECTRONICS TECHNICIAN (ET) SENIOR
Course Number: Not available.
fundamentals of computer logic and systems, with emphasis on maintenance of equipment, microwave principles, including characteristics of transmission lines, waveguides, cavities, antennas, microwave tubes and circuits, fundamentals of AM, FM, and SSB, and block diagrams and functional operation of navigation and radar systems, with emphasis on maintenance and repair.

Credit Recommendation: In the vocational certificate category, 12 semester hours in mathematics and electronics (4/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in mathematics, 6 in electronics (4/74), in the upper-division baccalaureate category, 3 semester hours in mathematics, 6 in engineering electronics (12/68).

NV-1715-0557
AN/SPS-40 RADAR SYSTEM
(Electronics Technician AN/SPS-40 Radar Set Maintenance)
Course Number: A-104-0040, A-104-0041.
Location: Electronics Schools Command, San Diego, CA; Fleet Training Center, Norfolk, VA.
Length: 8 weeks (240 hours)
Exhibit Dates: 4/68-Present.
Objectives: To train enlisted personnel to operate and maintain the AN/SPS-40 radar set and associated test equipment.
Instruction: Lectures and practical exercises in the operation and maintenance of the AN/SPS-40 radar set and associated test equipment, including detailed operation and troubleshooting procedures for power, hydraulic, antenna, timing, frequency generation, transmitter, receiver, moving-target indicator, and video distribution subsystems.
Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics (4/74); in the lower-division baccalaureate/associate degree category, credit in electronics on the basis of institutional evaluation (4/74).

NV-1715-0560
OXYGEN GENERATOR ELECTRICAL MODEL 6L16 (ENLISTED)
Course Number: F-623-029.
Location: Submarine School, Groton, CT.
Length: 3 weeks (150 hours)
Exhibit Dates: 4/68-Present.
Objectives: To train enlisted personnel in maintenance of electronics and electricity, magnetic amplifiers, and transistor theory to maintain and operate the 6L16 electrolytic oxygen generator.
Instruction: Lectures and practical exercises in the operation and maintenance of the 6L16 electrolytic oxygen generator, including the electrolytic process of producing oxygen, flow system analysis, functions of electronic control system, hydraulic flow components, electrolytic cells, power supplies and troubleshooting, annunciators (contact and magnetic amplifier types), pressure controller system function (operation and analysis), calibration, and troubleshooting and test procedures.
Credit Recommendation: In the vocational certificate category, credit in electronics laboratory on technical elective on the basis of institutional evaluation (4/74).

NV-1715-0561
S-1/D/E AN/A-4(V) INDICATOR GROUP, ELECTRONIC INTERMEDIATE MAINTENANCE
Course Number: C-102-3617, C-102-135.
Location: Air Maintenance Training Detachment, North Island, CA; Air Maintenance Training Detachment, Key West, FL.
Length: 3 weeks (120 hours).
Exhibit Dates: 6/66-Present.
Objectives: To train maintenance personnel to operate, test, and maintain the AN/AQA-4(V) indicator group system.
Instruction: Lectures and practical exercises in the operation and maintenance of the AN/AQA-4(V) indicator group system, including circuit analysis of the fiber chain, the reference signal generator, the codar chain, and power supplies, overall and subsystem block-diagram analysis, and troubleshooting, testing, and reception procedures.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0562
RF-4B AN/ASQ-85 RT-736 AND KY-531 FLIGHT DIRECTOR
Course Number: C-102-195.
Location: Air Maintenance Training Detachment, El Toro, CA.
Length: 2 weeks (80 hours).
Exhibit Dates: 3/70-Present.
Objectives: To train maintenance personnel to service and maintain the TACAN portion of the AN/ASQ-85 GNPS and flight director groups.
Instruction: Lectures and practical exercises in the functional analysis of transceivers, pulse decoders, and flight director computers, with emphasis on troubleshooting and servicing procedures. This course is highly specialized and has limited educational value.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0563
AN/APX-44(V) IFF TRANSPONDER SET INTERMEDIATE MAINTENANCE
Course Number: C-102-3065.
Location: Air Maintenance Training Detachment, C-102-3065.
Air Maintenance Training Detachment, C-102-3065.
Length: 3 weeks (120 hours).
Exhibit Dates: 4/68-Present.
Objectives: To train electronic maintenance personnel to maintain, service, troubleshoot, and align AN/APX-64(V) IFF transponder set.
Instruction: Lectures and practical exercises in basic IFF characteristics, block-diagram analysis, detailed logic and circuit theory, and maintenance and operating procedures for IFF transponders.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0564
METEOROLOGICAL/OCEANOGRAPHIC EQUIPMENT MAINTENANCE, CLASS C
Course Number: Not available.
Location: Technical Training Center, Lakehurst, NJ.
Length: 17 weeks (680 hours).
Exhibit Dates: 5/68-Present.
Objectives: To train aviation and electronics technicians to operate and maintain meteorological and oceanographic equipment.
Instruction: Lectures and practical exercises in atom and electron theory, semiconductors, diodes, and transistors, amplifiers, bias and bias stabilization, practical transistor amplifiers, time-base analyzers, test equipment, ac-dc conversion devices, recorder alignment and troubleshooting; and test equipment, interference blanker, video.
<table>
<thead>
<tr>
<th>Course Number</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NV-1715-0571</td>
<td>STRIKE ARMAMENT INTERMEDIATE MAINTENANCE REPAIR</td>
<td>Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).</td>
</tr>
<tr>
<td>NV-1715-0572</td>
<td>TARTAR WEAPONS OFFICER</td>
<td>Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).</td>
</tr>
<tr>
<td>NV-1715-0573</td>
<td>SWS (STRATEGIC WEAPONS SYSTEM) COMMAND POLARIS</td>
<td>Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).</td>
</tr>
</tbody>
</table>

**COURSE EXHIBITS**

- **ISSN baccalaureate/associate degree categorization, and trouble analysis.**
- **Certificate**
- **Electronics Training Detachment, North Island, CA.**
- **Institutional evaluation (4/74)**
- **Elective in electronics on the basis of institutional evaluation (4/74).**
- **HI electronics (4/74), in the upper-division category, credit as a technical elective in electronics.**
- **Course Number:** Not available.
- **Credit Recommendation:** Credit is not recommended because of the military-specific nature of the course (9/77).
NV-1715-0577

SSBN Mk 84 POLARIS WEAPONS OFFICER
Course Number: A-2F-0034.
Location: Guided Missiles School, Dam Neck, VA.
Length: 10 weeks (360 hours).
Exhibit Dates: 2/72-Present.
Objectives: To familiarize officers with the capabilities and limitations of fleet ballistic missile system equipment.
Instruction: Lectures and practical exercises include use of vacuum tubes, power supplies, synchros, and servos; use of common hand tools; basic motors; and electronic maintenance procedures. Note: This evaluation is based only on 4 weeks of the 10-week course; the remaining 6 weeks are apparently classified for military security reasons.
Credit Recommendation: In the vocational certificate category, 5 semester hours in electricity and electronics and additional credit on the basis of institutional evaluation (see Note above) (4/74); in the upper-division baccalaureate/associate degree category, 4 semester hours in electricity and electronics and additional credit on the basis of institutional evaluation (see Note above) (4/74).

NV-1715-0578

SONAR TECHNICIAN CLASS A-2 (INTERMEDIATE ELECTRONICS)
Course Number: K-130-559.
Location: Fleet Anti-Submarine Warfare School, San Diego, CA.
Length: 14 weeks (420 hours).
Exhibit Dates: 6/68-Present.
Objectives: To provide enlisted personnel with a basic review of mathematics and advanced training in DC and AC circuit theory, electronics, and servos.
Instruction: Lectures and practical exercises in basic mathematics and electricity, AC circuit theory, including inductance, capacitance, and resonance, electronics, including vacuum tubes, transistors, amplifiers, oscillators, and servos, and digital and analog computer fundamentals.
Credit Recommendation: In the vocational certificate category, 16 semester hours in electricity or electronics (4/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in electricity or electronics (12/68), in the upper-division baccalaureate category, 2 semester hours in electricity or electronics (4/74).

NV-1715-0579

RA-5C AN/ASB-12 BOMB DIRECTING SET ORGANIZATIONAL MAINTENANCE
Course Number: C-111-3743.
Location: Air Maintenance Training Detachment, Albany, GA.
Length: 7 weeks (280 hours).
Exhibit Dates: 1/70-Present.
Objectives: To train maintenance personnel to operate and maintain AN/ASB-12 bomb-directing sets.
Instruction: Lectures and practical exercises in bomb computer systems, television systems, and system testing.
Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics, 1 in electronics laboratory (4/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics (4/74).

NV-1715-0580

SONAR TECHNICIAN CLASS A-1 (BASIC ELECTRONICS)
Course Number: K-130-560.
Location: Fleet Anti-Submarine Warfare School, San Diego, CA.
Length: 10 weeks (300 hours).
Exhibit Dates: 6/68-Present.
Objectives: To provide enlisted personnel with training in basic electrical and electronic fundamentals.
Instruction: Lectures and practical exercises in basic electronic fundamentals and circuit theory; basic electronics, including vacuum tubes, power supplies, synchros, and servos; use of common hand tools; basic motors; and electronic maintenance procedures. Note: This evaluation is based only on 4 weeks of the 10-week course; the remaining 6 weeks are apparently classified for military security reasons.
Credit Recommendation: In the vocational certificate category, 5 semester hours in electricity and electronics and additional credit on the basis of institutional evaluation (see Note above) (4/74); in the upper-division baccalaureate/associate degree category, 2 semester hours in electricity and electronics and additional credit on the basis of institutional evaluation (see Note above) (4/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in electricity or electronics (4/74).

NV-1715-0581

10IC ELECTRONIC DATA PROCESSING MAINTENANCE
Course Number: D-150-010.
Location: Reconnaissance Attack Squadron Three, Albany, GA.
Length: 19 weeks (760 hours).
Exhibit Dates: 1/69-Present.
Objectives: To train data systems technicians to troubleshoot and repair electronic data processing equipment.
Instruction: Lectures and practical exercises in Integrated Operational Intelligence Center System; control panel, function board, and troubleshooting computer equipment, digital oscillographs, high-speed line printers, and use of test equipment for troubleshooting and repair.
Credit Recommendation: In the vocational certificate category, 6 semester hours in electronics, 2 in electronics laboratory (4/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in computer electronics, 1 in computer electronics laboratory (4/74).

NV-1715-0582

AN/ASA-47 DOPPLER/ARMASS NAVIGATIONAL COMPUTER SYSTEM INTERMEDIATE MAINTENANCE
Course Number: C-102-3554.
Location: Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA.
Length: 2-3 weeks (80-120 hours).
Exhibit Dates: 1/68-Present.
Objectives: To train maintenance personnel to operate and maintain the AN/ASA-47 Doppler weather navigation system.
Instruction: Lectures and practical exercises in the operation and maintenance of the AN/ASA-47 Doppler weather navigation system, including instrument components, components, operation of special support equipment, and alignment procedures.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electricity and electronics, 1 in electronics laboratory (4/74).

NV-1715-0583

AN/APN-134(V) RADAR NAVIGATIONAL SET INTERMEDIATE MAINTENANCE
Course Number: C-102-3388.
Location: Air Maintenance Training Detachment, Quonset Point, RI.
Length: 6 weeks (240 hours).
Exhibit Dates: 2/73-Present.
Objectives: To train maintenance personnel to maintain the AN/APN-134(V) radar navigation set at the intermediate level.
Instruction: Lectures and practical exercises in the maintenance of the AN/APN-134(V) radar navigation set, including baseband electronics, basic computer circuits, digital circuits, circuits, specific equipment component breakdown, test set operation, power supply and receiver transmitter unit, clock circuits and track-er, digital scaler, summing amplifiers, demodulator, function board, and troubleshooting and alignment.
Credit Recommendation: In the vocational certificate category, 6 semester hours in electronics, 2 in electronics laboratory (4/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics, 3 in electronics laboratory (4/74).

NV-1715-0584

AN/APN-134(V) RADAR BEACON INTERMEDIATE MAINTENANCE
Course Number: C-102-3031.
Location: Air Maintenance Training Detachment, Miramar, CA; Air Maintenance Training Detachment, Cherry Point, NC; Air Maintenance Training Detachment, Cecil Field, FL; Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Oceana, VA; Air Maintenance Training Detachment, Lemoore, CA; Air Maintenance Training Detachment, El Toro, CA.
Length: 2 weeks (64 hours).
Exhibit Dates: 2/72-Present.
Objectives: To train maintenance personnel to maintain the AN/APN-134(V) radar beacon at the intermediate level and to use associated test equipment.
Instruction: Lectures and practical exercises in the maintenance of the AN/APN-134(V) radar beacon and the use of associated test equipment, including controls and indicators, block diagrams and signal flow, component characteristics, electrical characteristics, and alignment and troubleshooting techniques.
Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics, 1 in electronics laboratory (4/74).

NV-1715-0585

MK 89 MOD 1 FIRE CONTROL TECHNICIAN CONVERSION (MK 10 & 84 TO MK 89)
Course Number: A-121-0137.
Location: Guided Missiles School, Dam Neck, VA.
Length: 16 weeks (490 hours).
Exhibit Dates: 10/72-Present.
Objectives: To train fire control system technicians to operate and maintain the Mk 89 fire control system and associated nontactical equipment.
Instruction: Lectures and practical exercises in the operation and maintenance of the Mk 89 fire control system and associated equipment, including system orientation-level, poseidon missile operation, circuit analysis, guidance computer, inertial guidance computer.
AN/APX-72 RADAR IDENTIFICATION SYSTEM INTERMEDIATE MAINTENANCE

Course Number: Not available.

Location: Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA; Air Maintenance Training Detachment, New River, NC; Air Maintenance Training Detachment, Quonset Point, RI; Air Maintenance Training Detachment, Santa Ana, CA; Air Maintenance Training Detachment, Lemoore, CA, Air Maintenance Training Detachment, Jacksonville, FL; Air Maintenance Training Detachment, Imperial Beach, CA; Air Maintenance Training Detachment, Key West, FL.

Length: 4 weeks (160 hours).

Exhibit Dates: 10/68-Present.

Objectives: To train maintenance personnel to maintain, repair and test AN/APX-72 radar identification systems.

Instruction: Lectures and practical exercises in block-diagram analysis of radar identification systems, and use of prescribed test equipment in troubleshooting, bench testing, and aligning radar identification systems.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronic equipment maintenance (4/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronic equipment maintenance on the basis of institutional evaluation (4/74).

AN/APX-72 RADAR IDENTIFICATION SYSTEM INTERMEDIATE MAINTENANCE

Course Number: A-670-0021.

Version 2: Not available.

Location: Naval Schools Command, Treasure Island, CA; Naval Schools Command, Norfolk, VA.


Location: Naval Schools Command, Treasure Island, CA; Naval Schools Command, Norfolk, VA.

Version 2: Not available.

Length: 9 weeks (360 hours).

Exhibit Dates: 1/56-2/69.

Objectives: To train electronics technicians who have experience in Dash weapon control subsystem circuitry and repair, radar identification system, AN/APX-72 radar identification system.

Instruction: Lectures and practical exercises in the operation of Combat Information Centers and to train CIC personnel to analyze radar circuit operation, and repair of Combat Information Centers.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronic systems maintenance (4/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronic systems maintenance on the basis of institutional evaluation (4/74).

NV-1715-0595

NV-1715-0591

NV-1715-0592

QH-50D OPERATIONAL TELERANIM SYSTEMS MAINTENANCE

Course Number: Not available.

Location: Air Maintenance Training Detachment, Dam Neck, VA.

Length: 9 weeks (360 hours).

Exhibit Dates: 1/72-Present.

Objectives: To train maintenance personnel to operate and repair QH-50D teleranim systems.

Instruction: Lectures and practical exercises in the block-diagram analysis of teleranim systems, and use of prescribed test equipment in troubleshooting, bench testing, and aligning teleranim systems.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronic equipment maintenance (4/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronic equipment maintenance on the basis of institutional evaluation (4/74).

NV-1715-0591

NV-1715-0592

NV-1715-0593

NV-1715-0594

VQ-1150-0084

Mk 112 COMPUTER AND PERIPHERAL EQUIPMENT/COMMON CORE

Course Number: A-150-0083; A-150-0084.

Location: Guided Missiles School, Mare Island, CA, Guided Missiles School, Dam Neck, VA.

Length: 12 weeks (324 hours).

Exhibit Dates: 6/71-Present.

Objectives: To train fire control technicians to operate, adjust, and maintain the Mk 112 computer and peripheral equipment.

Instruction: Lectures and practical exercises in the operation, and maintenance of the Mk 112 computer and peripheral equipment, including block diagram of computer complex, review of computer number systems, manual operations, instruction word analysis and operations, computer logic operations, sequence analysis, control instruction analysis, logical and arithmetic instruction analysis, and diagnostic routines for the specific computer equipment.

Credit Recommendation: In the vocational certificate category, 6 semester hours in computer electronics, 1 in computer electronics laboratory (4/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in computer electronics, 1 in computer electronics laboratory (4/74).

NV-1715-0587

GYROCOMPASS TECHNICIAN ELECTRICAL, CLASS C

(Electrical Gyrocompass Operation, Class C)

2. GYROCOMPASS TECHNICIAN—ELECTRICAL, CLASS C

Course Number: A-670-0021.

Version 2: Not available.

Location: Interior Communications Class School, Great Lakes, IL.

Length: Version 1: 9 weeks (253-270 hours).

Version 2: 12 weeks (320 hours).


Objectives: To train communications technicians to operate and repair Mk 23 and Mk 19 gyrocompasses.

Instruction: All versions: Lectures and practical exercises in the operation and maintenance of Mk 23 and Mk 19 gyrocompasses, including theory of operation, special test equipment, electrical checks, servo and follow-up loop adjustment, AC and DC power supply and maintenance circuits, auxiliary operating modes, and various component and subsystem analyses. Version 2: Includes corrective maintenance procedures and test system tests.

Credit Recommendation: Version 1. In the vocational certificate category, 5 semester hours in electromechanical systems and 2 in electromagnetic laboratory (9/77). Version 2. In the vocational certificate category, 6 semester hours in electronics laboratory (4/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in electronics laboratory (4/74). In the lower-division baccalaureate/associate degree category, credit in electrical laboratory on the basis of institutional evaluation (4/74).

NV-1715-0588

AN/BST-1 TENDER MAINTENANCE

Objectives: To train communications technicians to maintain and operate AN/BST-1 system.

Instruction: Lectures and practical exercises in the operation and maintenance of the AN/BST-1 system, including system power supplies, special transmitters, launch-control system circuitry and armings, monitor circuits, signal unit, launch control test set, detonator resistance and electrical cable test set, pressure switch test set, buoy subsystem, control system, programmers and associated test set, transmitters, handling and rigging procedures, and various regulatory functions.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electrical laboratory (4/74).

NV-1715-0589

AIR LAUNCHED WEAPONS GUIDED MISSILE INTERMEDIATE MAINTENANCE

Location: Annapolis, MD; Air Maintenance Training Detachment, North Island, CA.

Length: 4 weeks (160 hours).

Exhibit Dates: 11/72-Present.

Objectives: To train maintenance personnel to operate and maintain air-launched guided missiles.

Instruction: Lectures and practical exercises in the operation and maintenance of air-launched guided missiles, including operation, testing, and components of specific air-to-air and air-to-surface guided missiles.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0590

ELECTRONICS TECHNICIAN, AN/SRN-14 OMEGA RECEIVER MAINTENANCE, CLASS C

Course Number: A-102-0088.

Location: Electronics Technician Class School, Norfolk, VA.

Length: 5 weeks (200 hours).

Exhibit Dates: 10/72-Present.

Objectives: To train enlisted personnel to operate and maintain AN/SRN-14 Omega receiving sets.

Instruction: Lectures and laboratory work in the operation, maintenance, and repair of Omega receivers, system circuit analysis, and use of tools and test equipment.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0591

AN/APX-72 RADAR IDENTIFICATION SYSTEM INTERMEDIATE MAINTENANCE

Course Number: F-623-035.

Location: Submarine School, Groton, CT.

Length: 2 weeks (40 hours).

Exhibit Dates: 12/72-Present.

Objectives: To train communications technicians to maintain and operate AN/APX-72 radar identification systems.

Instruction: Lectures and practical exercises in the operation and maintenance of the AN/APX-72 system, including system power supplies, special transmitters, launch-control system circuitry and armings, monitor circuits, signal unit, launch control test set, detonator resistance and electrical cable test set, pressure switch test set, buoy subsystem, control system, programmers and associated test set, transmitters, handling and rigging procedures, and various regulatory functions.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electrical laboratory (4/74).
Navy I-229

**TERRIER RADAR SET AN/SPG-55B Mod 5**

**Course Number:** A-104-0143, A-104-0144, Location: Guided Missiles School, Dam Neck, VA; Combat Systems Technical School Command, Mare Island, CA.

**Length:** 23 weeks (920 hours)

**Exhibit Dates:** 11/72-Present

**Objectives:** Train fire control technicians to operate, maintain, and repair AN/SPG-55B Mod 5 radar set.

**Instruction:** Lectures, and practical exercises in the operation, maintenance, and repair of AN/SPG-55B Mod 5 radar set, including use of electronic testing equipment (oscilloscopes, multimeters, and signal generators), TERRIER weapons system description, various modes of operation, power supplies, synchro, and electronic countermeasures, various circuit analyses, frequency monitoring, operation of various channels, range and beacon tracking, alignment and systems tests, and radiation and monitoring information.

**Credit Recommendation:** In the vocational certificate category, 19 semester hours in electronic equipment maintenance (4/74), in the lower-division baccalaureate/associate degree category, credit in electronic maintenance laboratory usage on the basis of institutional evaluation (4/74).

---

**Information Centers and training of CIC personnel, including electronic warfare principles, navigation and plotting, communications procedures, naval tactics, and training methods, and practical exercises in radar circuit operation and equipment repair, including basic electronics, radio equipment, and the use of specific communications equipment.**

**Credit Recommendation:** Version 1: Credit is not recommended because of the military-specific nature of the course (4/74).

---

**RADIOMAN, CLASS A**

**Course Number:** C-191-2011, Version 2: Not available. Version 3: Not available

**Location:** Air Technical Training Center, Memphis, TN

**Length:** 21-22 weeks (850-874 hours) Version 2: 23 weeks (920 hours).

**Exhibit Dates:** 3/75-12/68

**Objectives:** To train radiomen to operate, maintain, and repair AN/SPG-55B Mod 5 radar set, including use of electronic testing equipment (oscilloscopes, multimeters, and signal generators), TERRIER weapons system description, various modes of operation, power supplies, synchro, and electronic countermeasures, various circuit analyses, frequency monitoring, operation of various channels, range and beacon tracking, alignment and systems tests, and radiation and monitoring information.

**Credit Recommendation:** In the vocational certificate category, 19 semester hours in electronic equipment maintenance (4/74), in the lower-division baccalaureate/associate degree category, credit in electronic maintenance laboratory usage on the basis of institutional evaluation (4/74).

---

**INSTRUCTION:** Lectures, and practical exercises in the operation, troubleshooting, and maintenance of the AN/SPG-55B radar and associated test console, including all versions of the AN/SPG-55B Mod 5 radar set and the associated test console. 

**Credit Recommendation:** In the vocational certificate category, 6 semester hours in electronic equipment maintenance laboratory (4/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electrical equipment maintenance laboratory on the basis of institutional evaluation (4/74).

---

**TRADEVAN SCHOOL, CLASS B**

**Course Number:** Version 1: C-365-001, Version 2: Not available. Version 3: Not available

**Location:** Air Technical Training Center, Memphis, TN

**Length:** 24 weeks (920 hours) Version 2: 25 weeks (920 hours).

**Exhibit Dates:** 10/71-5/72

**Objectives:** To train radiomen to operate, maintain, and repair AN/SPG-55B Mod 5 radar set, including use of electronic testing equipment (oscilloscopes, multimeters, and signal generators), TERRIER weapons system description, various modes of operation, power supplies, synchro, and electronic countermeasures, various circuit analyses, frequency monitoring, operation of various channels, range and beacon tracking, alignment and systems tests, and radiation and monitoring information.

**Credit Recommendation:** In the vocational certificate category, 19 semester hours in electronic equipment maintenance (4/74), in the lower-division baccalaureate/associate degree category, credit in electronic maintenance laboratory usage on the basis of institutional evaluation (4/74).
1-230 COURSE EXHIBITS

...ty or electronics, 3 in introduction to digital computers, 2 in computer laboratory, and 2 in electrical laboratory, all on the basis of institutional evaluation (4/74). Version 3: In the vocational certificate category, 1 semester hour in basic mathematics, 3 in electricity and electronics, 2 in television principles, 3 in introduction to digital computer, 2 in computer laboratory, 2 in electrical laboratory (4/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in basic mathematics, 3 in electricity and electronics, 2 in television principles on the basis of institutional evaluation, 3 in digital computer introduction, 2 in computer laboratory, and 2 in electrical laboratory on the basis of institutional evaluation (4/74); up to 3 semester hours in electricity or electronics, 3 in introduction to digital computers, 2 in computer laboratory, and 2 in electrical laboratory, all on the basis of institutional evaluation (4/74). Version 3: In the vocational certificate category, 1 semester hour in basic mathematics, 3 in electricity and electronics, 2 in television principles on the basis of institutional evaluation, 3 in digital computer introduction, 2 in computer laboratory, and 2 in electrical laboratory on the basis of institutional evaluation (4/74); up to 3 semester hours in electricity or electronics, 3 in introduction to digital computers, 2 in computer laboratory, and 2 in electrical laboratory, all on the basis of institutional evaluation (4/74).

NV-1715-0600
P-3 PB20N AUTOMATIC FLIGHT CONTROL SYSTEM MAINTENANCE, NO 13
Course Number: Not available.
Location: Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA.
Length: 3 weeks (104 hours).
Exhibit Dates: 1/68-Present.
Objectives: To train electrical maintenance personnel familiar with the P-3 aircraft systems to maintain and operate the PB20N automatic flight control system.
Instruction: Lectures and practical exercises in the maintenance and operation of the PB20N automatic flight control system as installed in the P-3 aircraft, including system components, power supply and monitor, hydraulic booster assembly, trim circuits, gyro systems, controls, amplifier and computer, signal chain and channel, test sets, and troubleshooting techniques.
Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics, 1 in electronics laboratory (4/74).

NV-1715-0601
RA-3C FLIGHT CONTROL AND ELECTRICAL SYSTEMS, INTERMEDIATE MAINTENANCE
Course Number: C-602-3750, C-602-223.
Location: Air Maintenance Training Detachment, Albany, GA.
Length: 2 weeks (80 hours).
Exhibit Dates: 9/69-Present.
Objectives: To train maintenance personnel who have experience on transistorized equipment and RA-3C flight control systems to operate and test the electronic equipment in the flight control and electrical systems of RA-3C aircraft.
Instruction: Lectures and practical exercises in the operation and testing of the electronic equipment in the flight control and electrical systems of RA-3C aircraft, including system electronics, various amplifier and computer, balancer, and compensator components, and operations; and electrical systems electronics maintenance and operation.
Credit Recommendation: In the vocational certificate category, 1 semester hour in electrical laboratory (4/74).

NV-1715-0602
TALOS GUNNER'S (MISSILE) HANDLING
Course Number: Not available.
Location: Naval Schools Command, Mare Island, CA.
Length: 3 weeks (90 hours).
Exhibit Dates: 2/68-Present.
Objectives: To train gunner's mates to assemble, disassemble, and replace modules of the Talos guided missile and to test and service the missile using specialized equipment.
Instruction: Lectures and practical exercises in the assembly, disassembly, and replacement of modules and the testing and servicing of the Talos guided missile, including aerodynamics, input power and major assemblies of test equipment, receiving and pretest inspection, preventive maintenance, and component handling.
Credit Recommendation: In the vocational certificate category, 1 semester hour in electrical laboratory (4/74).

NV-1715-0603
TERRIER/TARTAR GUNNER'S MATE
Course Number: Not available.
Location: Guided Missles School, Dam Neck, VA; Naval Schools Command, Mare Island, CA.
Length: 3 weeks (90 hours).
Exhibit Dates: 2/68-Present.
Objectives: To train gunner's mates to maintain and repair Terrier and Tartar guided missile test equipment.
Instruction: Lectures and practical exercises in the maintenance and repair of Terrier and TA guided missile test equipment.
Credit Recommendation: In the vocational certificate category, credit in electrical laboratory on the basis of institutional evaluation (4/74).

NV-1715-0604
POSEIDON MISSILE TECHNICIAN
Course Number: A-121-0138
Location: Guided Missiles School, Dam Neck, VA.
Length: 18 weeks (557 hours).
Exhibit Dates: 11/72-Present.
Objectives: To train graduates of the Polaris Electronic School to perform as Poseidon missile technicians.
Instruction: Lectures and practical exercises in the operation and maintenance of Poseidon missile equipment, including ballistic missile flight, capabilities and limitations, missile construction, symbology, propulsion system, ordnance system, power generation and distribution, missile flight sequence, instrumentation, missile testing and results analysis, missile transfer equipment and procedures, external test equipment and simulations, individual-package testing, special-purpose digital computers, and radiation and detection equipment.
Credit Recommendation: Credit is not recommended because of the military specific nature of the course (4/74).

NV-1715-0605
TERRIER WEAPONS
Course Number: A-2F-0039.
Location: Guided Missiles School, Dam Neck, VA.
Length: 6 weeks (192 hours).
Exhibit Dates: 10/72-Present.
Objectives: To train officers who are graduates of Naval Gunfire Control and who possess previous weapons/gunnery department experience to operate and maintain Terrier weapons systems on DLG-16 class ships.
Instruction: Lectures and practical exercises in the operation and maintenance of the Terrier weapons systems equipment on DLG-16 class ships, including operation on the basis of institutional evaluation, airborne early warning, and electronic countermeasures equipment.

Objectives: To train junior line officers to operate airborne early warning and electronic countermeasures equipment.
Instruction: Lectures and practical exercises in the operation of airborne early warning and electronic countermeasures equipment.

Objectives: To train maintenance personnel familiar with the P-3 aircraft systems to maintain and operate the PB20N automatic flight control system.
Instruction: Lectures and practical exercises in the maintenance and operation of the PB20N automatic flight control system as installed in the P-3 aircraft, including system components, power supply and monitor, hydraulic booster assembly, trim circuits, gyro systems, controls, amplifier and computer, signal chain and channel, test sets, and troubleshooting techniques.

Objectives: To train maintenance personnel who have experience on transistorized equipment and RA-3C flight control systems to operate and test the electronic equipment in the flight control and electrical systems of RA-3C aircraft.
Instruction: Lectures and practical exercises in the operation and testing of the electronic equipment in the flight control and electrical systems of RA-3C aircraft, including system electronics, various amplifier and computer, balancer, and compensator components, and operations; and electrical systems electronics maintenance and operation.

Objectives: To train gunner's mates to assemble, disassemble, and replace modules of the Talos guided missile and to test and service the missile using specialized equipment.
Instruction: Lectures and practical exercises in the assembly, disassembly, and replacement of modules and the testing and servicing of the Talos guided missile, including aerodynamics, input power and major assemblies of test equipment, receiving and pretest inspection, preventive maintenance, and component handling.

Objectives: To train gunner's mates to maintain and repair Terrier and Tartar guided missile test equipment.
Instruction: Lectures and practical exercises in the maintenance and repair of Terrier and TA guided missile test equipment.
Credit Recommendation: In the vocational certificate category, credit in electrical laboratory on the basis of institutional evaluation (4/74).

Objectives: To train maintenance personnel familiar with the P-3 aircraft systems to maintain and operate the PB20N automatic flight control system.
Instruction: Lectures and practical exercises in the maintenance and operation of the PB20N automatic flight control system as installed in the P-3 aircraft, including system components, power supply and monitor, hydraulic booster assembly, trim circuits, gyro systems, controls, amplifier and computer, signal chain and channel, test sets, and troubleshooting techniques.

Credit Recommendation: In the vocational certificate category, credit in electrical laboratory on the basis of institutional evaluation (4/74).

Credit Recommendation: Credit is not recommended because of the military specific nature of the course (4/74).

Objectives: To train graduates of the Polaris Electronic School to perform as Poseidon missile technicians.
Instruction: Lectures and practical exercises in the operation and maintenance of Poseidon missile equipment, including ballistic missile flight, capabilities and limitations, missile construction, symbology, propulsion system, ordnance system, power generation and distribution, missile flight sequence, instrumentation, missile testing and results analysis, missile transfer equipment and procedures, external test equipment and simulations, individual-package testing, special-purpose digital computers, and radiation and detection equipment.

Credit Recommendation: Credit is not recommended because of the military specific nature of the course (4/74).

Objectives: To train officers who are graduates of Naval Gunfire Control and who possess previous weapons/gunnery department experience to operate and maintain Terrier weapons systems on DLG-16 class ships.
Instruction: Lectures and practical exercises in the operation and maintenance of the Terrier weapons systems equipment on DLG-16 class ships, including operation on the basis of institutional evaluation, airborne early warning, and electronic countermeasures equipment.
launching systems, weapon system maintenance, flight analysis and system testing.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0606

SWS (STRATEGIC WEAPONS SYSTEM) WEAPONS OFFICER POLARIS (Mk 41 and Weapons Officer)

Course Number: A-2F-0022.
Location: Submarine Training Center, Pacific, Pearl Harbor, HI; Guided Missiles School, Dam Neck, VA.
Length: 3 weeks (248-350 hours).
Exhibit Dates: 1/70-Present.

Objectives: To train officers to supervise the operation and maintenance of fleet ballistic missiles.

Instruction: Topics cover terms, abbreviations, symbols, and diagrams used in electronics, servo systems, gyro, digital systems, and the physics of motion, light and fluids. Major emphasis is placed on practical exercises in the operation and maintenance of fleet ballistic missiles on 598 or 608 class SSBN submarines, including functional aspects of specific systems and subsystems, and emphasizing data flow, control and indications, switching, patching, casualty recognition, and readiness testing, and operation and monitoring of various systems components and devices.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electrical laboratory (9/77).

NV-1715-0607

MISSILE TECHNICIAN Mk 41 POLARIS (A-3)

Course Number: A-121-UJ.
Location: Guided Missiles School, Dam Neck, VA.
Length: 23 weeks (967 hours).
Exhibit Dates: 11/72-Present.

Objectives: To train enlisted personnel to operate, test, and maintain missile equipment on Polaris FBM submarines.

Instruction: Lectures and practical exercises in the operation, testing, and maintenance of missile equipment on Polaris FBM submarines, including weapons system orientation, Polaris missile components, telemetry, guidance subsystem characteristics and circuitry, guidance computer, radar altimeter, IFF transponder, TACAN navigational equipment, and radio navigation system. In addition, students will receive a review of missile operation, test set equipment, and radiation and detection equipment.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electrical laboratory (4/74).

NV-1715-0608

TALOS OFFICERS (Talos Weapons/Fire Control/Missile Defense)

Course Number: A-2F-0013.
Location: Not available, Mare Island, CA.
Length: 4 weeks (160 hours).
Exhibit Dates: 1/73-Present.

Objectives: To train junior officers to supervise the maintenance of the Talos weapons system.

Instruction: Lectures and practical exercises in the maintenance and management of the Talos weapons system, including Talos system operation, search radar, and ground-to-air direction system; specific equipment components; transmitter and microwave, receivers and ranging circuits, servos, associated computing equipment and logic introduction, launching system, Talos missile flight termination, propulsion, hydraulic, electrical, control, steering, and anti-ship systems; target processing, telemetry, flight analysis, and system testing.

Credit Recommendation: In the vocational certificate category, 3 semester hours in missiles (4/74).

NV-1715-0609

OPTICAL LANDING SYSTEMS MAINTENANCE, CLASS C

Course Number: Not available.
Location: Technical Training Center, Lakehurst, NJ; Air Technical Training Unit, Philadelphia, PA.
Length: 6 weeks (240 hours).

Objectives: To train communications technicians to troubleshoot and maintain the Fresnel Lens Optical Landing System Mk 6 Mod 1 and the manually operated visual landing aid system Mk I Mod 1, 2, and 3; or Mk II.

Instruction: All Versions: Lectures and practical exercises in the troubleshooting and maintenance of the Fresnel Lens Optical Landing System Mk 6 Mod 1 and the manually operated visual landing aid system Mk 1 Mod 1, 2, and 3, or Mk II, including electrical and solid-state devices, component identification, test equipment, indicators, assembly, stabilization, stabilization control equipment, reference lighting circuits, and lighting assembly. Version 2: Includes specific electronics.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics (4/74), in the lower-division associate degree category, credit in electricity or electronics on the basis of institutional evaluation (4/74).

NV-1715-0610

UH-1C, HH-1C, HH-2D AUTOMATIC STABILIZATION EQUIPMENT INTERMEDIATE MAINTENANCE (UH-2C Automatic Stabilization Equipment Intermediate Maintenance)

Course Number: C-602-3388.
Location: Air Maintenance Training Detachment, Imperial Beach, CA.
Length: 4 weeks (160 hours).
Exhibit Dates: 12/68-Present.

Objectives: To train maintenance personnel in test, maintain, and repair automatic stabilization equipment in UH-2C, HH-2C, and HH-2D helicopters.

Instruction: Lectures and practical exercises in the testing, maintenance, and repair of automatic stabilization equipment in UH-2C, HH-2C, and HH-2D helicopters, including operation of power supply circuitry, synchronization loop, amplifier-demodulator circuitry, all channel, test sets, sensors, unit, vertical gyro, accelerometer, actuators, and pitch, yaw, and collective channel.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0611

F-4J AN/AWG-10 ANTENNA CONTROL AND MISSILE CONTROL INTERMEDIATE MAINTENANCE

Course Number: Not available.
Location: Air Maintenance Training Detachment, Miramar, CA; Air Maintenance Training Detachment, El Toro, CA.
Length: 3 weeks (120 hours).
Exhibit Dates: 1/71-Present.

Objectives: To train maintenance personnel who have completed intermediate courses in the automatic flight control systems of the F-4B aircraft.

Instruction: Lectures and practical exercises in the maintenance of the automatic flight control systems of the F-4B aircraft (with and without data link), including
1-232 / COURSE EXHIBITS

component functions, surface control and flight control systems, block-diagram analysis, power supply and switching circuits, signal circuit analysis, automatic pilot coupler analysis, test equipment operation and components.

Credit Recommendation: In the vocational certificate category, 4 semester hours in electronics (4/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics (4/74).

NV-1715-0614
RF-4B INERTIAL NAVIGATION SYSTEM
Course Number: C-102-3838.
Location: Air Maintenance Training Detachment, El Toro, CA.
Length: 3 weeks (120 hours).
Exhibit Dates: 11/72-Present.
Objectives: To train maintenance personnel who have completed courses in digital and transistor fundamentals to operate and troubleshoot the AN/ASN-46A and the AN/ASN-74 inertial navigation systems.
Instruction: Lectures and practical exercises in the operation and troubleshooting of the AN/ASN-46A and the AN/ASN-74 inertial navigation systems, including navigational principles, terms and vectors, heading, attitude, and cockpit displays, block-diagram analysis, synchros, Boolean algebra, gyroscopic principles, logic circuits, accelerometer integrators, and alignment and test procedures.
Credit Recommendation: In the vocational certificate category, 4 semester hours in electrical laboratory (4/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electrical laboratory (4/74).

NV-1715-0615
A-C/E BOMBING SYSTEM AN/AJB-3 AND REMOTE STANDBY ATTITUDE INDICATOR
Course Number: C-602-0057.
Location: Air Maintenance Training Detachment, Lemoore, CA; Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Beaumont, TX.
Length: 2 weeks (80 hours).
Exhibit Dates: 1/70-Present.
Objectives: To train maintenance personnel who have completed courses in transistors and A-4 systems to operate and maintain the AN/AJB-3 and remote-stanby, attitude-indicator systems.
Instruction: Lectures and practical exercises in the operation and maintenance of the AN/AJB-3 and remote-stanby, attitude-indicator systems, including displacement gyros, compass adaptors, bomb release control, all attitude indicator, and associated components of specific equipment; power supply and system analysis; and alignment and troubleshooting procedures.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electrical laboratory (4/74).

NV-1715-0616
SH-3A AUTOMATIC STABILIZATION EQUIPMENT MAINTENANCE
Course Number: Not available.
Location: Air Maintenance Training Detachment, Ream Field, CA; Air Maintenance Training Detachment, Key West, FL.
Length: 5 weeks (200 hours).
Exhibit Dates: 3/68-Present.
Objectives: To train maintenance personnel to maintain the SH-3 helicopter's automatic stabilization equipment at the intermediate level.
Instruction: Lectures and practical exercises in the maintenance of the SH-3A helicopter's automatic stabilization equipment, including flight theory, stabilization problems, system functions, circuit analysis of control channels, test equipment, and troubleshooting procedures.
Credit Recommendation: In the vocational certificate category, 4 semester hours in electronics (4/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics (4/74).

NV-1715-0617
A-7 AN/ASW-26/30 AUTOMATIC FLIGHT CONTROL SYSTEM INTERMEDIATE MAINTENANCE
Course Number: C-602-3782, C-602-162.
Location: Air Maintenance Training Detachment, Lemoore, CA; Air Maintenance Training Detachment, Cecil Field, FL.
Length: 2 weeks (80 hours).
Exhibit Dates: 9/68-Present.
Objectives: To train fleet maintenance personnel who have backgrounds in A-7 systems to operate, test, troubleshoot, and maintain specific automatic flight control systems equipment at the intermediate level.
Instruction: Lectures and practical exercises in the operation, testing, troubleshooting, and maintenance of the AN/ASW-26 and AN/ASW-30 automatic flight control systems, including component theory, various module analyses, circuit analysis, modes of operation, yaw stabilization and control augmentation, trim theory, and specific component testing procedures.
Credit Recommendation: In the vocational certificate category, 4 semester hours in electronics laboratory (4/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics laboratory (4/74).

NV-1715-0618
GUNNER'S MATE CLASS C ROCKET LAUNCHER MK 108
Course Number: Not available.
Location: Service Schools Command, Great Lakes, IL.
Length: 8 weeks (240 hours).
Exhibit Dates: 2/68-Present.
Objectives: To train gunner's mates to operate, maintain, and repair missile launching systems.
Instruction: Lectures and practical exercises in the operation, maintenance, and repair of missile-launching systems, including configuration, characteristics, and performance of guided missiles; electrical and servo system input and output; power drive, testing of magnetic and electronic amplifiers, synchro servo systems, and hydraulic mechanical components; power supplies; electronic and hydraulic circuits; AC and DC amplifiers; oscilloscopes; modulator and demodulator units; fire-fighting equipment operation; and maintenance management.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electrical laboratory (4/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in electrical laboratory (4/74).

NV-1715-0621
SH-3 AUTOMATIC STABILIZATION EQUIPMENT INTERMEDIATE MAINTENANCE
Course Number: C-602-3398.
Location: Air Maintenance Training Detachment, Imperial Beach, CA; Air Maintenance Training Detachment, Key West, FL.
Length: 5-6 weeks (200-240 hours).
Exhibit Dates: 5/68-Present.
Objectives: To train maintenance personnel to maintain the SH-3 helicopter's automatic stabilization equipment at the intermediate level.

SPARROW III, SIDEWINDER, SHRIKE AND WALL EYE GUIDED MISSILE TEST EQUIPMENT (CVA/CVS)
Course Number: C-122-3109.
Location: Air Maintenance Training Detachment, Jacksonville, FL; Air Maintenance Training Detachment, North Island, CA.
Length: 7 weeks (280 hours).
Exhibit Dates: 2/73-Present.
Objectives: To train enlisted personnel to operate, calibrate, and maintain air-launched guided missile test equipment at the intermediate level.
Instruction: Lectures and practical exercises in the operation, calibration, and maintenance of air-launched guided missile test equipment, including principles of modulation, Doppler principles, and Sparrow III, Sidewinder, Shrike, and Walleye block-diagram analysis, data flow, test set operation and components, circuits, signal generation, electronic theory, power supplies, and detailed calibration procedures.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electrical laboratory (4/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in electrical laboratory (4/74).
NV-1715-0622
TALOS GUIDED MISSILE AND GUIDED MISSILE TEST SET MAINTENANCE
Course Number: Not available.
Location: Guided Missiles School, Dam Neck, VA, Naval Schools Command, Mare Island, CA.
Length: 25 weeks (690 hours).
Exhibit Dates: 9/67-Present.
Objectives: To train enlisted personnel to test and maintain Talos guided missiles, and to operate and maintain associated test sets and equipment.
Instruction: Lectures and practical exercises in the testing and maintenance of Talos guided missiles, and in the operation and maintenance of associated test sets and equipment, including description of the electrical, control, steering, guidance, and control systems; test equipment, and associated test equipment.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (4/74).

NV-1715-0623
LAUNCHER TECHNICIAN MK 85 FIRE CONTROL CONVERSION
Course Number: A-633-0015.
Location: Guided Missiles School, Dam Neck, VA.
Length: 2 weeks (63 hours).
Exhibit Dates: 9/66-Present.
Objectives: To train enlisted personnel who have had training on the Polaris missile-launching system to operate and maintain mechanical and electrical subsystems of the Poseidon missile-launching systems.
Instruction: Lectures and practical exercises in the operation and maintenance of mechanical and electrical subsystems of the Poseidon missile-launching systems, including principles of inertial guidance and flight control, navigation, calibration, and deployment; principles of hydraulics and pneumatics, repair of the launch tube, missile ejector group and missile suspension system components; disassembly and assembly of gas piston-operated pneumatic valves, advanced theory of special valves, detailed logic and analysis of the solid-state integrated circuits, and troubleshooting.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-1715-0624
GUNNERY OFFICERS (RELATIVE RANK)
Course Number: J-2E-101.
Location: Fleet Anti-Air Warfare Training Center, Dam Neck, VA.
Length: 5 weeks (70 hours).
Exhibit Dates: 5/72-Present.
Objectives: To train junior officers from ships with specific gun mount and relative fire control systems to perform as gunnery officers.
Instruction: Lectures and practical exercises in fundamentals of gunnery, including target detection, ammunition, correction, and maintenance of associated test equipment.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (4/74).

NV-1715-0625
GUNNERY OFFICERS—WEAPONS DEPARTMENT OFFICERS
Course Number: J-2E-0100, J-2E-1002.
Location: Fleet Anti-Air Warfare Training Center, Dam Neck, VA.
Length: 5 weeks (150 hours).
Exhibit Dates: 5/72-Present.
Objectives: To train junior officers to perform as gunnery or fire control division officers.
Instruction: Lectures and practical exercises in the fundamentals of gunnery, including target detection, ammunition, correction, and maintenance of associated test equipment, including administrational, test set, service, and administrative procedures, small arms, target tracking, sighting, firing systems, and maintenance of specific equipment.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (4/74).

NV-1715-0626
GUNNER'S MATE CLASS C ASROC LAUNCHING GROUP
Course Number: Not available.
Location: Service Schools Command, Great Lakes, IL.
Length: 15 weeks (450 hours).
Exhibit Dates: 9/67-Present.
Objectives: To train gunner's mates to operate, maintain, and repair advanced rocket-launching systems.
Instruction: Lectures and practical exercises in the operation, maintenance, and repair of advanced rocket-launching systems, including power supplies, electrical and electronic systems, control circuitry, launching machinery construction and operation, testing and monitoring of signal inputs, management procedures, and logistics.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (4/74).

NV-1715-0627
AN/ARW-77 BULLPUP GUIDANCE CONTROL SYSTEM
Course Number: Not available.
Location: Air Maintenance Training and Detachment, Pennington River, MD.
Length: 10 weeks (270 hours).
Exhibit Dates: 9/72-Present.
Objectives: To train junior officers from ships with ships with specific gun mount and relative fire control systems to perform as gunnery officers.
Instruction: Lectures and practical exercises in the maintenance of the AN/ARW-77 Bullpup transmitter, including operational analysis, circuit analysis, and troubleshooting; and assembly and troubleshooting.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (4/74).

NV-1715-0628
AN/DM-8 SPARROR III GUIDED MISSILE TEST EQUIPMENT INTERMEDIATE MAINTENANCE
Course Number: Not available.
Location: Air Maintenance Training Detachment, Jacksonville, FL, Air Maintenance Training Detachment, Miramar, CA.
Length: 4-5 weeks (140 hours).
Exhibit Dates: 7/67-Present.
Objectives: To train enlisted personnel to troubleshoot and maintain the Sparrow III missile and associated test equipment.
Instruction: Lectures and practical exercises in the troubleshooting and maintenance of the Sparrow III missile and the calibration and maintenance of associated test equipment, including check-out procedures, missile and test set, components, subassemblies, data flow, power supply block analyses, and test set repair procedures.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics laboratory (4/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics laboratory (4/74).

NV-1715-0629
CLASS A AVIATION GUIDED MISSILEMAN
Course Number: Not available.
Location: Aviation Guided Missileman School, Memphis, TN.
Length: Version 1: 27 weeks (1080 hours)
Version 2: 24 weeks (960 hours).
Objectives: To train enlisted personnel to operate, maintain, and repair advanced electronic guided missiles, and to train them to operate air-launched guided missiles.
Instruction: All Versions. Lectures and practical exercises in the operation, maintenance, and repair of advanced electronic guided missile systems, including power supplies, electrical and electronic systems, control circuitry, launching machinery construction and operation, testing and monitoring of signal inputs, management procedures, and logistics.
Credit Recommendation: Version 1: In the vocational certificate category, 2 semester hours in electronics laboratory (4/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in electronics, 3 in electronic circuits (12/68).
vocational certificate category, 8 semester hours in electronics (4/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in electronics, 2 in electronic circuits (12/68).

**NV-1715-0630**

**ARSDC MISSILE ASSEMBLY AND ORGANIZATIONAL MAINTENANCE**

Course Number: 8-15/8-317.

Location: Air Maintenance Training Detachment, Beaufort, SC; Air Maintenance Training Detachment, Beaufort, SC.

Length: 2 weeks (74 hours).

Exhibit Dates: 8/77-Present.

Objectives: To train enlisted personnel to operate and maintain the ASROC missile.

Instruction: Lectures and practical exercises in the assembly and maintenance of the ASRO 1 missile, including system components, testing, packaging, and safety, and specific-equipment test, repair, and maintenance.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

**NV-1715-0631**

**A-4 ARMAMENT SYSTEM ORGANIZATIONAL MAINTENANCE**

Course Number: C-464-3716.

Location: Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Beaufort, SC.

Length: 2 weeks (74 hours).

Exhibit Dates: 2/73-Present.

Objectives: To train maintenance personnel with knowledge of the A-4 series aircraft and aviation or munitions fundamentals to maintain and operate the A-4 armament system.

Instruction: Lectures and practical exercises in the operation and maintenance of the A-4 armament system, including basic armament and weapons system configuration analysis; alternate controls, gun control system, circuitry analysis, fuze-arming system components, missile system components, and launcher and tester, special weapons, and suspension and accessory equipment.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics laboratory (4/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in electronic laboratory (4/74).

**NV-1715-0632**

**F-4B/J ARMAMENT, MISSILE AND WEAPONS CONTROL SYSTEM ORGANIZATIONAL MAINTENANCE**

(F-4B/J Armament and Weapons Control System Maintenance)

Course Number: C-464-3806.

Location: Air Maintenance Training Detachment, Great Lakes, IL; Air Maintenance Training Detachment, Treasure Island, VA.

Length: 3 weeks (120 hours).

Exhibit Dates: 1/78-Present.

Objectives: To train maintenance personnel with knowledge of electrical fundamentals to operate and maintain armament, missile, and weapon control systems equipment.

Instruction: Lectures and practical exercises in the operation and maintenance of armament, weapon control systems, and weapon control system equipment, including F-4B/J equipment, configuration, and control panels, specific guided missile launcher equipment circuitry, test sets, and operation, wing missile pylon operation; centerline system and wing fuel tank pylon operation and components, fuel control device, weapon control system, multiple weapons systems, electrical operation, and miscellaneous systems and test sets.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

**NV-1715-0633**

**QH-50D WEAPONS SYSTEM ELECTRONIC INTERMEDIATE MAINTENANCE**

Course Number: Not available.

Location: Air Maintenance Training Detachment, Treasure Island, CA.

Length: 6-8 weeks (200-320 hours).

Exhibit Dates: 1/66-Present.

Objectives: To train maintenance personnel to maintain the DASH weapons system electronic system.

Instruction: Lectures and practical exercises in DASH avionics system maintenance and troubleshooting procedures, including radio receiver and decoder functional analysis, automatic control system power distribution, gyroscope system, and functional navigation system troubleshooting procedures.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electrical laboratory (4/74).

**NV-1715-0634**

**TALOS COMPUTER Mk 111 MOD 1**

Course Number: A-150-0027.

Location: Naval Schools Command, Mare Island, CA.

Length: 18-20 weeks (515 hours).

Exhibit Dates: 1/71-Present.

Objectives: To train fire control technicians to operate and maintain the Mk 111 MOD 1 computer.

Instruction: Lectures and practical exercises in the operation and maintenance of the Mk 111 MOD 1 computer, including basics of analog computers, oscillograph recording systems, modes of operation of the specific equipment, system testing, and special-purposes equipment.

Credit Recommendation: Insufficient data for evaluation (4/74).

**NV-1715-0635**

**AIRBORNE RADAR INTERCEPT OPERATOR**

Course Number: Not available.

Location: Air Technical Training Center, Glynco, GA.

Length: 8-10 weeks (352-392 hours).

Exhibit Dates: 10/65-Present.

Objectives: To train enlisted personnel to perform as airborne radar intercept operators.

Instruction: Lectures and practical exercises in airborne radar intercept operations, including communications and navigation equipment, flight line procedures, survival equipment, jet operation, general aircraft systems, meteorology, cruise control, approaches, computer-based solutions, navigation procedures, voice control procedures, intercept procedures and tactics, radar fundamentals, path analysis, and Sidewinder intercepts.

Credit Recommendation: Not recommended because of the limited technical nature of the course (4/74).

**NV-1715-0636**

**CONALOG II MAINTENANCE (SPERRY)**

Course Number: A-623-0033; F-623-027.

Location: Submarine School, Groton, CT.

Length: 5 weeks (200 hours).

Exhibit Dates: 3/67-Present.

Objectives: To train enlisted personnel to operate and maintain the submarine pictorial display and control system (CONALOG).

Instruction: Lectures and practical exercises in the operation and maintenance of the submarine pictorial display and control system, including functional block analysis, data flow within systems, power supplies, and test set and associated testing procedures for the specific equipment.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

**NV-1715-0637**

**S-3D/E AN/ARN-52(V) NAVIGATIONAL TACAN MAINTENANCE**

Course Number: Not available.

Location: Air Maintenance Training Detachment, Key West, FL.

Length: 3 weeks (120 hours).

Exhibit Dates: 9/66-12/68.

Objectives: To train enlisted personnel who have had training in basic transistors to operate and maintain the AN/ARN-52 navigational TACAN.

Instruction: Lectures and practical exercises in the operation and maintenance of the AN/ARN-52 navigational TACAN, including theory of operation, power supply, analysis of circuits, and block-diagram analysis for range and bearing-measuring circuitry.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

**NV-1715-0638**

1. ELECTRONICS TECHNICIAN, CLASS A, PHASE SEIR (SHIIPBOARD EQUIPMENT INDOCTRINATION, RADAR)

2. ELECTRONICS TECHNICIAN, CLASS C, SHIPBOARD EQUIPMENT INDOCTRINATION (INDOCTRINATION, ELECTRONICS (RADAR))


Location: Service School Command, Treasure Island, CA; Service School Command, Great Lakes, IL.

Length: Version 1: 8 weeks (290 hours).

Version 2: 12 weeks (472 hours).


Objectives: To train graduates of basic electronics courses to operate, maintain, and repair electronic equipment in shipboard radar systems.

Instruction: Lectures and practical exercises in the operation, maintenance, and repair of electronic equipment in shipboard radar systems, including basic theory of radar repeaters and identification systems, repair and replacement of modular assemblies, logical troubleshooting procedures, and operation and analysis of various components in specific indicator group equipment.

Credit Recommendation: Version 1: In the vocational certificate category, 1 semester hour in electronics laboratory (9/77); in the lower-division baccalaureate/associate degree category, 3 semester hours in electronics laboratory (9/77). Version 2: In the vocational certificate category, 3 semester hours in electronics laboratory (9/77).
hours in electrical laboratory (4/74); in the lower-division baccalaureate/associate degree category, credit in electrical laboratory (4/74); in the upper-division baccalaureate category, credit in electrical laboratory on the basis of institutional evaluation (4/74)

NV-1715-0639

1. ELECTRONICS TECHNICIAN, CLASS A, PHASE SEIN (SHIPBOARD EQUIPMENT INDICATION, COMMUNICATIONS)

2. ELECTRONICS TECHNICIAN, CLASS C, SHIPBOARD EQUIPMENT INDICATION (COMMUNICATIONS)


Location: Service School Command, Treasure Island, CA; Service School Command, Great Lakes, IL.


Objectives: To train electronics technicians to operate, maintain, and repair shipboard electronics equipment.

Instruction: Lectures and practical exercises in the operation, maintenance, and repair of shipboard electronics communications equipment, including principles and operation of transmitters, oscillators, and antennas; circuit diagrams for major components; transceiver and telegraph terminal equipment; telecommunications fundamentals; controls, and testing and installation procedures.

Credit Recommendation: Version 1: In the vocational certificate category, 3 semester hours in communications equipment (9/77); in the lower-division baccalaureate/associate degree category, 2 semester hours in communications laboratory (9/77). Version 2: In the vocational certificate category, 6 semester hours in electrical laboratory (4/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in electrical laboratory, and additional credit in electrical laboratory on the basis of institutional evaluation (4/74).

NV-1715-0640

1. P-3C SENSOR STATION THREE (RADAR/DISPLAY TECHNICIAN) ORGANIZATIONAL MAINTENANCE

2. P-3C SENSOR STATION THREE (RADAR/DISPLAY) INTEGRATED SYSTEM ORGANIZATIONAL MAINTENANCE

Course Number: C-102-2593.

Location: Service School Command, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA.


Objectives: To train fleet maintenance personnel to operate and maintain P-3C Sensor Station Three radar/display systems.

Instruction: Lectures and practical exercises in the operation and maintenance of P-3C Sensor Station Three radar/display systems, including specific equipment, control block diagrams, trouble analysis, and adjustment; radar and IFF systems, magnetic anomaly detection system, and low-light-level television system. Version 1: Includes functions of logic units for specific display equipment.

Credit Recommendation: Version 1: In the vocational certificate category, 8 semester hours in electronic equipment maintenance on the basis of institutional evaluation (4/74). Version 2: In the vocational certificate category, 6 semester hours in electronic equipment maintenance on the basis of institutional evaluation (4/74).

NV-1715-0641

S-1/D/E AVIONICS SYSTEMS ORGANIZATIONAL MAINTENANCE

Course Number: C-602-3611.

Location: Air Maintenance Training Detachment, North Island, CA; Air Maintenance Training Detachment, Key West, FL.

Length: 4 weeks (160 hours).

Exhibit Dates: 3/71-Present.

Objectives: To train maintenance personnel to maintain S-1/D/E avionics systems.

Instruction: Lectures and practical exercises in maintenance of S-1/D/E avionics systems, instruction in the block diagrams of various electronic systems, use of specialized test equipment, intercommunications equipment operation and troubleshooting, IFF equipment, navigation equipment operation, and components and testing of specific subsystems.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronic systems maintenance (4/74).

NV-1715-0642

SUBMARINE INTERIOR COMMUNICATIONS (IC) SYSTEMS

Course Number: F-621-016.

Location: Submarine School, Groton, CT.

Length: 4 weeks (120 hours).

Exhibit Dates: 2/68-Present.

Objectives: To train submarine personnel to operate and maintain shipboard communications systems and associated equipment.

Instruction: Lectures and practical exercises in the operation and maintenance of shipboard communications systems and associated equipment, including theory of operation, component parts, introductory mathematics, basic electricity and electronics, transformer theory, and analysis of motor-generator controls, ship speed monitors, hydrogen detectors, synchro systems, announcing systems, and talkback and electrical control systems.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics systems maintenance (4/74).

NV-1715-0643

1. RADARMAN, CLASS A

2. CLASS A RADARMAN SCHOOL (OPERATIONAL COURSE)

Course Number: Not available.

Location: Naval Schools Command, Treasure Island, CA.


Objectives: To train enlisted personnel to perform as on-board radar repairmen.

Instruction: Version 1: Lectures and practical exercises in the fields of on-board radar repairmen, including operation and maintenance procedures for specific radar equipments, subsurface search and height-finding radar sets, and associated remote repeaters, air plotting and maneuvering, tactics and radar navigation, communications equipment, and test sets. Version 2: Includes basic electricity and electronics and special radar circuits.

Credit Recommendation: Versions: In the vocational certificate category, 5 semester hours in electricity or electronics, 5 in electronic laboratory (4/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in electricity or electronics (12/68). Version 2: In the vocational certificate category, 5 semester hours in electricity or electronics (4/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in electricity or electronics on the basis of institutional evaluation (4/74).

NV-1715-0644

F/R/R-F SHOEHORN ORGANIZATIONAL MAINTENANCE

Course Number: C-102-3851.

Location: Air Maintenance Training Detachment, Miramar, CA.

Length: 3-4 weeks (100-160 hours).

Exhibit Dates: 6/71-Present.

Objectives: To train fleet, maintenance personnel to operate and maintain a Shoehorn electronic countermeasures system.

Instruction: Lectures and practical exercises in the operation and maintenance of a Shoehorn electronic countermeasures system, including basic principles of loud, jugs, and radar; input to Shoehorn electronic countermeasures; Shoehorn system and component block diagram and locations; peripheral equipment; testing procedures; and basic equipment repair.

Credit Recommendation: In the vocational certificate category, 1 semester hour in equipment maintenance on the basis of institutional evaluation (4/74), in the lower-division baccalaureate/associate degree category, credit in equipment maintenance on the basis of institutional evaluation (4/74).

NV-1715-0645

AN/SAP-42 COUNTERMEASURES RECEIVING GROUP, CLASS C

Course Number: A-104-025.

Location: Electronics Technician, Class C School, Treasure Island, CA.

Length: 4 weeks (160 hours).

Exhibit Dates: 10/68-Present.

Objectives: To train personnel with prior technical training in the operation, maintenance, and repair of the AN/SAP-42 countermeasures receiving group.

Instruction: Lectures and practical exercises on the operation, maintenance, and repair of the AN/SAP-42 countermeasures receiving group, including maintenance and material management, special circuits and semiconductor devices used in the AN/SAP-62, system block diagram, operating procedures, printed circuit board repair techniques, radar set modifications, receiver, trigger, and gate generator, normal and ECM video realignment, power supplies, and control monitor.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronic maintenance techniques (4/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in electronic maintenance techniques on the basis of institutional evaluation (4/74).
1-236 COURSE EXHIBITS

NV-1715-0646

INTERMEDIATE AVIATION FIRE CONTROL TECHNICIAN, CLASS B

Course Number: Not available
Location: Technical Training Center, Memphis, TN.
Length: 34 weeks (1360 hours)
Exhibit Dates: 4/69-12/68
Objectives: To provide aviation fire control technicians with supplemental training in electronics maintenance.

In Correlation: The student will be able to assemble and disassemble of guided missiles, aircraft machine gun and small arms repair, ammunition handling, pyrotechnics, underwater munitions and special weapons, ordnance administration, and test units for specific equipment.

Credit Recommendation: In the vocational certificate category, 1 semester hour in mathematics and 3 in basic electricity (6/75); in the lower-division baccalaureate/associate degree category, 3 semester hours in basic electronics (6/75).

NV-1715-0647

GUIDED MISSILEMAN

Class: A Guided Missileman

Course Number: Not available
Location: Guided Missiles School, Dam Neck, VA.
Length: 24 weeks (720 hours)
Exhibit Dates: 6/59-12/68
Objectives: To train personnel to perform as junior guided missilemen.

Instruction: Lectures and practical exercises in the basic electronics and circuits of guided missiles, including magnetic amplifiers, oscillators, transmitters, transmission lines, TRF receivers, superheterodyne receivers, aerial weapons, gyroscopic radio direction finders, radar special circuits, and principles of guided missiles and nuclear weapons.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics or electricity, 2 in electrical laboratory (4/74); in the lower-division baccalaureate/associate degree category, 6 semester hours in electronics or electricity (12/68); in the upper-division baccalaureate category, 1 semester hour as an elective in electronics, 1 in electrical laboratory (4/74).

NV-1715-0648

AVIATION ORDINANCEMAN, CLASS A

Course Number: C-646-2010
Location: Air Technical Training Center, Memphis, TN. Air Technical Training Center, Great Lakes, IL. Location: Air Technical Training Center, Great Lakes, IL.
Length: 3 weeks (105 hours)
Exhibit Dates: 6/59-12/68
Objectives: To train personnel to perform as aviation ordinancemen.

Instruction: Lectures and practical exercises in the functions of aviation ordnance, including elementary algebra and mathematics, physics, electrical fundamentals, electronic fundamentals, aircraft ordnance and electrical armament circuits, assembly and disassembly of guided missiles, aircraft machine gun and small arms repair, ammunition handling, pyrotechnics, underwater munitions and special weapons, ordnance administration, and test units for specific equipment.

Credit Recommendation: In the vocational certificate category, 1 semester hour in mathematics and 3 in basic electricity (6/75); in the lower-division baccalaureate/associate degree category, 3 semester hours in basic electronics (6/75).

NV-1715-0649

TERRIER WEAPON DIRECTION SYSTEM Mk 1

Course Number: Not available
Location: Service Schools Command, Great Lakes, IL.
Length: 20 weeks (600 hours)
Exhibit Dates: 2/68-Present
Objectives: To train enlisted personnel to maintain and repair weapons direction systems.

Instruction: Lectures and practical exercises in the repair of weapons direction systems, including Terrier weapon system fundamentals; analysis of weapons direction systems, including power supplies, simulators, electronics, target generation and display, target evaluation, director-channel switching, designation data converting system, weapons assignment, and casual analysis; and related computer and systems equipment.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics laboratory (4/74); in the lower-division baccalaureate/associate degree category, 1 semester hour as an elective in electronics (4/74).

NV-1715-0650

A-6 DATA PROCESSING UNIT AND ASSOCIATED TEST SET

INTERMEDIATE MAINTENANCE

Course Number: C-102-3775
Location: Air Maintenance Training Detachment, Whidbey Island, WA. Air Maintenance Training Detachment, Oceana, VA.
Length: 2 weeks (80 hours)
Exhibit Dates: 7/73-Present
Objectives: To train maintenance personnel to operate, maintain, and troubleshoot the A-6 Data processing unit and DPU test set.

Instruction: Lectures in data processing unit and DPU test set theory, system block-diagram and circuit analysis, functional operation, circuit theory, shop procedures, system checkout and repair procedures, and safety procedures.

Credit Recommendation: Insufficient data for evaluation (3/74).

NV-1715-0652

1. GUNNER'S MATE, CLASS A

Course Number: A-041-0010
Location: Service Schools Command, Great Lakes, IL.
Length: Version 1: 12 weeks (400 hours) Version 2: 10 weeks (401 hours)
Objectives: To train enlisted personnel to operate and maintain gun mounts and missile launching systems.

Instruction: Lectures and practical exercises in AC and DC motors, generators, current transformers, electric motors, vacuum tube, and transistor electronics, fundamental fluid mechanics, munitions, small arms and fire control systems.

NV-1715-0653

GUNNER'S MATE, CLASS A, PHASE II

Course Number: A-041-0011
Location: Service Schools Command, Great Lakes, IL.
Length: 7 weeks (163 hours)
Exhibit Dates: 2/68-12/73.
Objectives: To train gunner's mates to operate the electronic systems contained in missile launching systems.

Instruction: Lectures and practical exercises in the operation of the electronic systems in missile launching systems, including theory of operation and construction of vacuum tube, solid-state circuits; and magnetic amplifiers; circuit analysis techniques, weapons department and ordnance organization, and troubleshooting of electronic circuitry.

Credit Recommendation: In the vocational certificate category, 7 semester hours in electronics technology, 6 in the lower-division baccalaureate/associate degree category, 1 semester hour as an elective in electronics (6/75).

NV-1715-0654

MK 9 AND MK 10 2.75 IN CALIBER TWIN GUN MOUNT POWER DRIVE MAINTENANCE

Course Number: K-041-2060
Location: Fleet Training Center, San Diego, CA.
Length: 2 weeks (60 hours)
Exhibit Dates: 11/72-Present.
Objectives: To train enlisted personnel to operate and maintain the Mk 9 and
MK 10 Ford power drives and indicator-receiver regulators.

**Instruction:** Lectures and practical exercises in the testing, adjustment, and repair of the MK 9 and MK 10 Ford power drives and indicator-receiver regulators, including elementary hydraulics, electronic circuitry, control systems, disassembly, and assembly, and adjustment procedures.

**Credit Recommendation:** Credit is not recommended because of the military-specific nature of the course.

**NV-1715-0659**

1/50 CALIBER RAPID FIRE TWIN MOUNT

**Course Number:** J-113-1202

**Location:** Fleet Combat Direction Systems Training Center, Atlantic, Dam Neck, VA.

**Length:** 4 weeks (120 hours)

**Exhibit Dates:** 10/72-Present

**Objectives:** To train gunnery personnel to test, adjust, and maintain the 1/50 caliber rapid fire gun mount.

**Instruction:** Lectures and practical exercises in the testing, adjustment, and maintenance of the 1/50 caliber rapid fire gun mount, including basic electricity and electronics, power distribution and control circuits, parallax system operation, elevation and train receiver regulators; amplifier cabinet components; gun mechanism; loader operation; cam shaft operation; feeding and shifting mechanism; timing; brake system, and lubrication procedures.

**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course.

**NV-1715-0656**

DATA SYSTEMS TECHNICIAN, CLASS C, PERIPHERAL GROUP RD-21(V)/UYK RECORDER REPRODUCER MAGNETIC DISK FILE EQUIPMENT MAINTENANCE

**Course Number:** A-150-0067

**Location:** Naval Schools Command, Mare Island, CA.

**Length:** 5 weeks (150 hours)

**Exhibit Dates:** 4/70-Present

**Objectives:** To train enlisted personnel to operate and maintain a recorder-reproducer magnetic disk RD-281(U)/UYK.

**Instruction:** Lectures and practical exercises in disk file familiarization, programming, control functions, disk file adjustment and maintenance, instruction on file organization, and malfunction isolation.

**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course.

**NV-1715-0657**

MARDAN/VERDAN COMPUTER THEORY

**Course Number:** P-193-084

**Location:** Training Center, Charleston, SC.

**Length:** 2 weeks (80 hours)

**Exhibit Dates:** 1/70-Present

**Objectives:** To train the navigation electronics technician to operate the MARDAN or VERDAN computer and to understand its theory of operation.

**Instruction:** Lectures of MARDAN or VERDAN computer operation, including Boolean algebra, review, computer program loading, power sequencing and protective circuits, OP automated operations, digital differential analyzer operation and mechanism, input/output, and troubleshooting techniques.

**Credit Recommendation:** In the vocational certificate category, credit in electronics on the basis of institutional evaluation (3/74). In the lower-division baccalaureate/associate degree category, credit in electronics on the basis of institutional evaluation (3/74).

**NV-1715-0658**

TERRIER WEAPONS SYSTEMS WITH DIGITAL FIRE CONTROL SYSTEMS (MFCS MK 76/AFCS)

**Course Number:** A-121-0180

**Location:** Guided Missiles School, Dam Neck, VA.

**Length:** 1 week (470 hours)

**Exhibit Dates:** 10/72-Present

**Objectives:** To train enlisted personnel to operate and maintain the Terrier digital fire control weapons system and to supervise its operation, maintenance, and testing.

**Instruction:** Lectures and practical exercises in Terrier weapons system introduction; ship sensors and search radars, including three-dimensional ones; fire control systems, including gun director and underwater fire systems; power distribution and control circuits, tactical data systems, weapons direction system, guided missile fire control system data flow and launching system, Terrier missile, and weapons system testing and alignment procedures.

**Credit Recommendation:** In the vocational certificate category, 6 semester hours in electrical laboratory (3/74).

**NV-1715-0659**

P-3 POWER GENERATING SYSTEM AND AVQ-2 SEARCHLIGHT INTERMEDIATE MAINTENANCE

**Course Number:** Not available

**Location:** Air Maintenance Training Detachment, Patuxent River, MD, Air Maintenance Training Detachment, Moffett Field, CA.

**Length:** 2 weeks (80 hours)

**Exhibit Dates:** 5/71-Present

**Objectives:** To train maintenance personnel to test, troubleshoot, and repair the P-3 generator, supervisory panel, bus transfer relay, decoder timer, and a specific searchlight.

**Instruction:** Lectures and practical exercises in the testing, troubleshooting, and repair of the P-3 generator, supervisory panel, bus transfer relay, decoder timer, and the AVQ-2C searchlight, including use of oscilloscope and multimeter in the troubleshooting, operation, and repair of the various components of the power-generating system, and searchlight components, operation, test, and repair procedures.

**Credit Recommendation:** In the vocational certificate category, 1 semester hour as an elective in electronics (5/74).

**NV-1715-0660**

MOTION PICTURE PROJECTION SYSTEM MAINTENANCE, CLASS C

**Course Number:** A-690-0014, A-690-0015

**Location:** Naval School, Norfolk, VA.

**Length:** 2 weeks (80 hours)

**Exhibit Dates:** 2/70-Present

**Objectives:** To train projectionists to maintain, troubleshoot, and repair JAN 16mm sound motion picture projectors.

**Instruction:** Lectures and practical exercises in the repair and maintenance, projection maintenance, troubleshooting, and repair, including mechanical and electrical components, power supply and vacuum tube amplifier theory, and audio system troubleshooting procedures.

**Credit Recommendation:** In the vocational certificate category, 3 semester hours in media, 3 in audio-visual equipment repair (3/74). In the lower-division baccalaureate/associate degree category, 3 semester hours in media, 1 in audio-visual technology, 1 as an elective in electrical technology, 1 as an elective in electromechanical technology (3/74).

**NV-1715-0661**

STROMBERG CARLSON AUTOMATIC TELEPHONE XY SWITCHING SYSTEM MAINTENANCE, CLASS C

**Course Number:** A-623-0043

**Location:** Service School Command, Great Lakes, IL

**Length:** 7 weeks (220 hours)

**Exhibit Dates:** 12/74-Present

**Objectives:** To train personnel in the maintenance, repair and checkout of automatic electric telephone systems.

**Instruction:** Areas of instruction include the Stromberg Carlson automatic telephone system, relaying fundamentals, analysis of system design, priorities and faults.

**Credit Recommendation:** In the vocational certificate category, 1 semester hour as an elective in electrical technology (9/77).

**NV-1715-0662**

MODEL 28 ASR TELETYPE MAINTENANCE

**Course Number:** A-160-0023

**Location:** Teletype Maintenance Class C School, Norfolk, VA, Teletype Maintenance Class C School, San Diego, CA.

**Length:** 9-10 weeks (307-328 hours)

**Exhibit Dates:** 10/71-Present

**Objectives:** To train personnel to install, maintain, and repair Mod 28 automatic send and receive teletypes (AN/UGC-6K, AN/UGC-20 and AN/UGC-6K, modified for low-level keying), and in methods for planned maintenance system implementation.

**Instruction:** Lectures and practical exercises in installation, maintenance, and repair of Mod 28 automatic send and receive teletypes and in the implementation of maintenance data collection systems, including introductions to AN/UGC-6K, automatic typewriter, keyboard, perforator and perforator, and transistor distributor, operation of electrical components, troubleshooting of the AN/UGC-6K, introduction to the AN/UGC-20 and to various teletype equipment, and introduction to low-level keying.

**Credit Recommendation:** In the vocational certificate category, 6 semester hours in teletypewriter maintenance (3/74); in the lower-division baccalaureate/associate degree category, 3 semester hours as an elective in electrical technology, mechanical technology, or electromechanical technology (3/74).

**NV-1715-0663**

TELETYPE MAINTENANCE, CLASS C, LOW LEVEL KEYING

**Course Number:** A-160-0052, A-160-0053

**Location:** Naval Schools Command, Norfolk, VA, Service School Command, San Diego, CA.

**Length:** 3 weeks (105 hours)

**Exhibit Dates:** 1/71-Present

**Objectives:** To train enlisted personnel to install low-level modification kits and to adjust, maintain, and repair the Mod 28 teletypewriter.
COURSE EXHIBITS

Instruction: Lectures and practical exercises in the installation, adjustment, maintenance, and preventive maintenance of MOD 28 teletypewriter equipment modified for low-level keying, including electrical orientation, semiconductors fundamentals; radio frequency and electronic tubes, circuits, purpose and construction of MK-1088/UG modification kit, modes of operation, circuit symbols, electrical service assemblies, and options, test buildings, troubleshooting, modification kit installation; adjustments; converter; repair; and troubleshooting.

Credit Recommendation: In the vocational certificate category, 2 semester hours as an elective in mechanical, electrical, or electromechanical technology (5/74).

NV-1715-0664

1. TEXTYPE REPERFORATOR TT-253/UG COMBINED MAINTENANCE
2. TELETYPE WRITER REPERFORATOR TT-253/UG SERIES AND
   TELETYPE DISTRIBUTOR TT-187/UG SERIES
3. TELETYPE DISTRIBUTOR TT-253/UG Series and Transmitter
   Distributor TT-187/UG Series
4. TELETYPE DISTRIBUTOR REPERFORATOR TT-253/UG

Course Number: All Versions. A-160-0076
Version 2: L-160-0012; L-160-012
Location: Submarine Training Center, Pacific, Pearl Harbor, HI.
Length: Version 1: 4 weeks (120 hours)
Version 2: 4-5 weeks (120-150 hours).
Objectives: To train rated personnel to operate and maintain TT-253/UG teletypewriter perforators, TT-187/UG distributor transmitters, and associated equipment.

Instruction: Lectures and practical exercises on the operation and maintenance of TT-253/UG teletypewriter perforators and TT-187/UG distributor transmitters, including general system information, theory of system operation, and service and repair of teleprinter transmitters.

Credit Recommendation: Version 1: In the vocational certificate category, 2 semester hours in electromechanical technician training (5/74).

NV-1715-0665

TELETYPETRATOR SYSTEM (AFLOAT)

MAINTENANCE MODELS TT-253/UG AND AN/UGC-5 TT-253 TYPING

Perforator

Course Number: K-160-262
Location: Fleet Training Group, Pearl Harbor, HI.
Length: 6 weeks (180 hours).
Exhibit Dates: 4/66-12/68.
Objectives: To train enlisted personnel on TT-253A teletypewriter and AN/UGC-5 perforators.

Instruction: Lectures and practical exercises on the operation and preventive maintenance of TT-70A/UG teletypewriter and the operation of the typing perforator TT-253/UG, including teleprinter introduction, Mod 28 component parts, keyboard and adjustments, automatic typer and adjustments, theory of perforator operation, the TT-252/UG typing perforator, and punching, tape feed, printing operation, and troubleshooting.

Credit Recommendation: In the vocational certificate category, 4 semester hours in teletypewriter operation and repair (5/74), in the lower-division baccalaureate/associate degree category, 2 semester hours as an elective in electromechanical technology (5/74).

NV-1715-0666

P-7/TT-253/UG TELETYPETRATOR GROUP

M AINTENANCE, NO. 20

Course Number: Not available
Location: Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA.
Length: 3 weeks (120 hours).
Exhibit Dates: 3/68-Present.

Objectives: To train maintenance personnel to repair specific teleprinters.

Instruction: Lectures and practical exercises in the operation and maintenance of teleprinters.

Course includes all elements of the teleprinter ribbon-feed group, printer breakdown, motor servicing, magnetic core-driven drum, punch-and-release system, alignment, character advance and carriage return, advance prevention, print-prevention system, and general troubleshooting.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electromechanical technology (5/74).

NV-1715-0667

5/74 RAPID FIRE MOUNT FUZESETTER, TRAIN AND ELEVATION (SERVO AMPLIFIER SYSTEM)

Course Number: K-041-2029
Location: Fleet Training Center, San Diego, CA.
Length: 3 weeks (90 hours).
Exhibit Dates: 6/69-6/70.
Objectives: To train enlisted personnel to operate and maintain a specific artillery fuze setter and fire control equipment.

Instruction: Lectures and practical exercises on a specific artillery fuze setter and fire control equipment. Course includes power supplies and servo units, signal tracing, sequence control circuits, use of schematics, magnetics, the operation and maintenance of AC and DC amplifiers.

Credit Recommendation: In the vocational certificate category, 2 semester hours as an elective in electronics (5/74).

NV-1715-0668

5/74 MOUNT RAPID FIRE M 42 MOD 7

LOCATION AND MAINTENANCE

Course Number: 3-041-0128; K-041-2056.
Location: Fleet Training Center, San Diego, CA.
Length: 3 weeks (90 hours).
Exhibit Dates: 10/71-Present.
Objectives: To train enlisted personnel to operate and maintain a gun mount.

Instruction: Lectures and practical exercises in the operation and maintenance of a gun mount. Course includes basic electrical, electrical control systems, and the general operation of a 5-inch gun mount.

Credit Recommendation: In the vocational certificate category, 1 semester hour in basic electricity (5/74).

NV-1715-0669

MARINE AIR TRAFFIC CONTROL UNIT

AUXILIARY EQUIPMENT MAINTENANCE, CLASS C

Course Number: Not available
Location: Air Technical Training Center, Glynnco, GA.
Length: 7 weeks (280 hours).
Objectives: To train enlisted personnel to operate, maintain, and repair specific AC generators and air conditioners.

Instruction: Lectures and practical exercises in the operation, maintenance, and repair of auxiliary equipment. Course includes simple DC circuits, conductors, insulators, resistors, inductance; capacitance, basic electrical indicating instruments, AC generators, transformers, AC motors, semiconductor fundamentals, rectifiers, starting systems, fault circuits, battery charging circuits, and air conditioning fundamentals.

Credit Recommendation: In the vocational certificate category, 4 semester hours in electrical and air conditioning fundamentals (3/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in electrical and air conditioning fundamentals (3/74).
Exhibit Dates: 7/69-Present

Objectives: To train maintenance personnel in the maintenance, repair, and functional testing of the AN/APS-20B/E radar set at the intermediate level.

Instruction: Lectures and practical exercises in the maintenance, repair, and functional testing of the AN/APS-20B/E radar set, including theory of operation of the AN/APS-20B/E radar set control C-1449/APS-20B/E; low-voltage power supply V-347/APS-20B/E; electrical synchronizer SN-35/APS-20B/E; transmitter T-467/APS-20B/E; high-voltage control; radar IF amplifiers; receiver K-251/APS-20B/E; and duplexer, and indicator IF-414/A/APA-125.

Credit Recommendation: In the vocational certificate category, credit in radar on the basis of institutional evaluation (6/74).

NV-1715-0672

E-2A AN/AQ-96 SEARCH RADAR INTERMEDIATE MAINTENANCE

Course Number: C-102-3471.

Location: Air Maintenance Training Detachment, North Island, CA.

Length: 7-8 weeks (280-320 hours)

Exhibit Dates: 3/72-Present

Objectives: To train maintenance personnel to maintain the AN/APS-96 search radar set at the intermediate and organizational levels.

Instruction: Lectures and practical exercises in the intermediate maintenance of the AN/APS-96 search radar, including transmit operation, receive operation, modulation components, frequency and phase components, position function, trigger timer and synchronizer, frequency synthesizer, and test operations.

Credit Recommendation: In the vocational certificate category, credit in radar on the basis of institutional evaluation (6/74).

NV-1715-0673

NAVAL TACTICAL DATA SYSTEM (NTDS) DATA INPUT-BASIC

(Naval Tactical Data System (NTDS) Tracker/Supervisor)

Course Number: K-221-0039; K-221-1010.

Location: Fleet Combat Training Center, Pacific, San Diego, CA, Fleet Combat Training Center, Atlantic, Dam Neck, Virginia\n
Length: 3 weeks (98-120 hours)

Exhibit Dates: 5/72-Present.

Objectives: To train enlisted personnel to perform as detector-trackers, identification operators, or track supervisors.

Instruction: Lectures and practical exercises on the Naval Tactical Data System (NTDS) including data input to NTDS, NTDS block diagram analysis, data display equipment manual air tracking, surface tracking, tracking considerations, identification, IFP/SIF/PIF, track supervisor, system tracking. NTDS communications, antenna keyset, navigation keyset, utility mode, data links, beacon video processor, ECM supervisor, ECM keyset, height/size, and communication security and user overview.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (6/74).

NV-1715-0674

BASIC NAVAL TACTICAL DATA SYSTEM (NTDS) AIR INTERCEPT CONTROLLER

Course Number: K-2G-0027; K-221-0027.

Location: Air Warfare Training Center, San Diego, CA.

Length: 6 weeks (173 hours)

Exhibit Dates: 6/72-Present

Objectives: To train air intercept controllers and radarmen to perform as basic NTDS air intercept controllers.

Instruction: Lectures and practical exercises in the maintenance of the AN/APS-20B/E, including air intercept control, including aircraft characteristics, air-to-air weapons systems, radar nose navigation aids, communications equipment, interconnect control communication procedures and vocabulary, radar indicator equipment, identification equipment, and preparation and procedures for NTDS control.

Credit Recommendation: In the vocational certificate category, credit in radar aircraft control operation on the basis of institutional evaluation (6/74).

NV-1715-0576

MARK 105 UNDERWATER FIRE CONTROL SYSTEM (UWFC/S) MOD 28

Course Number: Not available.

Location: Fleet Sonar Schools, Key West, FL; Fleet Sonar Schools, San Diego, CA.

Length: 16 weeks (507 hours)

Exhibit Dates: 2/68-Present

Objectives: To train personnel in the maintenance and repair of the Mk 105 Mod 11-23 underwater fire control system (UWFC/S).

Instruction: Lectures and practical exercises in the maintenance of the MK 105 11-23 UWFC/S, including introduction to the weapon system, equipment testing, trouble analysis, basic component adjustments, analog and digital components and special circuits, computer description, instrumentation, control, basic circuits, maintenance and operation, trainable and fixed weapon data flow equipment, Hedgehog control equipment, and torpedo control equipment.

Credit Recommendation: Insufficient data for evaluation (6/74).

NV-1715-0676

ACOUSTIC ANTI-SUBMARINE OPERATOR TRANSITION

Course Number: E-210-53.

Location: Fleet Airborne Electronics Training Unit, Pacific, Moffett Field, CA.

Length: 3 weeks (98 hours)

Exhibit Dates: 10/72-Present.

Objectives: To train the acoustic AW in DIFAR equipment operation.

Instruction: Lectures and practical exercises in DIFAR equipment operation, including acoustic sensor signal generator and listening devices, sonobuoy receiver systems, AN/AQA-7 systems analysis, signal flow, frequency spectrum, nondirectional modes of operation, range mode of operation, acoustic recorder/reproducer, time code generator, and capabilities of sensor station 1 and 2.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/74).

NV-1715-0677

SH-3 AN/AQS-13 SONAR MAINTENANCE

Course Number: Not available.

Location: Air Maintenance Training Detachment, Ream Field, CA; Air Maintenance Training Detachment, Key West, FL.

Length: 6 weeks (240 hours).

Exhibit Dates: 8/67-12/68.

Objectives: To train the airman to operate and maintain sonar systems.

Instruction: Lectures and practical exercises in the maintenance of a specific sonar system. Topics include sonar fundamentals, electronic warfare principles, electronic intelligence information, sensor data display system, intercommunication system, MAD signal interpretation, emitter scan characteristics, threat signal identification, and 14B40 trainer laboratory.

Credit Recommendation: In the vocational certificate category, credit in communications systems on the basis of institutional evaluation (6/74).

NV-1715-0678

RADAR/MAD FOR NONACOUSTIC OPERATOR PIA/B (D)

Course Number: E-210-45.

Location: Fleet Aviation Specialized Operational Training Group, Pacific, Moffett Field, CA.

Length: 2 weeks (70 hours)

Exhibit Dates: 10/72-Present.

Objectives: To train VP antisubmarine warfare sensor operators in the operation of nonacoustic sensors.

Instruction: Lectures and practical exercises in nonacoustic sensors, including magnetic environment, equipment familiarization and procedures, magnetic compensation equipment and procedures, MAD signal interpretation, AN/AIC-22 communication system, navigation plotting familiarization and application of navigation principles, radar fundamentals, radar equipment components and operating procedures, airborne recognition equipment and pre-flight procedures, and radar tactical employment.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/74).

NV-1715-0679

NONACOUSTIC ANTI-SUBMARINE OPERATOR TRANSITION PJC

(Nonacoustic Operator Transition)

Course Number: E-210-54.

Location: Fleet Aviation Specialized Operational Training Group, Pacific, Moffett Field, CA.

Length: 4 weeks (126 hours)

Exhibit Dates: 10/72-Present.

Objectives: To train the nonacoustic AW operator in PJC procedures.

Instruction: Lectures and practical exercises in PJC procedures, including sensor search and location on sensors; radar principles, radar navigation principles; magnetic environment principles, electronic warfare principles, electronic intelligence information, sensor data display system; intercommunication system; MAD scan converter system; emitter scan characteristics; threat signal identification, and 14B40 trainer laboratory.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/74).

NV-1715-0677

SH-3 AN/AQS-13 SONAR MAINTENANCE

Course Number: Not available.

Location: Air Maintenance Training Detachment, Ream Field, CA; Air Maintenance Training Detachment, Key West, FL.

Length: 6 weeks (240 hours).

Exhibit Dates: 8/67-12/68.

Objectives: To train the airman to operate and maintain sonar systems.

Instruction: Lectures and practical exercises in the maintenance of a specific sonar system. Topics include sonar fundamentals, electronic warfare principles, electronic intelligence information, sensor data display system, intercommunication system, MAD signal interpretation, emitter scan characteristics, threat signal identification, and 14B40 trainer laboratory.

Credit Recommendation: In the vocational certificate category, credit in communications systems on the basis of institutional evaluation (6/74).

NV-1715-0678

RADAR/MAD FOR NONACOUSTIC OPERATOR PIA/B (D)

Course Number: E-210-45.

Location: Fleet Aviation Specialized Operational Training Group, Pacific, Moffett Field, CA.

Length: 2 weeks (70 hours)

Exhibit Dates: 10/72-Present.

Objectives: To train VP antisubmarine warfare sensor operators in the operation of nonacoustic sensors.

Instruction: Lectures and practical exercises in nonacoustic sensors, including magnetic environment, equipment familiarization and procedures, magnetic compensation equipment and procedures, MAD signal interpretation, AN/AIC-22 communication system, navigation plotting familiarization and application of navigation principles, radar fundamentals, radar equipment components and operating procedures, airborne recognition equipment and pre-flight procedures, and radar tactical employment.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/74).

NV-1715-0679

NONACOUSTIC ANTI-SUBMARINE OPERATOR TRANSITION PJC

(Nonacoustic Operator Transition)

Course Number: E-210-54.

Location: Fleet Aviation Specialized Operational Training Group, Pacific, Moffett Field, CA.

Length: 4 weeks (126 hours)

Exhibit Dates: 10/72-Present.

Objectives: To train the nonacoustic AW operator in PJC procedures.

Instruction: Lectures and practical exercises in PJC procedures, including sensor search and location on sensors; radar principles, radar navigation principles; magnetic environment principles, electronic warfare principles, electronic intelligence information, sensor data display system; intercommunication system; MAD scan converter system; emitter scan characteristics; threat signal identification, and 14B40 trainer laboratory.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/74).

NV-1715-0677

SH-3 AN/AQS-13 SONAR MAINTENANCE

Course Number: Not available.

Location: Air Maintenance Training Detachment, Ream Field, CA; Air Maintenance Training Detachment, Key West, FL.

Length: 6 weeks (240 hours).

Exhibit Dates: 8/67-12/68.

Objectives: To train the airman to operate and maintain sonar systems.

Instruction: Lectures and practical exercises in the maintenance of a specific sonar system. Topics include sonar fundamentals, electronic warfare principles, electronic intelligence information, sensor data display system, intercommunication system, MAD signal interpretation, emitter scan characteristics, threat signal identification, and 14B40 trainer laboratory.
COURSE EXHIBITS

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (6/74).

NV-1715-0680

BASIC DENTAL REPAIR TECHNICIAN
(Dental Technician Repair, Class C)
(Dental Repair Technician, Basic)
Course Number: B-670-10.
Location: National Medical Center, Bethesda, MD.
Length: 24 weeks (900 hours).
Objectives: To train personnel to perform as basic dental repair technicians.
Instruction: Lectures and practical exercises in the maintenance and repair of dental operating room and prosthetic laboratory equipment, including applied physics, repair of dental operating room equipment, repair of dental prosthetic laboratory equipment, instructor training, and petty officer leadership training.
Credit Recommendation: In the vocational certificate category, 2 semester hours in machine shop (6/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in machine shop on the basis of institutional evaluation (6/74).

NV-1715-0681

TARTAR WEAPONS SYSTEM MISSILE FIRE CONTROL SYSTEM (MFCS) Mk 74
Moder 0
Course Number: A-121-0032, A-121-0034
Location: USN Midship School, Dam Neck, VA, Training Center, Mare Island, CA.
Length: 11 weeks (323 hours).
Exhibit Dates: 6/72-10/72.
Objectives: To train senior petty officers on the Tartar missile weapons system.
Instruction: Lectures and practical exercises on Tartar weapons system missile fire control system Mk 74 Mod 0, including supplemental reports, introduction to OP-3472, DDG weapons system, Tartar weapons system, system functional diagrams, system testing and casualty analysis, standard missile (MR), DDG battery alignment, ECM/ECM, Tartar procedures and exercises, and UHF TM system.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (5/74).

NV-1715-0682

F/RF-4B POWER GENERATING SYSTEM MAINTENANCE
Course Number: C-602-182
Location: Air Maintenance Training Detachment, El Toro, CA.
Length: 2 weeks (80 hours).
Exhibit Dates: 11/72-10/72.
Objectives: To train strikers to maintain the power generating system of the F-RF-4B aircraft at the intermediate and organizational level.
Instruction: Lectures and practical exercises on the F-RF-4B power generating system maintenance, including familiarization and circuit analysis of power generating system, circuit analysis, troubleshooting procedures and equipment, electrical power generating system, alternating current generators, specific electrical power test set, testing of the frequency and load control box and the generator control panel, and saturable current potential transformer.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/74).

NV-1715-0683

UH-3C, HH-3C, HH-3D AUTOMATIC STABILIZATION EQUIPMENT
ORGANIZATIONAL MAINTENANCE
Course Number: C-602-3339.
Location: Air Maintenance Training Detachment, Imperial Beach, CA.
Length: 4 weeks (112 hours).
Exhibit Dates: 2/72-10/72.
Objectives: To train maintenance personnel to maintain and repair the automatic stabilization equipment installed on UH-3C, HH-3C, and HH-3D helicopters.
Instruction: Lectures and practical exercises in the organizational maintenance of UH-3C, HH-3C, and HH-3D automatic stabilization equipment, including introduction and theory of the automatic stabilization equipment system; operation and maintenance of the ASE channels; roll, pitch, and yaw channels; collective channel, and review and testing of the ASE system.
Credit Recommendation: In the vocational certificate category, 2 semester hours in helicopter control systems on the basis of institutional evaluation (6/74).

NV-1715-0684

SHIPBOARD DECOY SYSTEM (CHAFF/FROG) LAUNCHER
OPERATION AND MAINTENANCE Mk 28 Mod 1-3
Course Number: J-113-0103; J-041-1032, J-113-1032.
Location: Fleet Combat Direction Systems Training Center, Atlantic, Dam Neck, VA.
Length: 2 weeks (70 hours).
Exhibit Dates: 10/72-10/72.
Objectives: To train enlisted personnel to operate and maintain a rocket launching system, including loading, unloading, preventive maintenance, casualty analysis, and corrective maintenance.
Instruction: Lectures and practical exercises in the operation and maintenance of a rocket launching system. Topics include basic electricity, basic hydraulics, hydraulic pumps and valves, and information pertaining to specific equipment. Coverage of the topics is very limited.
Credit Recommendation: In the vocational certificate category, 1 semester hour in electromechanical laboratory (6/74).

NV-1715-0685

ADVANCED SONAR MAINTENANCE, 561
(Class B Sonarman)
Course Number: 561.
Location: Fleet Sonar School, San Diego, CA.
Length: 18 weeks (596 hours).
Exhibit Dates: 7/55-12/68.
Objectives: To train enlisted personnel to repair sonar and associated equipment.
Instruction: Lectures and practical exercises in advanced sonar maintenance, including fundamental mathematics, electricity and electronics theory, vacuum tube fundamentals, basic electronic circuits, basic servo systems, and circuit analysis and troubleshooting sonar equipment.
Credit Recommendation: In the vocational certificate category, 12 semester hours in electricity or electronics in electrical laboratory (6/74); in the lower-division baccalaureate/associate degree category, 4 semester hours in electricity or electronics (12/68).

NV-1715-0686

RA-5C AN/ALQ-61 COUNTERMEASURES
SET SPECIAL SUPPORT EQUIPMENT
Course Number: Not available.
Location: Air Maintenance Training Detachment, Sanford, FL.
Length: 11 weeks (440 hours).
Exhibit Dates: 8/67-12/68.
Objectives: To train enlisted personnel to operate, maintain, and service specific countermeasures equipment and systems.
Instruction: Lectures and practical exercises in the operation and maintenance of the AN/ALQ-61 countermeasures set, including line test, shop test, and calibration procedures for the countermeasures test set.
Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics laboratory (6/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics laboratory (6/74).

NV-1715-0687

RA-5C AN/ALQ-35 DECM SYSTEM
Course Number: Not available.
Location: Air Maintenance Training Detachment, Whidbey Island, WA.
Length: 8 weeks (320 hours).
Exhibit Dates: 2/67-12/68.
Objectives: To train fleet maintenance personnel to service and maintain specific electronic equipment.
Instruction: Lectures and practical exercises in the service and maintenance procedures for specific electronic equipment. Topics include system functional analysis, preamplifier and multicooper, RF circuitry, synthesizer, receiver, high-resolution millipede, jam frequency generator, and an introduction to logic. Foundation material in digital fundamentals and circuitry is included in the course.
Credit Recommendation: In the vocational certificate category, 6 semester hours in electronics, 2 in electrical laboratory (6/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in electronics, 1 in electrical laboratory (12/68).

NV-1715-0688

F-5 COMMUNICATION NAVIGATION AND IDENTIFICATION (CNI) SYSTEMS
ORGANIZATIONAL MAINTENANCE
Course Number: C-102-3859; C-102-306.
Location: Air Maintenance Training Detachment, Miramar, CA.
Length: 2 weeks (60-80 hours).
Exhibit Dates: 3/70-10/72.
Objectives: To train maintenance personnel to handle operational data flow and to maintain the F-5 aircraft's communications, navigation, and identification systems.
Instruction: Lectures and practical exercises in the organizational maintenance of the F-5 aircraft's communications, navigation, and identification systems, including integration electronics systems, automatic radar direction finding, radar, block-diagram analysis, and the TACAN system, and troubleshooting procedures.
Credit Recommendation: In the vocational certificate category, 1 semester hour in electrical maintenance laboratory (6/74).
NV-1715-0689

SUBMARINE SONAR SUBJECTIVE ANALYSIS (SSSA)
Course Number: A-130-0020, F-130-020.
Location: Submarine School, New London, CT; Submarine Training Center, Pacific, Pearl Harbor, HI; Fleet Ballistic Missile Submarine Training Center, Charleston, SC.
Length: 4-5 weeks (120-150 hours)
Exhibit Dates: 12/69-Present.
Objectives: To provide sonar technicians with advanced training in the analysis and classification of underwater sound information.

Instruction: Lectures and practical exercises in the analysis and classification of underwater sound information, including security, acoustic intercept, use of filters, tone-finding techniques, diesel submarines, patrol craft, warships, analysis of target and non-target noise, and principles of magnetic tape recording.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (9/77).

NV-1715-0690

COMMUNICATIONS QUALITY MONITORING SYSTEM OPERATOR
Course Number: A-201-0020.
Location: Servicemen Schools Command, San Diego, CA.
Length: 2 weeks (60 hours)
Exhibit Dates: 10/71-Present.
Objectives: To train enlisted personnel to monitor the performance of operational communication systems.

Instruction: Lectures and practical exercises to familiarize students with the duties and skills necessary to perform as communications quality monitoring systems operators, including fundamentals of communications, teletype terminology, audio techniques, quality control methods, and systems application.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (9/77).

NV-1715-0691

A-6A WEAPONS SYSTEM SPECIALIST ORGANIZATIONAL MAINTENANCE
Course Number: C-102-3954, C-000-3764.
Location: Air Maintenance Training Detachment, Whidbey Island, WA; Air Maintenance Training Detachment, Oceana, VA.
Length: 10-12 weeks (400-480 hours)
Exhibit Dates: 9/71-Present.
Objectives: To train enlisted personnel to operate and learn advanced sonar techniques.

Instruction: Lectures and practical exercises in the maintenance of the A-6A weapons system, including aircraft systems familiarization, ballistics computer, radar systems, DIANE system operation and tie-in, diagnostics, and troubleshooting procedures. Course provides good introduction to digital systems and basic digital computer theory.

Credit Recommendation: In the vocational certificate category, 3 semester hours in basic electrical laboratory (6/74).

NV-1715-0692

ADVANCED SONAR, 567
Course Number: 567
Location: Fleet Sonar School, Key West, FL.
Length: 14 weeks (558 hours)
Exhibit Dates: 10/57-12/68.
Objectives: To train enlisted personnel to operate, maintain, and repair the specific sonar radar equipment.

Instruction: Lectures and practical exercises in sonar maintenance, at the advanced level. Course includes brief and basic coverage of electricity, special electronic circuits, and meter theory.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electrical laboratory (6/74).

NV-1715-0693

TERRITORIAL ROLL SET AN/SPG-55B CONTINUOUS WAVE ACQUISITION AND TRACKING (CWAT)

Location: Guided Missiles School, Dam Neck, VA.
Length: 2 weeks (309 hours)
Exhibit Dates: 6/72-12/68.
Objectives: To train enlisted personnel to maintain and troubleshoot a specific radar system.

Instruction: Lectures and practical exercises in the maintenance and operation of the AN/SPG-55B radar system and specialized electronic test equipment, including digital voltmeters, pulse generators, VSWR indicators, spectrum analyzers, digital voltmeters and counters, square-wave generators, and continuous-wave radio frequency analyzers.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics laboratory (6/74).

NV-1715-0694

ADVANCED SONAR, 557
Course Number: 557.
Location: Fleet Sonar School, Key West, FL.
Length: 11 weeks (440 hours)
Exhibit Dates: 7/57-12/68.
Objectives: To train enlisted personnel to operate and learn advanced sonar techniques.

Instruction: Lectures and practical exercises in the operation of sonar at an advanced level. Topics include basic mathematics, base fire control, elementary wiring diagrams, and testing, calibration, and maintenance of fire control systems.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electrical laboratory (6/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics laboratory (6/74), in the upper-division baccalaureate category, 1 semester hour in electronics laboratory (6/74).

NV-1715-0695

P-3 AN/APS-80 SEARCH RADAR SYSTEM ORGANIZATIONAL MAINTENANCE
Course Number: Not available.
Location: Air Maintenance Training Detachment, Patuxent River, MD; Air Maintenance Training Detachment, Moffett Field, CA.
Length: 3 weeks (136 hours)
Exhibit Dates: 6/74-12/68.
Objectives: To train experienced technicians to maintain the AN/APS-80 search radar at the organizational and intermediate level.

Instruction: Lectures and practical exercises in the maintenance and alignment procedures for the AN/APS-80 search radar system, including introduction to the P-3 search radar system, dual radar installation in the P-3, antenna azimuth and tilt systems, dual installation switching arrangement, P-3 radar system alignment, modular power supply, electronic synchronizer, AC power distribution, and TR tube and associated circuitry.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics, 1 in -electronics laboratory (6/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics, and additional credit in electronics on the basis of institutional evaluation (6/74).

NV-1715-0696

AVIATION ANTI-SUBMARINE WARFARE (AASW) SENSOR STATION THREE OPERATOR, P3C (NAVY ANTI-SUBMARINE WARFARE (AASW) NONACOUSTIC OPERATOR P3C)
Course Number: E-210-0005, E-210-050.
Location: Fleet Aviation Specialized Operational Training Group, Moffett Field, CA.
Length: 3-4 weeks (105-126 hours).
Exhibit Dates: 10/72-Present.
Objectives: To train VP avionics warfare operators in the operation of nonacoustic equipment.

Instruction: Lectures and practical exercises in nonacoustic equipment, including operation, intercept procedures, terminology, and applications and skills of scope interpretation, including sensor station duties and techniques, equipment operation, search and localization sensors, radar principles, radar navigation principles, magnetic environment principles, electronic warfare principles, and electronic intelligence recognition.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (6/74).

NV-1715-0697

SH-2D LIGHT AIRBORNE MULTIPURPOSE SYSTEMS (LAMPS) AVIONIC EQUIPMENT ORGANIZATIONAL MAINTENANCE
Course Number: C-102-3376.
Location: Air Maintenance Training Detachment, Lakehurst, NJ; Air Maintenance Training Detachment, Imperial Beach, CA.
Length: 2 weeks (80 hours).
Exhibit Dates: 1/71-6/73.
Objectives: To train fleet maintenance personnel in the maintenance of SH-2D avionics equipment.

Instruction: Lectures and practical exercises in the maintenance of SH-2D avionics equipment, including LAMPS organizational maintenance, radar/ESM, antisubmarine warfare, communications/navigation equipment, systems operation and analysis, troubleshooting and repair, use of test equipment, publications and safety procedures.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics maintenance (6/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics maintenance (6/74).
NV-1715-0698
AVIATION SUPPORT EQUIPMENT NC-10B MOBILE ELECTRIC POWER PLANT SYSTEMS INTERMEDIATE MAINTENANCE

Course Number: Not available
Location: Air Maintenance Training Detachment, Jacksonville, FL. Air Maintenance Training Detachment, North Island, CA.
Length: 2 weeks (80 hours).

Exhibit Dates: 2/70-Present.

Objectives: To train aviation support equipment technicians to perform intermediate maintenance on the systems of the NC-10B mobile electric power plant.

Instruction: Lectures and practical exercises in the maintenance of the NC-10B mobile electric power plant, including NC-10B mechanical systems, maintenance, electrical systems, component removal and replacement, and troubleshooting and adjustments.

Credit Recommendation: In the vocational certificate category, 1 semester hour in support equipment maintenance (6/74).

NV-1715-0699
A-6A AUTOMATIC FLIGHT CONTROL SYSTEM INTERMEDIATE MAINTENANCE

Course Number: Not available
Location: Air Maintenance Training Detachment, Oceana, VA. Air Maintenance Training Detachment, Whidbey Island, WA.
Length: 7 weeks (280 hours).

Exhibit Dates: 3/68-Present.

Objectives: To train maintenance personnel to maintain, test, and troubleshoot the A-6A automatic flight control system and the flight control test console at the intermediate maintenance level.

Instruction: Lectures and practical exercises in the AN/ASW-16 automatic flight control system and the flight control test console, including introduction to semiautomatic check-out equipment, operation and maintenance of the air data computer, operational theory of the air navigation computer and related components, and maintenance of the automatic flight control system.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electrical support equipment maintenance (6/74).

NV-1715-0700
AVIATION SUPPORT EQUIPMENT NC-1A MOBILE ELECTRIC POWER PLANT INTERMEDIATE MAINTENANCE

Course Number: C-602-3228.
Location: Air Maintenance Training Detachment, Jacksonville, FL. Air Maintenance Training Detachment, North Island, CA.
Length: 2 weeks (80 hours).

Exhibit Dates: 6/71-Present.

Objectives: To train aviation support equipment technicians to perform maintenance on the NC-2A mobile electric power plant.

Instruction: Lectures and practical exercises in the maintenance of the NC-2A mobile electric power plant, including introduction to electronic systems, NC-2A familiarization, and troubleshooting and bench test, repair, and adjustment.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electrical support equipment maintenance (6/74).

NV-1715-0701
F-4J RT-79/3/ASQ UHF TRANSMITTER INTERMEDIATE MAINTENANCE

Course Number: C-102-218.
Location: Air Maintenance Training Detachment, Miramar, CA. Air Maintenance Training Detachment, Oceana, VA. Air Maintenance Training Detachment, Cherry Point, NC. Air Maintenance Training Detachment, EFTORO, CA.
Length: 2 weeks (80 hours).

Exhibit Dates: 9/70-Present.

Objectives: To train personnel in the intermediate maintenance of the RT-79/3/ASQ UHF transmitter.

Instruction: Lectures and practical exercises in the intermediate maintenance of the RT-79/3/ASQ UHF transmitter, including theory of operation, and laboratory and maintenance procedures.

Credit Recommendation: In the vocational certificate category, 2 semester hours in avionics maintenance technology (6/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in avionics maintenance technology (6/74).

NV-1715-0702
SPEAR III, SIDESWINDER, SHRIKE, AND WALLEYE GUIDED MISSILE TEST EQUIPMENT, INTERMEDIATE MAINTENANCE (SHORE)

Course Number: C-122-3110.
Location: Air Maintenance Training Detachment, Jacksonville, FL. Air Maintenance Training Detachment, North Island, CA.
Length: 7 weeks (280 hours).

Exhibit Dates: 4/73-Present.

Objectives: To train enlisted personnel to operate, maintain, and calibrate air launched guided missile test equipment.

Instruction: Lectures and practical exercises in the theory, operation, maintenance, and calibration of air launched guided missile equipment, including the Sidewinder, Shrike, and Walleye systems.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics, 6 in electronics laboratory (6/74); in the lower-division baccalaureate/associate degree category, 4 semester hours in electronics, 3 in electronics laboratory (6/74); in the upper-division baccalaureate category, 2 semester hours in electronics laboratory (6/74).

NV-1715-0703
TARTAR FIRE CONTROL AND MISSILE OFFICER

Course Number: A-2F-0010.
Location: Guided Missiles School, Dam Neck, VA.
Length: 13 weeks (331 hours).

Exhibit Dates: 10/71-Present.

Objectives: To train commissioned officers to maintain, operate, and handle logistics for Tartar missile systems.

Instruction: Lectures and practical exercises in the maintenance and operation of Tartar missile systems. Course includes the capabilities and characteristics of Tartar missile systems, with strong emphasis on weapons system deployment, firing considerations, and operation of various radar systems.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electrical systems (6/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in electrical systems (6/74).

NV-1715-0704
DIFAR TRAINING FOR ACOUSTIC OPERATORS PJA/B/BID AND PIC (Jezebel Gram Analysis for AW's P3A/B (DIFAR Retrofit))

Course Number: E-210-004.
Location: Airborne Electronics Training Unit, Pacific, off Fort Field, CA.
Length: 6 weeks (203-24 hours).

Exhibit Dates: 10/71-Present.

Objectives: To train enlisted personnel in acoustic detection techniques for qualification as a sensor station operator aboard PJA/B (DIFAR Retrofit) aircraft.

Instruction: Lectures and practical exercises in acoustic detection techniques, including measurement and laboratory and maintenance procedures, aural listening techniques, acoustic listening devices, and specialized equipment.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (6/74).

NV-1715-0705
POLARIS ELECTRONICS, CLASS A

Location: Guided Missiles School, Dam Neck, VA.
Length: Version 1: 26 weeks (910 hours), Version 2: 22 weeks (703 hours).

Exhibit Dates: 1/67-present.

Objectives: To train technicians to be Polaris missile technicians.

Instruction: Lectures and practical exercises in Polaris missile technology, including basic electronic theory, transistor circuit analysis, modern digital computer circuits and logic operations, inertial guidance theory, radar, sonar, and communications fire control.

Credit Recommendation: Version 1: In the vocational certificate category, 25 semester hours in electronics or computer technology (6/74); in the lower-division baccalaureate/associate degree category, 12 semester hours in electronics or computer technology (6/74); in the upper-division baccalaureate category, 3 semester hours as an elective in digital computer fundamentals, or electrical or electronics laboratory (6/74). Version 2: In the vocational certificate category, 20 semester hours in electronics or computer technology (6/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in electronics or electronics laboratory (6/74). Version 1: 4/67-5/67.

NV-1715-0706
F-4J AN/AWG-10 MISSILE CONTROL DISPLAY AND BUILT-IN TEST (BIT) SYSTEMS INTERMEDIATE MAINTENANCE

Course Number: C-602-3189.
Location: Air Maintenance Training Detachment, Miramar, CA. Air Maintenance Training Detachment, El Toro, CA. Air Maintenance Training Detachment, Oceana, VA.
Length: 14 weeks (560 hours).

Exhibit Dates: 4/69-present.

Objectives: To train maintenance personnel in the maintenance and operation of the AN/AWG-10 missile control display and built-in test (BIT) system.

Instruction: Lectures and practical exercises in the maintenance and operation of the AN/AWG-10 missile control display and built-in test (BIT) system, including the capabilities and characteristics of the AN/AWG-10 missile control display and built-in test (BIT) system, with strong emphasis on weapons system deployment, firing considerations, and operation of various radar systems.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electrical systems (6/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in electrical systems (6/74).
VA: Air Maintenance Training Detachment, Cherry Point, NC
Length: 5-6 weeks (200-240 hours)
Exhibit Dates: 1/71-Present.
Objectives: To train maintenance personnel to maintain the AN/AWG-10 missile control display and built-in test.

VA: Air Maintenance Training Detachment, Camp Pendleton, CA, Air Maintenance Training Detachment, Camp Pendleton, CA, Air Maintenance Training Detachment, Key West, FL, Air Maintenance Training Detachment, Imperial Beach, CA
Length: 2 weeks (80-96 hours)
Exhibit Dates: 1/68-Present.
Objectives: To train enlisted personnel to operate, maintain, adjust, and troubleshoot the AN/AWG-10 indicator and associated test equipment.

Length: 3 weeks (90 hours)
Exhibit Dates: 12/66-12/68.
Objectives: To train aviation electricians to operate, maintain, and troubleshoot the AN/AWG-10 central gyro reference system.

NV-1715-0708
CENTRAL GYRO REFERENCE SYSTEM
(AN/AJA-2), CLASS C
Course Number: D-602-017.
Length: 3 weeks (90 hours)
Exhibit Dates: 12/66-12/68.
Objectives: To train air traffic controllers to operate, maintain, and troubleshoot the AN/SPA-36 inertial navigation system.

NV-1715-0709
E-1A INERTIAL NAVIGATION SYSTEM
AN/ASN-36 MAINTENANCE
Course Number: Not available.
Location: Air Maintenance Training Detachment, North Island, CA
Length: 6 weeks (240 hours)
Exhibit Dates: 3/68-Present.
Objectives: To train enlisted personnel to maintain the AN/ASN-36 inertial navigation system.

Instruction: Lectures and practical exercises in the maintenance of the AN/ASN-36 inertial navigation system. Topics include gyroscopes, accelerometers, servos, platform stabilization, control servos, control and navigation computer, analog-to-digital encoders, and analog and digital computations (functional approach only).

Credit Recommendation: In the vocational certification category, 1 semester hour in electrical and/or mechanical technology (7/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in electrical and/or mechanical technology (7/74); in the upper-division baccalaureate/associate degree category, 3 semester hours in electrical and/or mechanical technology (7/74).

NV-1715-0710
AN/ARC-51, S1A AND S1AX
COMMUNICATION SYSTEMS
INTERMEDIATE MAINTENANCE
(C-2) AN/ARC-51 COMMUNICATION SYSTEMS MAINTENANCE, No. 22
Course Number: Not available
Location: Oceanographic Air Survey Unit, Patuxent River, MD.
Length: 3 weeks (90 hours)
Exhibit Dates: 12/66-12/68.
Objectives: To train enlisted personnel to operate, maintain, and troubleshoot the AN/ARC-51, S1A, and S1AX communication systems.

Instruction: Lectures and practical exercises in the maintenance, operation, and troubleshooting of the AN/ARC-51, S1A, and S1AX communication systems.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/74).

NV-1715-0711
ADVANCED SONAR COURSE
Course Number: 566.
Location: Fleet Sonar School, Key West, FL
Length: 5-6 weeks (225 hours).
Exhibit Dates: 10/57-12/68.
Objectives: To train enlisted personnel to maintain, operate, and service sonar equipment.

Instruction: Lectures and practical exercises in the maintenance of the AN/ASN-36 inertial navigation system. Topics include gyroscopes, accelerometers, servos, platform stabilization, control servos, control and navigation computer, analog-to-digital encoders, and analog and digital computations (functional approach only).

Credit Recommendation: In the vocational certification category, 1 semester hour in electrical and/or mechanical technology (7/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in electrical and/or mechanical technology (7/74); in the upper-division baccalaureate/associate degree category, 1 semester hour in electrical and/or mechanical technology (7/74).

NV-1715-0712
MISSILE TECHNICIAN, CLASS B
(Class B Guided Missleman)
Course Number: Not available
Location: Guided Missile School, Dam Neck, VA.
Length: 38-41 weeks (1,140-1,435 hours)
Exhibit Dates: 3/61-Present.
Objectives: To provide the student with the technical background in mathematics, physics, and electronics necessary to analyze the operational capabilities and limitations of a complex weapon system.

Instruction: Lectures and practical exercises in technical mathematics, physics, and electronics. The mathematics instruction covers algebra, trigonometry, and basic calculus. Physics topics include mechanics, with emphasis on missile trajectories and the properties of matter, heat, light, sound, electricity, and magnetism. In the electronics section, DC and AC circuits, vacuum tubes, semiconductors, amplifiers, amplitude, frequency, phase, and pulse modulation are studied. In addition, computer fundamentals are presented. A significant part of the program is devoted to inertial components and weight calculations.

Credit Recommendation: In the vocational certification category, 6 semester hours in mathematics, 4 in physics, 4 in electronics, 3 in electricity, and, on the basis of institutional evaluation, additional credit in electronics laboratory (8/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in mathematics, 4 in physics, 3 in electricity or electronics, and, on the basis of institutional evaluation, additional credit in electrical laboratory (12/68).

NV-1715-0713
CARRIER AIR TRAFFIC CONTROL CENTER EQUIPMENT MAINTENANCE, AN/SPN-35A AND AN/SPN-35, CLASS C
(Class B Air Traffic Control Center Equipment Maintenance, AN/SPN-35, Class C)
Course Number: C-103-2012.
Location: Air Technical Training Center, Glynco, GA.
Length: 9-9 weeks (312-360 hours).
Exhibit Dates: 10/65-Present.
Objectives: To train graduates of electronics technicians school, class A, in the operation and maintenance of the AN/SPN-35A and AN/SPN-35 radar sets and associated auxiliary electronic equipment.

Instruction: Lectures and practical exercises in operation and maintenance of specific radar sets and associated electronic equipment, including radar circuitry, radar transmitters, radar receivers, antenna stabilization, indicators, system alignment, AN/SPN-35 modifications, and differences between AN/SPN-35A and AN/SPN-35 radar sets.

Credit Recommendation: In the vocational certification category, 4 semester hours in electronics laboratories (7/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics laboratories (7/74), in the upper-division baccalaureate category, 2 semester hours in electronics laboratories (7/74).
NV-1715-0715
CARRIER AIR TRAFFIC CONTROL CENTER EQUIPMENT MAINTENANCE, AN/SPN-6 AND AN/SPN-12 (XN-4), CLASS C

Course Number: Not available.
Location: Air Technical Training Center, Glynn, GA
Length: 3 weeks (120 hours)
Exhibit Dates: 2/65-12/68

Objectives: To train selected electronics technicians to operate AN/SPN-6 and AN/SPN-12 air traffic control electronic equipment.

Instruction: Lectures and practical exercises in operation of air traffic control equipment. Course includes transmitters and receivers, antenna stabilization, and air speed radar operation.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/74).

NV-1715-0716
BASIC UNDERSEA WEAPONS CIRCUITS

Course Number: A-I00-0012, A-123-030, A-123-119
Location: Naval Training Center, Orlando, FL, Advanced Undersea Weapons School, Key West, FL; Fleet Anti-Submarine Warfare School, San Diego, CA
Length: 8 weeks (283 hours)
Exhibit Dates: 1/70-7/77

Objectives: To train enlisted personnel in basic underwater weapon circuits.

Instruction: Lectures and practical exercises in basic underwater weapon circuits, including introduction, direct current and alternating current, law, alternator, generator, synchron, introduction to electronics, basic amplifier circuits theory, principles of receiver operation, and transmitters and transducers.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/74).

NV-1715-0717
ADVANCED UNDERSEA WEAPONS CIRCUITS

Course Number: A-123-0311
Location: Naval Training Center, Orlando, FL, Fleet Anti-Submarine Warfare School, Key West, FL; Fleet Anti-Submarine Warfare School, San Diego, CA
Length: 12 weeks (420 hours)
Exhibit Dates: 6/70-7/70

Objectives: To train enlisted personnel in advanced underwater weapon circuits.

Instruction: Lectures and practical exercises in advanced underwater weapon circuits, including basic mathematics, test equipment, and the lower-division baccalaureate/associate degree category, 2 semester hours in electronics and electronics (12/68); in the upper-division baccalaureate/associate degree category, 2 semester hours in electrical and electronics laboratory for non-electrical-engineering students (6/74).

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/74).

NV-1715-0720
TORPEDOMAN'S MATE, CLASS A
(Torpedoman's Mate, Class A, Submarine)

Course Number: A-123-0127
Location: Naval Training Center, Orlando, FL, Advanced Undersea Weapons School, Key West, FL; Fleet Anti-Submarine Warfare School, San Diego, CA
Length: 6 weeks (228-257 hours)
Exhibit Dates: 6/70-7/70

Objectives: To train enlisted personnel as torpedoman's mates.

Instruction: Lectures and practical exercises in submarine weapons, including introduction to explosives, specific torpedos, introduction to SUBROC missile, specific submerged torpedo tubes, and torpedo tube loading procedures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/74).

NV-1715-0721
ELECTRONICS OFFICERS ADMINISTRATIVE

Course Number: Not available.
Location: Electronics Officers School, Great Lakes, IL
Length: 14 weeks (420 hours)
Exhibit Dates: 9/57-12/58

Objectives: To train junior officers to maintain and repair sonar, radar, andoran system, to administer the operation of electronics installations, and to conduct training programs for ET strikes.

Instruction: Lectures and practical exercises in the maintenance and repair of radar, sonar, and other miscellaneous electronic equipment. Course includes fundamentals of electricity and vacuum-tube electronics as well as a description of radar, torpedos, and sonar systems.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/74).

NV-1715-0722
ELECTRONICS TECHNICIAN, CLASS A—A-11
(ELECTRONIC FUNDAMENTALS)

Course Number: A-100-001
Location: Electronics Technician Class A School, Treasure Island, CA
Length: 74 weeks (2364 hours)
Exhibit Dates: 8/57-7/74

Objectives: To train enlisted personnel who are graduates of a basic electricity and
INSTRUCTION: Lectures and practical exercises in the operation, maintenance, and repair of radar-related electronic equipment, including types of radar and moving-target indicators; review of special circuits, and specific radar set, antenna, synchro, R-F system, receiver, transmitter, and modulator.

CREDIT RECOMMENDATION: Version 1: In the vocational certificate category, 2 semester hours in radar electronics (9/77); Version 2: In the vocational certificate category, 2 semester hours in electronics laboratory (6/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in electronics laboratory (9/77).

NV-1715-0723

ELECTRONICS TECHNICIAN, CLASS A—A-3 (RA I R A D A R )

Course Number: All Versions—A-104-0010
Version 1: A-104-0010
Version 3: A-104-0011
Location: Electronics Technician Class A School, Great Lakes, IL. Electronics Technician Class A School, Treasure Island, CA
Length: Version 1: 3 weeks (110 hours)
Version 2: 2 weeks (150 hours)
Exhibit Dates: Version 1: 7/74-9/77
Version 2: 5/66-6/74
Objectives: To train enlisted personnel to perform as electronics technicians.

In the vocational certificate category, 4 semester hours in communications' equipment (9/77), in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics laboratory, or 2 in introduction to electronics for non-engineering students (6/74).

NV-1715-0725

ELECTRONICS TECHNICIAN, CLASS A—A-5 (COMMUNICATIONS)

Course Number: All Versions—A-100-0014
Version 1: A-100-0014, A-100-0015
Location: Electronics Technician Class A School, Great Lakes, IL, Electronics Technician Class A School, Treasure Island, CA
Length: Version 1: 7 weeks (255 hours)
Version 2: 9-12 weeks (270-368 hours)
Exhibit Dates: Version 1: 7/74-9/77
Version 2: 5/66-6/74
Objectives: To train enlisted personnel who are graduates of a basic electricity and electronics course to perform as electronics technicians.

Instruction: Lectures and practical exercises in the operation, maintenance, and repair of radar-related electronic equipment, including pulse circuits, timing circuits, multivibrators, choppers and counters, cathode followers, transistor printed-circuit training device, oscilloscope circuits, waveforms, effects, and radar timers andulators. Also covers control systems, magnetic amplifiers, Boolean algebra and simplified digital circuits.

CREDIT RECOMMENDATION: Version 1: In the vocational certificate category, 6 semester hours in radar systems (9/77); in the lower-division baccalaureate/associate degree category, 3 semester hours in radar systems (9/77).

NV-1715-0724

ELECTRONICS TECHNICIAN, CLASS A—A-3 (COMMUNICATIONS, RADAR AND SONAR SPECIALTIES)

Course Number: None
Location: Electronics Technician, Class A School, Treasure Island, CA. Electronics Technician, Class A School, Great Lakes, IL
Length: 24-26 weeks (720-780 hours)
Exhibit Dates: 1/54-5/62

Objectives: To train electronic technicians to operate and repair complex communication systems, including radar and sonar systems.

INSTRUCTION: Lectures and practical exercises in operation and maintenance of complex communications systems. Course includes basic electronic and electrical circuit theory, block-diagram analysis, and troubleshooting techniques.

CREDIT RECOMMENDATION: In the vocational certificate category, 18 semester hours in electronics (6/74), in the lower-division baccalaureate/associate degree category, 9 semester hours in electronics (6/74); in the upper-division baccalaureate category, 3 semester hours in electronics (12/68); in the upper-division baccalaureate category, 1 semester hour in electronics laboratory as technical electives for non-electrical-engineering majors, or 2 semester hours in electronic instrumentation or radio laboratory for electronic engineering students (6/74).
instrumentation for non-electrical-engineering majors, or in electrical or electronics laboratory for non-electrical-engineering majors, and in electrical laboratory (6/74).

**NV-1715-0730**

**ELECTRONICS TECHNICIAN, CLASS A (COMMUNICATIONS)**

**Course Number:** Not available  
**Location:** Electronics Technician, Class A School, Great Lakes, IL; Electronics Technician, Class A Schools, Treasure Island, CA  
**Length:** 38 weeks (1140 hours)  
**Exhibit Dates:** 6/2/46/66  
**Objectives:** To train personnel to maintain a variety of Naval electronic equipment.  
**Instruction:** Lectures and practical exercises in the maintenance of Naval electronic equipment, including electronic fundamentals, electronic circuit fundamentals, transmitter applications, receiver applications, pulse-logic control systems, micro-wave techniques, electronic equipments, communication receivers and transmitters, teletype terminal equipment, and single-ended equipment.  
**Credit Recommendation:** In the vocational certificate category, 28 semester hours in electronics laboratories (6/74); in the lower-division baccalaureate/associate degree category, 6 semester hours in electronics laboratories (6/74); in the upper-division baccalaureate/associate degree category, 6 semester hours in electronics laboratories (6/74).  
**Objectives:** To train personnel to maintain radar equipment. To train personnel to service the RA-5C flight control system.  
**Instruction:** Lectures and practical exercises in the maintenance of the RA-5C flight control system. Course includes hydraulic and airflow systems, directional control systems, flight control systems, and use of training units, meters, and oscilloscopes.  
**Credit Recommendation:** In the vocational certificate category, 1 semester hour in electrical laboratory (7/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in electrical laboratory (7/74).

**NV-1715-0731**

**ELECTRONICS TECHNICIAN, CLASS A (RADAR)**

**Course Number:** Not available  
**Location:** Electronics Technician, Class A School, Great Lakes, IL; Electronics Technician, Class A School, Treasure Island, CA  
**Length:** 38 weeks (1140 hours)  
**Exhibit Dates:** 6/2/46/66  
**Objectives:** To train personnel to maintain electronic equipment.  
**Instruction:** Lectures and practical exercises in the maintenance of electronic equipment, including radar equipment fundamentals, multivibrators, synchronization, oscillators, magnetrons, klystrons, clamps, limiters, and clippers; introduction to radar equipment; primary power, antenna, distribution; modulator; transmitter; receiver system and duplexer; receiver and adapter indicator; radar set control; antenna and transmitter systems; equipment review; and radar diagram of a specific radar set.  
**Credit Recommendation:** In the vocational certificate category, 28 semester hours in electronics laboratories (6/74); In the lower-division baccalaureate/associate degree category, 6 semester hours in physics (electricity); 12 in engineering electronics (12/68); in the upper-division baccalaureate/associate degree category, 6 semester hours in electricity and electronics for non-engineering students (6/74).  
**Objectives:** To train personnel to maintain and repair the Walleye weapons systems.  
**Instruction:** Lectures and practical exercises in the maintenance and repair of the Walleye weapons system. Course includes logic systems, power generators, instrumentation usage, system familiarization, and troubleshooting procedures.  
**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (7/74).

**NV-1715-0732**

**RA-5C FLIGHT CONTROL SYSTEM ELECTRONICS (INTERMEDIATE MAINTENANCE)**

**Course Number:** Not available  
**Location:** Air Maintenance Training Detachment, Sanford, FL.  
**Length:** 6 weeks (240 hours)  
**Exhibit Dates:** 9/67-Present  
**Objectives:** To train maintenance personnel to maintain and service the RA-5C flight control system.  
**Instruction:** Lectures and practical exercises in the maintenance of the RA-5C flight control system. Course includes hydraulic and airflow systems, directional control systems, flight control systems, and use of training units, meters, and oscilloscopes.  
**Credit Recommendation:** In the vocational certificate category, 1 semester hour in electrical laboratory (7/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in electrical laboratory (7/74).

**NV-1715-0733**

**A-4 WALLEYE WEAPON DELIVERY SYSTEM**

**Course Number:** Not available  
**Location:** Air Maintenance Training Detachment, Lemoore, CA; Air Maintenance Training Detachment, Cecil Field, FT; Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Cherry Point, NC  
**Length:** 3 weeks (120 hours)  
**Exhibit Dates:** 11/67-Present  
**Objectives:** To train enlisted personnel to maintain and repair the Walleye weapons systems.  
**Instruction:** Lectures and practical exercises in the maintenance and repair of the Walleye weapons system. Course includes logic systems, power generators, instrumentation usage, system familiarization, and troubleshooting procedures.  
**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (7/74).

**NV-1715-0734**

**TT-293/B/UJ TELETYPEWRITER SET MAINTENANCE (ENLISTED)**

**Course Number:** F-101-018  
**Location:** Submarine School, Groton, CT  
**Length:** 4 weeks (120 hours)  
**Exhibit Dates:** 8/67-12/68  
**Objectives:** To train submarine radomen and submarine tender personnel to repair the TT-293/B/UJ teleprinter sets.  
**Instruction:** Lectures and practical exercises in planned and corrective maintenance of a specific teleprinter set, including introduction to specific teleprinter set; mechanical function of the keyboard; mechanical function of the printer main shaft; electromechanical function of the magnetic selector; functional purpose of the start clutch and range selector; mechanical functions of the printing mechanism; mechanical operations of specific functions; and preparation for adjustments and tool kit inventory.  
**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (7/74).

**NV-1715-0735**

**AUTOMATIC ELECTRIC—STROWER SWITCHING TELEPHONE SYSTEMS MAINTENANCE, CLASS CI**

**Course Number:** A-621-0044  
**Location:** Service School Command, Great Lakes, IL  
**Length:** 6 weeks (173 hours)  
**Exhibit Dates:** 12/74-Present  
**Objectives:** To train personnel in the maintenance, repair and checkout of automatic electric telephone systems.  
**Instruction:** Areas of instruction include the Strowger Switch telephone system, relaying fundamentals, analysis of system design, priorities and faults.  
**Credit Recommendation:** In the vocational certificate category, 3 semester hours in telephone switch gear (9/77).

**NV-1715-0736**

**KT-1700/F-5 AUTOMATIC PILOT AND RELATED INSTRUMENTS INTERMEDIATE MAINTENANCE**

**Course Number:** Not available  
**Location:** Air Maintenance Training Detachment, El Toro, CA  
**Length:** 2 weeks (80 hours)  
**Exhibit Dates:** 7/68-Present  
**Objectives:** To train enlisted personnel to repair and maintain the automatic pilot installed in the KC-130F aircraft.  
**Instruction:** Lectures and practical exercises in the repair and maintenance of the automatic pilot installed in the KC-130F aircraft. Course includes MA-1 compass operation (electronics), and the operation of the SA-5 automatic pilot.  
**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (7/74).

**NV-1715-0737**

**F-8 AUTOMATIC FLIGHT CONTROL SYSTEM INTERMEDIATE MAINTENANCE**

**Course Number:** Not available  
**Location:** Air Maintenance Training Detachment, Miramar, CA.  
**Length:** 2 weeks (80 hours)  
**Exhibit Dates:** 11/70-Present  
**Objectives:** To train maintenance personnel to troubleshoot and repair F-8 automatic flight control systems.  
**Instruction:** Lectures and practical exercises in the maintenance and repair of F-8 automatic flight control systems. Course includes a review of vacuum tube theory, transistor theory, aerodynamics, and test equipment operation.  
**Credit Recommendation:** In the vocational certificate category, 3 semester hours in electronics laboratory (7/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics laboratory (7/74).

**NV-1715-0738**

**H-53 AUTOMATIC FLIGHT CONTROLS SYSTEMS INTERMEDIATE MAINTENANCE**

**Course Number:** C-602-3442  
**Location:** Air Maintenance Training Detachment, Santa Ana, CA.  
**Length:** 2 weeks (80 hours)  
**Exhibit Dates:** 5/70-Present  
**Objectives:** To train enlisted personnel who have had previous training in transistor fundamentals to operate and maintain at the intermediate level the automatic flight control system installed in H-53 aircraft.
**NV-1715-0739**

**P-3 COMMUNICATION/NAVIGATION ORGANIZATIONAL MAINTENANCE**

**Course Number:** Not available.

**Location:** Air Maintenance Training Detachment, Patuxent River, MD. Air Maintenance Training Detachment, Moffett Field, CA.

**Length:** 2 weeks (60 hours)

**Objectives:** To train fleet maintenance personnel to operate and maintain P-3 communication/navigation systems.

**Exhibit Dates:** 7/70-Present

**Instruction:** Lectures and practical exercises in the operation and maintenance of P-3 communication/navigation systems, including high-, very-high-, and ultra-high-frequency circuits, recorders and teletypewriter group components and maintenance; radio navigation electronic circuitry (automatic direction finder, radars, Loran and TACAN equipment, beacon receiving set, and various indicator groups); and navigation systems, including computer groups.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 2 semester hours in electronics (7/74).

**NV-1715-0740**

**MINE DETECTION SONAR TECHNICAL MAINTENANCE**

**Course Number:** C-570.

**Location:** Fleet Sonar School, San Diego, CA.

**Length:** 4 weeks (120 hours)

**Objectives:** To train enlisted personnel who have electronics backgrounds to operate, test, and repair mine-detection sonar.

**Exhibit Dates:** 4/55-12/63

**Instruction:** Lectures and practical exercises in the operation, testing, and repair of mine detection sonar, including test equipment (meters, tube testers, oscilloscopes, signal generators, and C & B bridges), special circuits (power supplies, diodes and triodes, multivibrators, synchrons, and DC generators), specific equipment components, AC and DC power, troubleshooting procedures, receiver and transmitter functions, servo systems, and calibration and alignment procedures.

**Credit Recommendation:** In the occupational certificate category, 3 semester hours in electronics (7/74), in the lower-division baccalaureate/associate degree category, 4 semester hours in electrical laboratory (7/74), in the upper-division baccalaureate category, credit in electrical laboratory on the basis of institutional evaluation (7/74).

**NV-1715-0743**

**NAVAL AIR WEAPONS SYSTEMS ORIENTATION, CLASS O**

**Course Number:** Not available.

**Location:** Air Technical Training Center, Jacksonville, FL.

**Length:** 8 weeks (320 hours)

**Exhibit Dates:** 8/57-12/65

**Objectives:** To train enlisted personnel to supervise naval air weapons systems maintenance in operational aircraft squadrons.

**Instruction:** Lectures and practical exercises in aircraft weapons systems maintenance, including aircraft armament control systems, air-launched guided missiles, electronic circuits, weapon control systems, all-weather aerial armament control systems, missile systems introduction, and maintenance administration.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 2 semester hours in electronics (7/74).

**NV-1715-0744**

**AVIATION ORDNANCE OFFICERS, CLASS O**

**Course Number:** Not available.

**Location:** Air Technical Training Center, Jacksonville, FL.

**Length:** 10 weeks (400 hours)

**Exhibit Dates:** 1/53-12/68

**Objectives:** To train officers to be aviation ordnance officers.

**Instruction:** Lectures and practical exercises in electricity and electronics, aviation fire control systems, aircraft munitions, torpedoes, machine gun and torpedoes.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 2 semester hours in electricity and electronics (7/74).

**NV-1715-0745**

**AN/SPS-40B/C/D RADAR SET DIFFERENT MAINTENANCE**

**(Electronics Technician, Class C1)**

**Course Number:** A-104-0164

**Location:** Services School Command, San Diego, CA, Fleet Training Center Norfolk, VA.

**Length:** 8 weeks (320 hours)

**Exhibit Dates:** 7/76-Present

**Objectives:** To train maintenance personnel in the maintenance of the AN/SPS-40B/C/D radar set.

**Instruction:** Course covers maintenance of the AN/SPS-40B/C/D radar set and power control and distribution, air system, cooling system, antenna system, timing and trigger generation, frequency generation, low- and high-power transmitting systems, receiver system, and test functions.

**Credit Recommendation:** In the vocational certificate category, 1 semester hour in communication and test laboratories, 1 semester hour in electronic laboratory (11/77).

**NV-1715-0746**

**E-2A AN/ASQ-18 INTEGRATED ELECTRONIC CENTRAL UHF-RT-542/ASQ AND RT-519/ASQ POWER SUPPLY-AM-310/1 INTELLIDATE MAINTENANCE**

**Course Number:** C-102-3473

**Location:** Air Maintenance Training Detachment, North Island, CA.

**Length:** 2 weeks (80 hours)

**Exhibit Dates:** 4/65-Present

**Objectives:** To train maintenance personnel to maintain UHF equipment and power supplies.

**Instruction:** Lectures and practical exercises in the maintenance of UHF equipment and power supplies, including transceiver block diagrams, circuit analysis, theory of operation, power distribution, and automatic equipment.

**Credit Recommendation:** In the vocational certificate category, 2 semester hours in electronics (3/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics (3/74).

**NV-1715-0747**

**SH-3A/D AN/AQS-13A SONAR INTERMEDIATE MAINTENANCE**

**Course Number:** C-130-3396

**Location:** Air Maintenance Training Detachment, Quonset Point, RI, Air Maintenance Training Detachment, Imperial Beach, CA.

**Length:** 6 weeks (240 hours)

**Exhibit Dates:** 11/72-Present

**Objectives:** To train fleet maintenance personnel in the maintenance of the AN/AQS-13A sonar system.

**Instruction:** Lectures and practical exercises in the maintenance of a specific sonar system, including introduction, associated test equipment, power supply, transmit and receive circuitry, video display, relaying machinery, and associated circuit analysis, minimum performance standards, test, and troubleshooting.

**Credit Recommendation:** In the vocational certificate category, 3 semester hours in electrical laboratory (7/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in electrical laboratory on the basis of institutional evaluation (7/74).
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/74).

NV-1715-0752
RF-4B CAMERA CONTROL SYSTEM
INTERMEDIATE MAINTENANCE

Course Number: C-195-3832
Location: Air Maintenance Training Detachment, El Toro, CA

Length: 4 weeks (160 hours).
Exhibit Dates: 11/72-Present.
Objectives: To train maintenance personnel to maintain the ES-55A correlator-processing system.

Instruction: Lectures and practical exercises in ES-55A correlator-processing system maintenance, including side-looking radar (SLR) functions, radar system functions, maintenance procedures, and troubleshooting and calibration procedures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/74).

NV-1715-0752
RF-4B CAMERA CONTROL SYSTEM
INTERMEDIATE MAINTENANCE

Course Number: C-195-3832
Location: Air Maintenance Training Detachment, El Toro, CA

Length: 7 weeks (280 hours).
Exhibit Dates: 3/68-Present.
Objectives: To train experienced maintenance personnel to operate, troubleshoot, repair, and maintain the RF-4B camera control system. This course includes knowledge of camera-system parts, function and control, familiarity of appropriate cameras designed to work with the system, and malfunction detection.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/74).

NV-1715-0754
ELECTRONICS TECHNICIAN, CLASS C7
(Electronics Technician, Class B)

Course Number: A-100-0016, A-100-0017
Location: Power School Command, San Diego, CA

Length: 28 weeks (1120 hours).
Exhibit Dates: 12/71-12/74
Objectives: To train the top senioree electronics technician in the field of electronics. This course includes electronics, mathematics, digital computer programming, and digital computer repair.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/74).

NV-1715-0754
ELECTRONICS TECHNICIAN, CLASS C7
(Electronics Technician, Class B)

Course Number: A-100-0016, A-100-0017
Location: Power School Command, San Diego, CA

Length: 28 weeks (1120 hours).
Exhibit Dates: 12/71-12/74
Objectives: To train the top senioree electronics technician in the field of electronics. This course includes electronics, mathematics, digital computer programming, and digital computer repair.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/74).

NV-1715-0754
ELECTRONICS TECHNICIAN, CLASS C7
(Electronics Technician, Class B)

Course Number: A-100-0016, A-100-0017
Location: Power School Command, San Diego, CA

Length: 28 weeks (1120 hours).
Exhibit Dates: 12/71-12/74
Objectives: To train the top senioree electronics technician in the field of electronics. This course includes electronics, mathematics, digital computer programming, and digital computer repair.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/74).

NV-1715-0754
ELECTRONICS TECHNICIAN, CLASS C7
(Electronics Technician, Class B)

Course Number: A-100-0016, A-100-0017
Location: Power School Command, San Diego, CA

Length: 28 weeks (1120 hours).
Exhibit Dates: 12/71-12/74
Objectives: To train the top senioree electronics technician in the field of electronics. This course includes electronics, mathematics, digital computer programming, and digital computer repair.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/74).

NV-1715-0754
ELECTRONICS TECHNICIAN, CLASS C7
(Electronics Technician, Class B)

Course Number: A-100-0016, A-100-0017
Location: Power School Command, San Diego, CA

Length: 28 weeks (1120 hours).
Exhibit Dates: 12/71-12/74
Objectives: To train the top senioree electronics technician in the field of electronics. This course includes electronics, mathematics, digital computer programming, and digital computer repair.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/74).
Credit Recommendation: Version 1 In the lower-division baccalaureate/associate degree category, 20 semester hours in electronics technician training and 2 in humanities (industrial relations) (11/77) Version 2.

In the vocational certificate category, 12 semester hours in mathematics and 20 in electronics (7/74), in the upper-division baccalaureate category, 3 semester hours in mathematics, 5 in electronics (12/68), in the upper-division baccalaureate degree category, 4 semester hours in electronics (11/77). Version 4.

In the vocational certificate category, 12 semester hours in mathematics and 20 in electronics (7/74), in the lower-division baccalaureate/associate degree category, 12 semester hours in mathematics, 12 in engineering electronics (12/68), in the upper-division baccalaureate category, 3 semester hours in mathematics, 7 in electronics laboratory (9/77), in the lower-division baccalaureate/associate degree category, 2 semester hours in computer technology, 7 in electronics, and 7 in electrical and electronics laboratory (9/77), in the lower-division baccalaureate/associate degree category, 2 semester hours in computer technology, 7 in electronics, and 7 in electrical and electronics laboratory (9/77), in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics laboratory (9/77).

In the vocational certificate category, 8 semester hours in electronics laboratory (7/74); in the lower-division baccalaureate/associate degree category, 4 semester hours in mathematics, 4 in electronics laboratory (7/74).

NV-1715-0755

1. INTERIOR COMMUNICATIONS (IC) ELECTRICIAN, CLASS C
2. INTERIOR COMMUNICATIONS (IC) ELECTRICIAN, CLASS B
3. ELECTRICIAN, CLASS B
4. ELECTRICIAN, CLASS B

Course Number: A-623-0013

Location: Naval Training Center, Great Lakes, IL

Length: Version 1 26 weeks (850 hours) Version 2 30 weeks (900 hours) Version 3 24 weeks (746 hours) Version 4 34 weeks (1,020 hours)


Objectives: To train students in the basic electrical and electronic skills necessary to maintain, troubleshoot, repair, align, and calibrate the electrical equipment found aboard a ship.

Instruction: Version 1: Lectures and practical exercises in AC and DC circuits, semiconductors, digital logic and logic circuits, static control devices, syncros and mechanical devices, and repair, calibration, troubleshooting and aligning of electronic, electronic and mechanical systems used in the operation of a ship. Version 2: Lectures and practical exercises in the repair, calibration, troubleshooting, and aligning of electronic and mechanical systems used in the operation of a ship. Version 3: Covers review of algebra, DC and AC series and parallel circuits, principles of magnetic circuit use of basic meters and the oscilloscope, RL, RC, and RLC circuits; transformer theory, electron tubes and semiconductors, operating characteristics of tubes, semiconductors, transistors, valves, and amplifiers, lab- pull, and feedback amplifiers and cathode followers, solid-state power supplies, amplifiers, regulators, pulse-shaping circuits, and oscillators, basic logic operation of the gate and DCTL circuit equivalents; inverters, clocks counters, half and full adders, and memory devices. Version 4: Topics include those in version 2 with considerable effort devoted to shipboard electrical and electronic systems, including motors, sound systems, synchro, magnetic amplifiers, monitoring systems, and power switchgear. There is much less emphasis on transistor circuits and digital logic.

Credit Recommendation: Version 1 In the vocational certificate category, 2 semester hours in computer technology, 7 in electronics and electronics laboratory (9/77), in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics, and 7 in electrical and electronics laboratory (9/77), in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics, and 7 in electrical and electronics laboratory (9/77), in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics, and 7 in electrical and electronics laboratory (9/77), in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics, and 7 in electrical and electronics laboratory (9/77).

In the vocational certificate category, 8 semester hours in electronics laboratory (7/74); in the lower-division baccalaureate/associate degree category, 4 semester hours in mathematics, 4 in electronics laboratory (7/74).

NV-1715-0756

AN/SPS-2C RADAR SET MAINTENANCE (ELECTRONICS TECHNICIAN, CLASS C)

Course Number: A-104-0150

Location: Service School Command, San Diego, CA

Length: 9 weeks (272 hours) Exhibit Dates: 2/68-Present

Objectives: To train selected personnel to maintain and adjust disturbed-line-of-sight control systems.

Instruction: Lectures and practical exercises in disturbed-line-of-sight control systems maintenance and adjustment, including use of schematic prints and diagrams, concept and application of planned maintenance system, system data flow, power distribution, lead-computing gun sights, antenna-positioning system, gun order computations, and radar functional description, testing, adjustment, and troubleshooting procedures.

Credit Recommendation: In the vocational certificate category, 4 semester hours as an elective in electricity or electronics (8/74); in the lower-division baccalaureate/associate degree category, 4 semester hours as an elective in electricity or electronics (8/74).

NV-1715-0757

E-2B WEAPON SYSTEM SPECIALIST ORGANIZATIONAL MAINTENANCE

Course Number: C-150-3482

Location: Air Maintenance Training Department, Great Lakes, IL

Length: 9-12 weeks (384 hours) Exhibit Dates: 5/71-Present

Objectives: To train technicians to isolate, maintain, and repair the E-2B weapon system.

Instruction: Lectures and practical exercises in the isolation, maintenance, and repair of the E-2B weapon system. Course includes general avionics, IFPM, ATDS communications and navigation, ATDS detection, and control and display.

Credit Recommendation: In the vocational certificate category, 4 semester hours as an elective in instrument repair (8/74); in the lower-division baccalaureate/associate degree category, 2 semester hours as an elective in instrument repair (8/74).

NV-1715-0758

SURFACE MISSILE SYSTEMS, ORICER

Course Number: Not available

Location: Guided Missiles School, Dam Neck, VA, Naval School Command, Mare Island, CA

Length: 11 weeks (330 hours)

Exhibit Dates: 2/68-Present

Objectives: To train enlisted personnel to operate fire control, missile, and surface missile systems.

Instruction: Lectures and practical exercises in the operation of surface missile weapons systems. Course includes equipment, engineering, systems, and weapon system management.

Credit Recommendation: Insufficient data for evaluation (8/74).

NV-1715-0759

DISTURBED LINE OF SIGHT GUNFIRE CONTROL SYSTEM MAINTENANCE

Course Number: J-113-1062

Location: Fleet Anti-Air Warfare Training Center, Dam Neck, VA

Length: 3 weeks (105 hours)

Exhibit Dates: 10/72-Present

Objectives: To train selected personnel to maintain and adjust disturbed-line-of-sight gunfire control systems.

Instruction: Lectures and practical exercises in disturbed-line-of-sight gunfire control systems maintenance and adjustment, including use of schematic prints and diagrams, concept and application of planned maintenance system, system data flow, power distribution, lead-computing gun sights, antenna-positioning system, gun order computations, and radar functional description, testing, adjustment, and troubleshooting procedures.

Credit Recommendation: In the vocational certificate category, 4 semester hours as an elective in electricity or electronics (8/74); in the lower-division baccalaureate/associate degree category, 4 semester hours as an elective in electricity or electronics (8/74).
baccalaureate/associate degree category, 2 semester hours in basic electronics, 3 as an elective in computer science (8/74).

NV-1715-0761

UH-1/A/B TACTICAL AIR NAVIGATION
(TACAN) AN/ARN-32 V.

Course Number: Not available.
Location: Air Maintenance Training Detachment, Ream's Field, CA.
Length: 3 weeks (120 hours).
Exhibit Dates: 2/66-12/68.
Objectives: To train maintenance personnel to maintain and troubleshoot the AN/ARN-32 tactical air navigation (TACAN) trainer.

Instruction: Lectures and practical exercises in the operation, maintenance, and servicing of the AN/ARN-32 TACAN trainer, including circuitry procedures, power distribution and supply, block-diagram analysis, channel-servo operation, video decoder, and range circuits theory.

Credit Recommendation: In the vocational certificate category, 1 semester hour as an elective in electronics (6/75).

NV-1715-0762

MK-1 GYROCOMPASS MAINTENANCE
CLASS C

Course Number: A-670-0026.
Location: Development and Training Center, San Diego, CA.
Length: 2 weeks (60 hours).
Exhibit Dates: 3/74-Present.
Objectives: To train personnel with previous electrical training to maintain the MK-1 gyrocompass.

Instruction: Lectures and practical exercises in the principles, maintenance, and repair of the MK-1 gyrocompass and instruction on the use of required test and monitoring equipment.

Credit Recommendation: In the vocational certificate category, 2 semester hours in small equipment repair (6/75); in the lower-division baccalaureate/associate degree category, 1 semester hour in basic instrumentation (6/75).

NV-1715-0763

LAUNCHER TECHNICIAN

Course Number: A-633-0016.
Location: Guided Missiles School, Dam Neck, VA.
Length: 11 weeks (384 hours).
Exhibit Dates: 12/71-Present.
Objectives: To provide training in all weapon systems in use aboard Fleet Ballistic Missile (FBM) submarines.

Instruction: Lectures and laboratory instruction in submarine subsystems, including hydraulics, pneumatics, electric power generation, and engineering power-plant, navigation subsystems, fire control, rocket, and missile guidance and flight control, mechanical and electrical launcher subsystems, and electrical, power, and hydraulic systems.

Credit Recommendation: In the vocational certificate category, 4 semester hours in hydraulic, pneumatic, or electrical systems (6/75).

NV-1715-0764

DGL-6-16 COMBAT SYSTEM

Course Number: A-1210199.
Location: Guided Missiles School, Dam Neck, VA.
Length: 10 weeks (330 hours).
Exhibit Dates: 10/72-Present.
Objectives: To provide instruction for senior maintenance supervisors in the integration of the DGL-6-16 Combat System.

Instruction: Lectures and practical exercises in the operation and interface of the various subsystems of the DGL-6-16 Combat System.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (6/75).

NV-1715-0765

RF-4B SHOEHRN ORGANIZATIONAL MAINTENANCE

Course Number: C-102-3831, C-102-0242.
Location: Air Maintenance Training Detachment, El Toro, CA, Air Maintenance Training Detachment, Cherry Point, NC.
Length: 4 weeks (160 hours).
Exhibit Dates: 5/69-09-Present.
Objectives: To train fleet maintenance personnel to maintain the Shoehorn aircraft radar system.

Instruction: Lectures and practical exercises in the Shoehorn aircraft radar system, including data link review, logic symbology, corrosion control, introduction to planned maintenance, and decals, and purpose components, operational block diagrams, and interface and test equipment of the radar homing and warning system, the radar receiver, the countermeasures set, the countermeasures receiver and transmitter, the tagging and blanking unit, and the countermeasures waveshaper dispenser set.

Credit Recommendation: In the vocational certificate category, credit in electronics on the basis of institutional evaluation (3/74); in the lower-division baccalaureate/associate degree category, credit in electronics on the basis of institutional evaluation (3/74).

NV-1715-0766

ELECTRONICS OFFICERS (MAINTENANCE)

Course Number: Not available.
Location: Electronics Officers School, Great Lakes, IL.
Length: Version 1. 48 weeks (1440 hours).
Version 2: 52 weeks (1620 hours).
Objectives: To provide officers who have electronics backgrounds with advanced training in electronics and management skills.

Instruction: All Versions. Lectures and practical exercises in mathematics, including algebra and trigonometry, basic electricity and electronics, including circuit analysis, motors, generators, power supplies, vacuum tubes, amplifiers, and oscillators, and modulation and detection, energy transmission, servo-mechanisms, and test equipment operation.

Version 1. Instruction includes calculus, physics, digital numbers, and Boolean algebra, and semiconductors. Version 2. Instruction emphasizes special equipment operation.

Credit Recommendation: Version 1. In the lower-division baccalaureate/associate degree category, 24 semester hours in electronics (6/75).

NV-1715-0767

LIGHT AIRBORNE MULTIPURPOSE SYSTEM (LAMPS) SENSOR OPERATOR

Course Number: D-210-0020.
Location: Fleet Airborne Electronics Training Unit, Atlantic, Norfolk, VA.
Length: 5 weeks (200 hours).
Exhibit Dates: 4/68-Present.
Objectives: To train submarine aircrews in the operation of electronic sensor equipment.

Instruction: Lectures and laboratory exercises in the operation of electronic sensor equipment, characteristics of underwater sound signals, analysis of target signals, radar fundamentals and operation, and active and passive acoustics.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics laboratory (6/75); in the lower-division baccalaureate/associate degree category, 4 semester hours in electronics laboratory (6/75).

NV-1715-0768

TACTICAL ELECTRONIC WARFARE

Course Number: D-00-0032.
Location: Air Maintenance Training Detachment, North Island, CA.
Length: 4 weeks (160 hours).
Exhibit Dates: 4/68-Present.
Objectives: To train pilots and flight officers in the concepts, planning, and techniques of electronic warfare.

Instruction: Classroom and practical training in active and passive electronic warfare policies and tactics and operation of various electronic warfare systems and equipment.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics laboratory (6/75); in the lower-division baccalaureate/associate degree category, 4 semester hours in electronics laboratory (6/75).

NV-1715-0769

E-B DETECTION SYSTEM

ORGANIZATIONAL MAINTENANCE

Course Number: C-104-3471.
Location: Air Maintenance Training Detachment, North Island, CA.
Length: 2 weeks (80 hours).
Exhibit Dates: 10/72-Present.
Objectives: To train electronics technicians in the maintenance of the E-B detection system.

Instruction: Instruction in radar principles, data acquisition, encoding, troubleshooting, and test instrument usage.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics laboratory (6/75); in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics laboratory (6/75).

NV-1715-0770

ASROC LAUNCHING GROUP MX 16

Course Number: A-121-0010

275
NV-1715-0771
AIR TRAFFIC CONTROL CENTER
EQUIPMENT MAINTENANCE
AN/TRAQ-5, CLASS C

Course Number: C-103-2077
Location: Air Technical Training Center,
Glynco, GA
Length: 6 weeks (200 hours)
Exhibit Dates: 4/73-Present

Objectives: To train technicians to maintain electronic air traffic control equipment.
Instruction: Lectures, and practical exercises in block diagram analysis, troubleshooting techniques, electronic circuitry, encoding, transmission and system alignment.
Credit Recommendation: In the vocational certificate category, 4 semester hours in electronic systems repair (6/75), in the lower-division baccalaureate/associate degree category, 1 semester hour in electronic laboratory (6/75)

NV-1715-0772
AN/AQA-7 V SONAR COMPUTER RECORDER GROUP INTERMEDIATE MAINTENANCE

Course Number: C-103-3075
Location: Air Maintenance Training Detachment, Patuxent River, MD, Air Maintenance Training Detachment, Moffett Field, CA, Air Maintenance Training Detachment, Cecil Field, FL
Length: 11 weeks (440 hours)
Exhibit Dates: 7/4-Present

Objectives: To train personnel in the maintenance procedures for a sonar computer-recorder and the specialized test equipment.
Instruction: Lectures and practical exercises in the theory, operation, and maintenance of a sonar computer-recorder, including demultiplexer, frequency, multiplexor, display, digital filter, and digital memory units to include fault localization, failure isolation, component replacement, reassembly, alignment, adjustment, and test equipment.
Credit Recommendation: In the vocational certificate category, 3 semester hours in communications laboratory (6/75), in the lower-division baccalaureate/associate degree category, 1 semester hour in communications laboratory (6/75)

NV-1715-0775
AN/ALR-54 COUNTERMEASURES REceiving SET Intermediate MAINTENANCE

Course Number: C-102-3238
Location: Air Maintenance Training Detachment, Lakehurst, NJ, Air Maintenance Training Detachment, Imperial Beach, CA
Length: 2 weeks (80 hours)
Exhibit Dates: 1/72-Present

Objectives: To provide instruction in the maintenance of electronic countermeasures receiving equipment.
Instruction: Instruciton covers theory and practical applications of specific circuits, RF detection, video display, power, supplies, logic boards, and filters, and practical exercises in test setup, troubleshooting, and repair.
Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics laboratory (6/75), in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics laboratory (6/75), in the upper-division baccalaureate category, 1 semester hour in electronics laboratory (6/75)

NV-1715-0776
E-2B ELECTRONIC SYSTEMS ORGANIZATION MAINTENANCE

Course Number: C-102-3479
Location: Air Maintenance Training Detachment, North Island, CA
Length: 3 weeks (120 hours)
Exhibit Dates: 11/73-Present

Objectives: To provide maintenance technicians with overall knowledge of a specialized electronic system.
Instruction: Lectures and practical exercises to include block diagram and functional description of communication/navigation systems, detection system and data link system interface, basic operation and troubleshooting, removal and replacement of Weapons Replaceable Assemblies (WRAs), installation procedures, and test equipment.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics laboratory (6/75)

NV-1715-0777
E-2B AIRBORNE TACTICAL DATA SYSTEMS - ATDS OPERATOR TRAINING

Course Number: D-102-0001
Location: Carrier Airborne Early Warning Squadron 120, Norfolk, VA
Length: 15 weeks (323 hours)
Exhibit Dates: 1/70-Present

Objectives: To provide personnel with basic skills to operate, maintain, and troubleshoot the specialized aircraft tactical data system of the E-2B aircraft.
Instruction: Lectures and practical exercises in block diagram description and troubleshooting procedures for detection, computer, communication, and navigation subsystems, and the aircraft communication and navigation system, with emphasis on test equipment, fault isolation, and basic deployment.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics laboratory (6/75)

NV-1715-0778
BASIC POINT DEFENSE SURFACE MISSILE SYSTEM

Course Number: A-121-0122
Location: Combat Systems Technical School Command, Mare Island, CA
Length: 20 weeks (355 hours)
Exhibit Dates: 9/71-Present

Objectives: To train personnel in the operation, maintenance, troubleshooting, and repair of specialized military equipment.
Instruction: Lectures and practical exercises in the principles of amplitude modulation and detection, analysis of specialized electronic systems, communication maintenance, and trouble isolation procedures.
Credit Recommendation: In the vocational certificate category, 7 semester hours in electronics laboratory (6/75), in the lower-division baccalaureate/associate degree category, 1 semester hour in electrical test and maintenance (6/75)
Exhibit Dates: Version 1: 1/77-Present
Version 2: 3/72-1/76
Objectives: To provide electronics technicians with instruction in the operation, maintenance, and repair of electronic countermeasures systems.

Instruction: Classroom and laboratory instruction in the use of specialized test equipment and the operation and maintenance of complex electronic circuitry.

Credit Recommendation: In the vocational certificate category, 3 semester hours in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics laboratory (6/75)

NV-1715-0781

ELECTRONIC WARFARE DECEPTION
REPEATER SYSTEMS MAINTENANCE.
AN/SLQ-22A(V)2

(Electronic Warfare Deception Repeater Systems Maintenance, AN/SLQ-22A(V)2)

Course Number: A-102-0096
Location: Service Schools Command, Treasure Island, CA
Length: 6 weeks (180 hours)
Exhibit Dates: 6/75-Present
Objectives: To train electronics technicians in principles of electronic countermeasures systems.

Instruction: Classroom and laboratory instruction in the use of specialized test equipment and the operation and maintenance of complex electronic circuitry.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics laboratory (6/75)

NV-1715-0782

ELECTRONIC WARFARE TECHNICIAN, CLASS A
A-11, TACTICAL OPERATIONS

Course Number: A-102-0096
Location: Service Schools Command, Treasure Island, CA
Length: 12 weeks (360 hours)
Exhibit Dates: 4/77-Present
Objectives: To train electronic technicians in the principles of electronic warfare systems.

Instruction: Classroom and laboratory instruction in electronic warfare analysis and specific hardware systems.

Credit Recommendation: In the vocational certificate category, 6 semester hours in electronics laboratory (6/75)

NV-1715-0783

SONAR AN/SQS-19 THROUGH 48 AND ASPECT MAINTENANCE

Course Number: A-130-0043
Location: Fleet Sonar School, Key West, FL
Length: 8 weeks (240 hours)
Exhibit Dates: 8/69-Present
Objectives: To train personnel to service and maintain a specific military sonar system.

Instruction: Lectures and practical exercises in the operation of a specific sonar system to include troubleshooting, calibration, DC power supply circuits, AC power distribution, timer base generators, and other related sonar circuitry.

Credit Recommendation: In the vocational certificate category, 3 semester hours in basic electronics (6/75)

NV-1715-0784

TORPEDO'S MATE, CLASS A
SUBMARINE AND SURFACE
PREREQUISITE

Course Number: A-123-0148
Location: Naval Technical Training Center, Orlando, FL
Length: 2 weeks (56 hours)
Exhibit Dates: 6/75-Present
Objectives: To provide personnel with basic mid-level training in hand tools and electrical measurement devices prerequisite to entry in the Torpedo's Mate, Class A program.

Instruction: Classroom and practical instruction in common hand tools, basic electricity, VOM's, multimeters, and soldering techniques.

Credit Recommendation: In the vocational certificate category, 1 semester hour in basic test equipment (6/75)

NV-1715-0785

TORPEDO MK 46 MOD 1, MK 44 MOD 1,
AND AWTY MK 32
ORGANIZATIONAL MAINTENANCE

Course Number: A-123-0145
Location: Service Schools Command, Orlando, FL
Length: 2 weeks (60 hours)
Exhibit Dates: 1/70-Present
Objectives: To provide personnel with knowledge of introductory operational and maintenance procedures for torpedoes.

Instruction: Instruction includes physical and operational characteristics and firing craft procedures for the surface/craft-fired antisubmarine warfare weapons.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (6/75)

NV-1715-0786

TORPEDO MK 45 MODS 1 AND 2 TEST EQUIPMENTS INTERMEDIATE
MAINTENANCE,

Course Number: A-123-0137
Location: Service Schools Command, Orlando, FL
Length: 2 weeks (210 hours)
Exhibit Dates: 1/70-Present
Objectives: To train personnel in the use and maintenance of torpedo test equipment.

Instruction: Instruction and practical experience in the maintenance of various test sets, including preparation for use, component replacement and adjustment, performance tests, troubleshooting, and operational checks.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (6/75)

NV-1715-0787

TORPEDO MK 37 MODS 0, 1, 2, AND 3
ORGANIZATIONAL MAINTENANCE

Course Number: A-123-0143
Location: Service Schools Command, Orlando, FL
Length: 2 weeks (60 hours)
**Exhibit**

Objectives: To provide personnel with introductory training in the maintenance of torpedoes aboard operating submarines.

Instruction: Instruction includes physical and operational characteristics of the torpedo, pre-loading and unloading procedures, patrol maintenance, emergency, and post-fire procedures, and film analysis.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (6/75).

---

**NV-1715-0788**

**TORPEDO MK 37 MODS 2, 3 AND 3 TEST EQUIPMENT INTERMEDIATE MAINTENANCE**

Course Number: A-123-0134

Location: Service Schools Command, Orlando, FL

Length: 7 weeks (120 hours)

Exhibit Dates: 1/70-Present

Objectives: To train technicians in test procedures for torpedo test equipment.

Instruction: Instruction and practical training in the use and maintenance of torpedo test equipment.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (6/75).

---

**NV-1715-0789**

**TORPEDO MK 3 MODS 2, AND 3 INTERMEDIATE MAINTENANCE**

Course Number: A-123-0133

Location: Service Schools Command, Orlando, FL

Length: 14 weeks (424 hours)

Exhibit Dates: 1/70-Present

Objectives: To train personnel in the maintenance of torpedo control systems.

Instruction: Instruction and practical training in the maintenance of electrical control systems for torpedoes, including troubleshooting procedures and functions of basic control system components.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/75).

---

**NV-1715-0790**

**AN/SPS-43A/37A RADAR SET MAINTENANCE ELECTRONIC TECHNICIAN CLASS C1**

Location: AN/SPS-43A/37A Radar Sets

Course Number: A-104-0149

Location: Service School Command, San Diego, CA

Length: 11 weeks (330 hours)

Exhibit Dates: 11/77-Present

Objectives: To train electronics technicians with the knowledge of radar and ECM to operate, maintain, and calibrate specified radar sets and the AN/SPS-63 countermeasures receivers.

Instruction: Lectures and practical exercises on the operation, maintenance, and calibration of the AN/SPS-37/37A, AN/SPS-43/43A radar sets, and the AN/SPA-63 ECM/countermeasures receiver.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/75).

---

**NV-1715-0791**

**TELEMETRY GROUND STATION AN/SKG-14**

Course Number: A-121-0113

Location: Guided Missiles School, Mare Island, CA

Length: 4 weeks (100 hours)

Exhibit Dates: 1/70-Present

Objectives: To provide technicians with practical training in the operation, adjustment, and maintenance of telemetry systems.

Instruction: Instruction includes electronic circuitry, block diagram analysis, and troubleshooting techniques.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics equipment laboratory (6/75).

---

**NV-1715-0792**

**TARTAR MK 152 COMPUTER COMPLEX**

Course Number: A-150-0079, A-150-0080

Location: Guided Missiles School, Mare Island, CA

Length: 9 weeks (238 hours)

Exhibit Dates: 6/71-Present

Objectives: To train personnel in the maintenance of computer systems, digital computer interfacing, and signal converters associated with fire control computers.

Instruction: Instruction and practical experience in the operation and maintenance of interface and signal conversion equipment for computer systems.

Credit Recommendation: In the vocational certificate category, 2 semester hours in computer interface circuits (6/75), in the intermediate baccalaureate/associate degree category, 2 semester hours in computer interface circuits (6/75).

---

**NV-1715-0793**

**TALOS RADAR AN/SPW-16**

Course Number: A-104-0085

Location: Naval Schools Command, Mare Island, CA

Length: 16-18 weeks (534-590 hours)

Exhibit Dates: 1/71-Present

Objectives: To train personnel in the operation, maintenance, troubleshooting, and repair of specialized radar equipment.

Instruction: Instruction and training in operational principles of general purpose test equipment, including oscilloscopes, power and frequency meters, and specialized military equipment. Topics also include circuit analysis and maintenance and troubleshooting procedures.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics maintenance (6/75).

---

**NV-1715-0794**

**SUBROC MISSILE MK 28 MOD 1 INTERMEDIATE MAINTENANCE**

Course Number: A-121-0144

Location: Service Schools Command, Orlando, FL

Length: 7 weeks (326 hours)

Exhibit Dates: 1/70-Present

Objectives: To train personnel to test, assemble, disassemble, and perform intermediate maintenance on the SUBROC guided missile.

Instruction: Lectures and practical exercises in identification and assembly of parts.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/75).

---

**NV-1715-0795**

**SUBROC MISSILE MK 28 MOD 0 TEST EQUIPMENT INTERMEDIATE MAINTENANCE**

Course Number: A-121-0145

Location: Service Schools Command, Orlando, FL

Length: 20 weeks (632 hours)

Exhibit Dates: 4/66-Present

Objectives: To train personnel to use the circuit schematics of the SUBROC missile and to service test equipment for trouble analysis.

Instruction: Lectures and practical exercises in checkout and assembly of the SUBROC missile to cover circuitry and circuit tracing, test equipment and test equipment calibration, trouble isolation, operational checks, and electronic fundamentals.

Credit Recommendation: In the vocational certificate category, 10 semester hours in equipment repair and maintenance, 1 in test equipment laboratory (6/75), in the intermediate baccalaureate/associate degree category, 1 semester hour in test equipment laboratory (6/75).

---

**NV-1715-0796**

**RT-236 AND KY-511 TACAN I NAVIGATION I INTERMEDIATE MAINTENANCE**

Course Number: C-102-3098

Location: White Sands Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Oceans, CA; Air Maintenance Training Detachment, Whidbey Island, WA

Length: 3 weeks (120 hours)

Exhibit Dates: 2/74-Present

Objectives: To provide avionics maintenance personnel with instruction in the maintenance of the TACAN systems.

Instruction: Lectures and practical exercises in TACAN equipment, test equipment, block diagram analysis, and troubleshooting.

Credit Recommendation: In the vocational certificate category, 2 semester hours in airframe electronics (6/75).

---

**NV-1715-0797**

**RT-54/A SQ RECEIVER/TRANSMITTER AND KY-309/ASQ PULSE DECODER AND RT-54/A SQ RECEIVER/TRANSMITTER AND KY-511/ASQ PULSE DECODER INTERMEDIATE MAINTENANCE**

Course Number: C-102-3094

Location: Air Maintenance Training Group, Whidbey Island, WA; Air Maintenance Training Group, Oceans, CA; Air Maintenance Training Group, Miramar, CA; Air Maintenance Training Group, El Toro, CA; Air Maintenance Training Group, Cherry Point, NC, Air Maintenance Training Group, North Island, CA

Length: 3 weeks (120 hours)

Exhibit Dates: 11/73-Present

Objectives: To provide maintenance personnel with knowledge of theory of operation, testing, and system troubleshooting procedures for a military communications system.

Instruction: Lectures and practical exercises to include maintenance procedures, pulse decoder circuits, block diagrams, and

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/75).
1-254 COURSE EXHIBITS

an introduction to receiver/transmitter theory.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in electronics laboratory (6/75).

NV-1715-0798
OA-33/ASM-76 COMPUTER DETECTOR
TEST CONSOLE INTERMEDIATE
MAINTENANCE
Course Number: C-150-3486
Location: Air Maintenance Training Detachment, North Island, CA.
Length: 5 weeks (200 hours).
Exhibit Dates: 2/74-Present
Objectives: To train personnel in the maintenance of a specific computer detector test console.

Instruction: Instruction in adapter components, signal generation, including power supplies and timing generators, and testing theory of magnetic computer detection systems.

Credit Recommendation: In the vocational certificate category, 1 semester hour in basic electronics laboratory (6/75).

NV-1715-0799
MARINE AIR TRAFFIC CONTROL
COMMUNICATIONS REPAIRMAN.
CLASS C
Course Number: C-103-0209
Location: Naval Air Training Command, Memphis, TN, Air Technical Training Center, Glyanco, CA.
Length: 7 weeks (233 hours).
Exhibit Dates: 5/73-Present

Objectives: To train personnel to inspect, test, maintain, and repair a specific military radio transmitter and receiver and associated communications equipment.

Instruction: Lectures and practical exercises in radio receiver and transmitter maintenance and repair, including system troubleshooting, circuit tracing on a block diagram level, and alignment procedures.

Credit Recommendation: In the vocational certificate category, 1 semester hour in basic communications laboratory (6/75).

NV-1715-0800
1. CRYPTOLOGIC TECHNICIAN O, HIGH
FREQUENCY DIRECTION FINDING (HFDF), COMMUNICATIONS TECHNICAL CONTROL. CLASS C.
Course Number: A-580-0017
Location: Naval Technical Training Center, Corry Station, Pensacola, FL.
Length: 11 weeks, 1 self-paced 6 weeks (240 hours). Version 2. 6 weeks (225 hours).
Exhibit Dates: Version 1. 2/76-Present.
Version 2. 1/70-1/76

Objectives: To train communications technicians to operate and repair direction finding communications systems.

Instruction: Classroom and practical instruction in special electronic circuits, telegraph, teletype, and communications systems.

Credit Recommendation: Version 1. In the vocational certificate category, 1 semester hour in communication equipment operation (1/77). Version 2. In the vocational certificate category, 4 semester hours in electronic systems maintenance (6/75); in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics laboratory (6/75).

NV-1715-0801
TERREIR ASM-70 sSB RADAR UPDATE (Ternier AN/SPG-55B ASM 70 Radar Update).
Course Number: C-100-0023
Location: Combat Systems Technical School Command, Mare Island, CA.
Length: 3 weeks (173 hours).
Exhibit Dates: 10/71-Present

Objectives: To provide personnel, previously trained in radar, with basic knowledge and skills required to maintain a modified radar.

Instruction: Lectures and practical training in the operation and maintenance of the modified radar, including range tracking circuits and narrow pulse techniques.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (6/75).

NV-1715-0802
GUNNER'S MATE. CLASS B
Course Number: A-041-0014
Location: Gunner's Mate School, Great Lakes, IL.
Length: 25 weeks (752 hours).
Exhibit Dates: 12/67-12/73

Objectives: To train personnel in the basic principles and procedures of operating and maintaining gun mounts and associated fire control circuits.

Instruction: Lectures and practical exercises in basic electricity and electronics, mathematics, mechanics, and equipment troubleshooting.

Credit Recommendation: In the vocational certificate category, 6 semester hours in electronics, 2 in electricity, and 1 in mathematics (6/75); in the lower-division baccalaureate/associate degree category, 3 semester hours in electronics and 2 in electricity (6/75); in the upper-division baccalaureate category, 3 semester hours in electronics on the basis of institutional evaluation (6/75).

NV-1715-0803
MK 101 MODS 1 THROUGH 20 FIRE CONTROL SYSTEM (MCS). MAINTENANCE. CLASS C.
Course Number: A-111-0057
Location: Fire Control Technician, Class C School, Great Lakes, IL.
Length: 21 weeks (710-737 hours).
Exhibit Dates: 1/71-Present

Objectives: To train fire control technicians to operate, adjust, and maintain an underwater fire control system.

Instruction: Instruction includes block diagram analysis, troubleshooting techniques, electronic circuitry, and electro-mechanical devices.

Credit Recommendation: In the vocational certificate category, 4 semester hours in electronic systems and 2 in electronics laboratory (9/77).

NV-1715-0804
TERREIR WEAPON SYSTEM DLTG-12 (CLASS SYSTEM LEVEL MAINTENANCE).
Course Number: A-121-0098
Location: Guided Missiles School, Mare Island, CA.
Length: 3 weeks (450 hours).
Exhibit Dates: 1/72-Present

Objectives: To train fire control technicians in the operation and repair of weapon control systems.

Instruction: Lectures and practical exercises in systems components, alignment, maintenance and troubleshooting, including block diagram analysis, signal flow, and repair techniques.

Credit Recommendation: In the vocational certificate category, 4 semester hours in electronic systems maintenance (6/75), in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics laboratory (6/75).

NV-1715-0805
TARTAR WEAPON SYSTEM MISSILE FIRE CONTROL SYSTEM (MCCS). MK 74 MODS 6 AND 7.
Course Number: A-121-0182, A-121-0183
Location: Guided Missiles School, Dam Neck, VA, Naval Schools Command, Mare Island, CA.
Length: 12 weeks (325 hours).
Exhibit Dates: 3/72-Present.

Objectives: To train fire control technicians to supervise the operation and maintenance of a Tartar weapon system.

Instruction: Lectures and laboratory instruction in block diagrams, including maintenance and operations procedures, and testing and alignment of weapon system equipment.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (6/75).

NV-1715-0806
SONAR AN/SQS-56AX RETROFIT MAINTENANCE.
Course Number: A-130-0044
Location: Fleet Anti-submarine Training Center, San Diego, CA, Fleet Sonar School, Key West, FL.
Length: 26 weeks (752-842 hours).
Exhibit Dates: 5/71-Present.

Objectives: To train technicians in the operation and repair of a sonar system.

Instruction: Lectures and laboratory instruction in the theory of operation and preventive and corrective maintenance of the sonar set and Louis-Allis power supply. Topics include linear and nonlinear electronic circuits, block diagram analysis, and troubleshooting techniques.

Credit Recommendation: In the vocational certificate category, 6 semester hours in electronic troubleshooting (9/77).

NV-1715-0807
A-1/A/B/E AN/AWS-14/30 AUTOMATIC FLIGHT CONTROL SYSTEM ORGANIZATIONAL MAINTENANCE.
Course Number: C-602-3788, C-602-195.
Location: Air Maintenance Training Detachment, Lemoore, CA, Air Maintenance Training Detachment, Nellis Field, FL.
Length: 2-3 weeks (80-100 hours).
Exhibit Dates: 9/68-Present.

Objectives: To provide instruction in the maintenance of an automatic flight control system.

Instruction: Lectures and practical exercises on circuit analysis applied to flight control systems, stabilization, and automatic landing assemblies.

Credit Recommendation: In the vocational certificate category, 2 semester hours in advanced avionics/electronics maintenance (6/75).
AN/SRN-18 Radio Satellite Navigation Set Maintenance (Electronics Technician, Class C)  
Course Number: A-102-0002  
Location: Service School Command, San Diego, CA, Fleet Training Center, Norfolk, VA  
Length: 4 weeks (120 hours)  
Exhibit Dates: 10/77-Present  
Objectives: To provide the skills and knowledge necessary to maintain the AN/SRN-18 navigation set  
Instruction: Includes operation and familiarization, with AN/SRN-18, and the receiver signals, DPU, power supply, thermal printer, test generator, system troubleshooting, and supply procedures  
Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics communications systems, 1 in electronic communications laboratory (11/77)  

AN/AFX-72 Series IFF Transponder System Maintenance (AN/AFX-72 Maintenance, Class C)  
Course Number: A-102-0063  
Location: Service School Command, San Diego, CA, Fleet Training Center, Norfolk, VA  
Length: 3 weeks (90 hours)  
Exhibit Dates: 12/75-Present  
Objectives: To provide skills and training necessary to perform preventive and corrective maintenance on an aircraft interrogation system  
Instruction: Topics include theoretical and practical instruction in operation, maintenance, and repair of a transponder system  
Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics or aircraft electronics (11/77)  

AN/SPS-40B Radar Set Maintenance (Electronics Technician, Class C)  
Course Number: A-102-0062  
Location: Service School Command, San Diego, CA, Fleet Training Center, Norfolk, VA  
Length: 16 weeks (480 hours)  
Exhibit Dates: 10/77-Present  
Objectives: To provide skills and knowledge necessary to maintain the AN/SPS-40B/C/D radar set  
Instruction: Course includes operation and maintenance of the AN/SPS-40B/C/D radar set, power control and distribution, air system, cooling system, antenna system, and the AN/UPN-12(A) Loran receiver system, among other equipment associated with the aircraft interrogator unit  
Credit Recommendation: In the vocational certificate category, 2 semester hours in communications systems, 2 in electronics laboratory (11/77)  

Aims Mk XIIIFF System Maintenance (Electronics Technician, Class C)  
Course Number: A-102-0064  
Location: Service School Command, San Diego, CA, Fleet Training Center, Norfolk, VA  
Length: 4 weeks (120 hours)  
Exhibit Dates: 11/77-Present  
Objectives: To train electronics technicians to operate, repair, maintain and calibrate the accessory equipment AIMS Mk XII (interrogator and decoder unit) associated with an aircraft interrogator unit  
Instruction: Lectures and practical exercises in the operation and purposes of the Mk XII system, the AN/UPA-59A decoder group equipment, computer logic, trigger and encoding circuits, transmitter and receiver circuits and troubleshooting and alignment  
Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics laboratory (11/77)  

AN/UPX-72 Miniature Electronic Repair (Electronics Technician, Class C)  
Course Number: A-102-0065  
Location: Service School Command, San Diego, CA, Fleet Training Center, Norfolk, VA  
Length: 4 weeks (120 hours)  
Exhibit Dates: 9/77-Present  
Objectives: To provide the knowledge and skills necessary to operate, repair, and diagnose all chip and discrete electronic components, and to perform fault isolation procedures for the repair station and associated components  
Instruction: Topics include the latest methods in disassembly, repair, and soldering of miniature printed circuits, components, terminals, circuit board laminates and conductors  
Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics technology (11/77)  

Prospective Electromagnetic Material Office—Pacific Fleet, Class C  
Course Number: A-4B-0018  
Location: Service School Command, San Diego, CA  
Length: 4 weeks (120 hours)  
Exhibit Dates: 9/77-Present  
Objectives: To provide the knowledge and skills necessary to operate, repair, and supervise the electronics maintenance division on board a Pacific fleet ship  
Instruction: Course includes audio-visual instruction in electronics materials management, communications systems, radar systems, navigation aids, electronic warfare, safety, training programs, and test equipment management  
Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (10/77)
DD-99 CLASS ELECTRONIC WARRIOR SUITE

(Course measures Receiving Set AN/WLR-1C (IV Class F-1)

**Course Number:** A-102-0203
**Location:** Naval Technical Training Center, Corry Station, Pensacola, FL
**Length:** 8 weeks (320-360 hours)

**Exhibit Dates:** 12/76-Present

**Objectives:** Provides electronic warfare team training and technical maintenance in electronic support measures systems for the Spruance class destroyer

**Instruction:** Provides training in operations under simulated conditions, alignment and preventive maintenance of the AN/FVR-1C (V) with Band 10 and AN/WLR-1A

**Credit Recommendation:** In the vocational certificate category, 2 semester hours in electronic maintenance (1/77)

---

**NV-1715-0818**

CRYPTOLOGIC TECHNICIAN M, BASIC
BULLSEYE MAINTENANCE
(Bullseye System Basic Maintenance)

**Course Number:** A-102-0151
**Location:** Naval Technical Training Center, Corry Station, Pensacola, FL
**Length:** 8 weeks (308-320 hours)

**Exhibit Dates:** 11/77-Present

**Objectives:** To teach personnel with the cryptologic technician M rating to perform basic electronic maintenance on the Bullseye high-frequency, direction-finding (HFDF) system.

**Instruction:** Includes instruction and practical application on the Bullseye system and equipment block diagrams of the various subsystems, Preventive maintenance and minor corrective maintenance procedures applicable to the OPEG, AN/FRS-10, AN/FLR-11, AN/FRA-54, and the AN/FRO-15 are also taught.

**Credit Recommendation:** In the vocational certificate category, 3 semester hours in communications electronics (1/77)

---

**NV-1715-0819**

CRYPTOLOGIC TECHNICIAN M, BULLSEYE NARROWBAND MAINTENANCE
(Bullseye Narrowband Maintenance Technician)

**Course Number:** A-102-0152
**Location:** Naval Technical Training Center, Corry Station, Pensacola, FL
**Length:** 28 weeks (1120 hours)

**Exhibit Dates:** 8/74-Present

**Objectives:** To provide personnel with the cryptologic technician M rating with sufficient training to perform electronic maintenance on the Bullseye Narrowband system

**Instruction:** Subjects covered include principles, history, and evaluation of high-frequency direction-finding, antenna types and construction; electromechanical, electrical, and electronic theory, principles of operation, preventive and corrective maintenance procedures and techniques on the high-frequency, direction-finding equipment, proper use of test equipment to evaluate high-frequency, direction-finding antenna performance.

**Credit Recommendation:** In the vocational certificate category, 6 semester hours in computer science, 2 in computer technician training (1/77)

---

**NV-1715-0820**

RESERVE CRYPTOLOGIC TECHNICIAN—INTERMEDIATE CRYPTANALYSIS
(Reserve Naval Security Group-13.1 Intermediate Cryptanalysis)

**Course Number:** A-232-0055
**Location:** Naval Technical Training Center, Corry Station, Pensacola, FL
**Length:** 2 weeks (80 hours)

**Exhibit Dates:** 1/77-Present

**Objectives:** To provide working knowledge of the cryptanalytic techniques and practical experience in solving transposition ciphers and polygraphic substitution systems employing large keys and small matrices, including one-square, two-square, and Playfair cipher systems, and cryptosystems employing irregular cipher-text units

**Instruction:** Instruction consists of a brief review of cryptography terminology and techniques used in the solution of unilateral and multilateral substitution systems, including transposition ciphers and various polygraphic substitution systems.

**Credit Recommendation:** Credit is not recommended because of the military-specific nature of the course (1/77)

---

**NV-1715-0821**

RESERVE CRYPTOLOGIC TECHNICIAN PROCESSING AND REPORTING, PHASE I
(Processing and Reporting)
(Reserve Naval Security Group-3)

**Course Number:** A-232-0050
**Location:** Naval Technical Training Center, Corry Station, Pensacola, FL
**Length:** 2 weeks (80 hours)

**Exhibit Dates:** 1/77-Present

**Objectives:** To provide an introduction to basic traffic analysis

**Instruction:** Course includes the construction of communications net diagrams by analysis of call signs and message externals of intercepted traffic.

**Credit Recommendation:** Credit is not recommended because of the military-specific nature of the course (1/77)

---

**NV-1715-0822**

RESERVE CRYPTOLOGIC TECHNICIAN PROCESSING AND REPORTING, PHASE II
(Processing and Reporting)
(Reserve Naval Security Group-4)

**Course Number:** A-232-0054
**Location:** Naval Technical Training Center, Corry Station, Pensacola, FL
**Length:** 2 weeks (80 hours)

**Exhibit Dates:** 1/77-Present

**Objectives:** To gain knowledge of the report writing phase of processing and reporting operations and to gain practical experience in the preparation of the special intelligence product and technical reports

**Instruction:** Student will obtain practical experience in assembling and correlating special intelligence materials, in the preparation of special intelligence reports for electronic operations and to gain practical experience in the writing of special intelligence product and technical reports in required machine-manipulatable formats.

**Credit Recommendation:** Credit is not recommended because of the military-specific nature of the course (1/77)

---

**NV-1715-0823**

RESERVE CRYPTOLOGIC TECHNICIAN NAVAL SECURITY GROUP ORIENTATION
(Reserve Naval Security Group-1)

**Course Number:** A-230-0015
**Location:** Naval Technical Training Center, Corry Station, Pensacola, FL
**Length:** 2 weeks (80 hours)

**Exhibit Dates:** 1/77-Present

**Objectives:** To familiarize the student with the organization, mission, and functions of the Naval Security Group and other cryptologic agencies engaged in the national intelligence effort.

**Instruction:** Course introduces the student to all phases of Naval Security Group operations including Morse, non-Morse, radiotelephone, communications security, electronic intelligence (ELINT), processing and reporting, special identification techniques, research and development, general service and Naval security group special communications, communications security material system, Armed Forces courier service, and an introduction to the application of cryptanalysis and traffic analysis.

**Credit Recommendation:** Credit is not recommended because of the military-specific nature of the course (1/77)

---

**NV-1715-0824**

RESERVE CRYPTOLOGIC TECHNICIAN, BASIC CRYPTANALYSIS
(Reserve Naval Security Group-13)

**Course Number:** A-232-0055
**Location:** Naval Technical Training Center, Corry Station, Pensacola, FL
**Length:** 2 weeks (80 hours)

**Exhibit Dates:** 1/77-Present

**Objectives:** To provide the student with a basic knowledge of cryptographic terminology, cryptanalysis techniques, and experience in solving unilateral substitution systems employing standard and mixed alphabets, multilateral substitution with single equivalent alphabets, and multilateral substitution with variants.

**Instruction:** Course covers cryptanalytic terminology and definition, basic statistical analysis, unilateral and multilateral substitution ciphers, and key and keyword recovery.

**Credit Recommendation:** Credit is not recommended because of the military-specific nature of the course (1/77)

---

**NV-1715-0825**

RESERVE CRYPTOLOGIC TECHNICIAN SIMULATED OPERATIONAL TRAINING PHASE 1
(Reserve Naval Security Group Simulated Operational Training Phase 1)

**Course Number:** A-232-0051
**Location:** Naval Technical Training Center, Corry Station, Pensacola, FL
**Length:** 2 weeks (80 hours)

**Exhibit Dates:** 1/77-Present

**Objectives:** To provide team training in collection, cryptanalysis, traffic analysis, reporting and forwarding of intercept materials.

**Instruction:** Simulates operations performed by a small Naval security detachment. Using analytical techniques, the group studies complex encrypted rotating call signs and frequency rotes to determine organization and composition (order-of-battle) of the enemy. Under supervision, students copy simulated enemy traffic, perform basic traffic analysis and cryptanalysis, and prepare special intelligence reports for electronic forwarding.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course. (1/77)

NV-1715-0826
RESERVE CRYPTOLOGIC TECHNICIAN
SIMULATED OPERATIONAL TRAINING PHASE II
(Reserve Naval Security Group Simulated Operations Training Phase II)
Course Number: A-232-0057
Location: Naval Technical Training Center, Corry Station, Pensacola, FL.
Length: 2 weeks (80 hours).
Exhibit Dates: 1/77-Present.
Objectives: To provide advanced training in collection, direction finding, cryptanalysis, traffic analysis, reporting and forwarding of intercept materials.
Instruction: Simulates operations performed by a small Naval security group division aloft by applying various cryptanalytic and traffic analysis techniques to simulated enemy intercept Complex problems, including encrypted rotating call signs and frequencies are analyzed to determine the location, organization, and composition (order-of-battle) of the enemy. Students copy simulated enemy chatter and traffic, sort and log, interpret, perform cryptanalysis, and create an intelligence summary and report for forwarding.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course. (1/77)

NV-1715-0827
RESERVE CRYPTOLOGIC TECHNICIAN
SIMULATED OPERATIONAL TRAINING SIMULATION
(Reserve Naval Security Group Simulated Operations Training Phase III)
Course Number: A-232-0032.
Location: Naval Technical Training Center, Corry Station, Pensacola, FL.
Length: 2 weeks (80 hours).
Exhibit Dates: 1/77-Present.
Objectives: To provide a realistic operational environment for advanced training in traffic analysis including reporting and forwarding of intercept materials.
Instruction: Course simulates the operation of a small Naval security group division aloft, located off the coast of a hypothetical country. During theoretical training, students are provided with equipment necessary to perform activities and participate in simulated special intelligence summaries and terminal reports for electrical forwarding.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course. (1/77)

NV-1715-0828
CRYPTOLOGIC TECHNICIAN M - FLEXSCOP MAINTENANCE
(CRYPTOLOGIC TECHNICIAN M - FLEXSCOP MAINTENANCE)
Course Number: A-102-0079
Location: Naval Technical Training Center, Corry Station, Pensacola, FL.
Length: 2 weeks (80 hours).
Exhibit Dates: 1/77-Present.
Objectives: To teach performance of preventive and corrective maintenance on the CP-818, FLEXSCOP, and the FG-617/G line printer.
Instruction: In-depth coverage of program logic diagram analysis and maintenance procedures for the CP-818 computer and associated I/O devices. Includes safety precautions and procedures.
Credit Recommendation: In the vocational certificate category, 6 semester hours in troubleshooting computer systems and subsystems (1/77), in the lower-division baccalaureate/associate degree category, 4 semester hours in applied computer systems (1/77).

NV-1715-0829
CRYPTOLOGIC TECHNICIAN M, CLASS A3
(CRYPTOLOGIC TECHNICIAN M, CLASS A3)
Course Number: A-102-0109
Location: Naval Technical Training Center, Corry Station, Pensacola, FL.
Length: Self-paced 12 weeks (480 hours).
Exhibit Dates: Version 1: 2/77-Present.
Version 2: 8/74-1/77.
Objectives: To teach basic electronic maintenance of equipment used in conjunction with cryptographic mission.
Instruction: Emphasis is on equipment configurations and procedures used in Naval security group divisions. Included are basic safeguards for security, use of maintenance documentation; safety precautions and practices, principles of operation and maintenance of antenna and RF distribution systems, radio receivers, and tape recorders, principles of TTY and communication terminal equipment, and use of common and special purpose test equipment.
Credit Recommendation: Version 1. In the vocational certificate category, 3 semester hours in electronic test equipment (1/77); in the lower-division baccalaureate/associate degree category, 3 semester hours in digital systems fundamentals (1/77). Version 2. In the vocational certificate category, 3 semester hours in electronic test equipment (1/77).

NV-1715-0830
CRYPTOLOGIC TECHNICIAN M, BULLSEYE WIDEBAND MAINTENANCE
(BULLSEYE WIDEBAND MAINTENANCE)
Course Number: A-102-0153.
Location: Naval Technical Training Center, Corry Station, Pensacola, FL.
Length: 28 weeks (1108-1120 hours).
Exhibit Dates: 12/74-1/77.
Objectives: To teach personnel with cryptologic technician M rating to perform electronic maintenance on the Bullseye wideband system.
Instruction: Teaches preventive and corrective maintenance on the AN/FLR-11, and AN/FRA-54 equipment and associated systems.
Credit Recommendation: In the vocational certificate category, 9 semester hours in communication electronics or computer systems (1/77); in the lower-division baccalaureate/associate degree category, credit is recommended in communication electronics or for a basic course in computer science on the basis of institutional evaluation (1/77).

NV-1715-0831
AVIATION SQUADRON ELECTRONIC WAREFARE (EW) OFFICER (EWO), CLASS A2
Course Number: C-2D-0314.
Location: Naval Technical Training Center, Corry Station, Pensacola, FL.
Length: 4 weeks (148-160 hours).
Exhibit Dates: 1/77-Present.
Objectives: To provide formal training for the aviation officer designed to an electronic warfare officer billet in a tactical air/antisubmarine warfare squadron.
Instruction: Topics include technology, organization, equipment, publications, weapons systems, training, and operations. Subjects include correspondence writing, equipment operation, training development, and operational planning.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course. (1/77).

NV-1715-0832
NAVAL SECURITY GROUP DIRECT SUPPORT OPERATIONS
(Officer Direct Support Operations, Class C4)
Course Number: A-3B-0012.
Location: Naval Technical Training Center, Corry Station, Pensacola, FL.
Length: Self-paced 4 weeks (148-160 hours).
Exhibit Dates: 1/77-Present.
Objectives: To teach basic functions for officers assigned to a Naval security direct support unit.
Instruction: Course provides training in the organization, tasks, and functions of the direct support unit, includes operational objectives and operational and management reports.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course. (1/77).

NV-1715-0833
CRYPTOLOGIC TECHNICIAN R HIGH FREQUENCY DIRECTION FINDER (HDF): OPERATOR
(HIGH FREQUENCY DIRECTION FINDER OPERATOR, CLASS C3)
Course Number: A-231-0012.
Location: Naval Technical Training Center, Corry Station, Pensacola, FL.
Length: Self-paced 3 weeks (188-200 hours).
Exhibit Dates: 1/77-Present.
Objectives: To provide background, theory, and knowledge of procedures necessary to operate direction-finding equipment in current use.
Instruction: Subjects include history and theory of direct finding; review of mathematics and basic radio theory; review of several practices and principles, calibration and operation of equipment and systems, charts, plotting, and fixes, communications practices and procedures, and simulated watchstanding.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course. (1/77).

NV-1715-0834
RESERVE CRYPTOLOGIC TECHNICIAN DIRECT SUPPORT
(Reserve Training Officer Direct Support Operations, Class F1)
Course Number: A-230-0016.
Location: Naval Technical Training Center, Corry Station, Pensacola, FL.
Length: 2 weeks (80 hours).
Exhibit Dates: 1/77-Present.
Objectives: To learn about Naval security group elements aloft and to enable students to perform in responsible, often independent positions.
Instruction: Student is trained to assume duties as Officer in Charge or Leading Petty Officer of a Naval security group aloft emphasis, is placed on independent
1-258 COURSE EXHIBITS

operations. Tactical and operational control methods are explained and proper use of governing directives is stressed.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (1/77)

NV-1715-0835

CRYPTOLOGIC TECHNICIAN M AN/FLR-15 MAINTENANCE, CLASS C1

Course Number: A-231-0054

Location: Naval Technical Training Center, Corry Station, Pensacola, FL.

Length: Self-paced 16 weeks (1428-1440 hours).

Exhibit Dates: 11/75-Present

Objectives: To perform preventive and corrective maintenance on the AN/FLR-15 equipment.

Instruction: Includes operational concepts of electronic communications equipment, principles of operation, theory and practice of maintenance and associated test equipment.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (1/77).

NV-1715-0836

CRYPTOLOGIC TECHNICIAN R, CLASS A3

(CRYPTOLOGIC TECHNICIAN Collection Branch)

Course Number: A-231-0044

Location: Naval Technical Training Center, Corry Station, Pensacola, FL.

Length: Self-paced 22 weeks (880 hours).

Exhibit Dates: 11/73-Present

Objectives: To perform preventive and corrective maintenance on the AN/FLR-15 equipment.

Instruction: Includes operational concepts of electronic communications equipment, principles of operation, theory and practice of maintenance and associated test equipment.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (1/77).

NV-1715-0838

CRYPTOLOGIC TECHNICIAN T, FIELD OPERATIONS TYPE ONE, CLASS A3

(SPECIAL NON-MORSE)

(CRYPTOLOGIC TECHNICIAN Technical Field Operations, Type One)

Course Number: A-231-0046

Location: Naval Technical Training Center, Corry Station, Pensacola, FL.

Length: Self-paced 5 weeks (200 hours).

Exhibit Dates: 1/77-Present

Objectives: To provide instruction and training in intercept of non-Morse communications.

Instruction: Includes concepts of collection analysis reporting and forwarding on non-Morse (plain text and encrypted) communications signals and the operation of the AN/GSQ-76 data acquisition system (TEBO) and associated equipment.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (1/77).

NV-1715-0839

CRYPTOLOGIC TECHNICIAN T, FIELD OPERATIONS TYPE TWO, CLASS A3

INTERNATIONAL COMMERCIAL RADIO (ICR) NON-MORSE

(CRYPTOLOGIC TECHNICIAN Technical Field Operations, Type Two)

Course Number: A-231-0047

Location: Naval Technical Training Center, Corry Station, Pensacola, FL.

Length: Self-paced 3 weeks (105-120 hours).

Exhibit Dates: 5/76-Present

Objectives: To provide instruction and practical experience in intercept of non-Morse communications.

Instruction: Includes operational concepts of electromagnetic communications equipment, principles of operation of Morse code, and development of ability to copy Morse code at a speed of 18 GPM and touch type at 25 WPM.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (1/77).

NV-1715-0840

CRYPTOLOGIC TECHNICIAN T, FIELD OPERATIONS TYPE THREE, CLASS A3

AN/FLR-11/15 OPERATIONS

(CRYPTOLOGIC TECHNICIAN Technical Field Operations Type Three)

Course Number: A-231-0024

Location: Naval Technical Training Center, Corry Station, Pensacola, FL.

Length: Self-paced 6 weeks (228-240 hours).

Exhibit Dates: 5/76-Present

Objectives: To provide training to operate all components of the AN/FLR-11 and AN/FLR-15.

Instruction: Includes introduction to and operating procedures for the digital data computer CP-818 and ancillary equipment associated with the Flexscop system.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (1/77).

NV-1715-0841

CRYPTOLOGIC TECHNICIAN T, FIELD OPERATIONS TYPE ONE, CLASS A3

AN/FLR-11/15 MAINTENANCE, CLASS C1

Course Number: A-231-0050

Location: Naval Technical Training Center, Corry Station, Pensacola, FL.

Length: Self-paced 6 weeks (188-200 hours).

Exhibit Dates: 7/75-Present

Objectives: To provide technical training in the maintenance of the AN/FLR-11A and associated equipment in a shipboard environment with minimum supervision.

Instruction: Subjects include digital logic review, alignment procedure, and preventive maintenance of the AN/FLR-11A and interface with AN/WLR-1.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronic communications equipment (1/77).

NV-1715-0842

AN/SQ-L19 AND AN/SQ-L26(V) WITH AN/SLD-1 COUNTERMEASURES RECOGNITION SET

(COUNTERMEASURES RECOGNITION SET AN/WLR-11A MAINTENANCE, CLASS C1)

Course Number: A-102-0192

Location: Naval Technical Training Center, Corry Station, Pensacola, FL.

Length: 10 weeks (400 hours).

Exhibit Dates: 7/74-Present

Objectives: To prepare personnel to operate, maintain, and repair the AN/SQ-L19 and AN/SQ-L26(V) systems.

Instruction: Topics include digital logic review, alignment, repair, and preventive maintenance of the AN/SQ-L19 and AN/SQ-L26(V) systems, including the AN/SQ-L1A.

Credit Recommendation: In the vocational certificate category, 6 semester hours in communications electronics (1/77).

NV-1715-0843

CRYPTOLOGIC TECHNICIAN T, FLEXSCOP OPERATOR

(Flexscop Operator, Class C3)

Course Number: A-231-0025

Location: Naval Technical Training Center, Corry Station, Pensacola, FL.

Length: Self-paced 4-6 weeks (160-240 hours).

Exhibit Dates: 11/74-Present

Objectives: To provide technical skills necessary to operate the CP-818 data computer and ancillary equipment associated with the Flexscop system.

Instruction: Includes introduction to and operating procedures for the digital data computer CP-818 and ancillary equipment. Air Force personnel attend additional 2 weeks for simulated watchstanding that parallels on-site operations.

Credit Recommendation: In the vocational certificate category, 2 semester hours in introduction to computer systems and operation (1/77); in the lower-division baccalaureate/associate degree category, credit in introduction to computer science upon the basis of institutional evaluation (1/77).

NV-1715-0844

RESERVE CRYPTOLOGIC TECHNICIAN T, ADVANCED, CLASS F1

(Reserve Naval Security Group-10-T)

Advanced Training (Trainig Orientation)

Course Number: A-231-0041

Location: Naval Technical Training Center, Corry Station, Pensacola, FL.
NV-1715-0845
RESERVE CRYPTOLOGIC TECHNICIAN
SIGNAL ANALYSIS, CLASS F1
(Reserve Naval Security Group-5 Signal Analysis)
Course Number: A-232-0049.
Location: Naval Technical Training Center, Corry Station, Pensacola, FL.
Length: 2 weeks (80 hours)
Exhibit Dates: 11/72-Present

Objectives: To provide knowledge and skills in electronics fundamentals and electronic circuit analysis. Credit Recommendation: In the vocational certificate category, 6 semester hours in electronics fundamentals and electronic circuit analysis.

NV-1715-0846
CRYPTOLOGIC TECHNICIAN, FLEXSCOP PROGRAMMER, CLASS C1
Course Number: A-532-0016.
Location: Naval Technical Training Center, Corry Station, Pensacola, FL.
Length: 2 weeks (80 hours)
Exhibit Dates: 12/72-Present

Objectives: To teach basic communications techniques in computer operation (1/77); in the lower-division baccalaureate/associate degree category, 3 semester hours in computer science assembly language (1/77).

NV-1715-0848
RESERVE CRYPTOLOGIC TECHNICIAN
COMMUNICATIONS TECHNICAL CONTROL, CLASS F1
(Reserve Naval Security Group-7 Communications Technical Control)
Course Number: A-580-0026.
Location: Naval Technical Training Center, Corry Station, Pensacola, FL.
Length: 2 weeks (80 hours)
Exhibit Dates: 1/74-Present

Objectives: To teach basic communications techniques in computer operation/administrative procedures, telegraph signal characteristics and printing by telegraph, signal distribution, safety, DC patching, telephone test equipment, control reporting, cryptographic equipment and setup/operation procedures.

Credit Recommendation: In the vocational certificate category, 6 semester hours in telecommunication equipment (1/77).

NV-1715-0849
CRYPTOLOGIC TECHNICIAN O, TACTICAL COMMUNICATIONS SYSTEMS OPERATIONS AND MANAGEMENT, CLASS C3
Course Number: A-580-0020.
Location: Naval Technical Training Center, Corry Station, Pensacola, FL.
Length: Self-paced 12 weeks (480 hours)
Exhibit Dates: 3/75-Present

Objectives: To provide training in tactical communications systems operation and management. Credit Recommendation: In the vocational certificate category, 3 semester hours in basic electricity and 6 in radio communications and communicator (1/77), in the lower-division baccalaureate/associate degree category, 3 semester hours in management procedures (1/77).

NV-1715-0850
CRYPTOLOGIC TECHNICIAN O, CLASS A1
(Cryptologic Technician Communications Basic, Class A1)
Course Number: A-580-0016.
Location: Naval Technical Training Center, Corry Station, Pensacola, FL.
Length: Self-paced 17 weeks (668-680 hours)
Exhibit Dates: 10/75-Present

Objectives: To provide in basic radio printer communications. Credit Recommendation: In the vocational certificate category, 3 semester hours in basic electronics and 6 in radio communications and communicator (1/77), in the lower-division baccalaureate/associate degree category, 3 semester hours in management procedures (1/77).

NV-1715-0851
ELECTRONICS TECHNICIAN A, COMMUNICATIONS
(Electronics Technician Communication Basic, Class A1)
Course Number: A-102-0227.
Location: Service School Command, Great Lakes, IL.
Length: 17 weeks (619 hours)
Exhibit Dates: 10/77-Present

Objectives: To provide knowledge and skills in electronics fundamentals and electronic circuit analysis. Credit Recommendation: In the vocational certificate category, 6 semester hours in electricity and electronics, 6 in radar systems, 4 in communications equipment, and 2 in electronics laboratory (10/77), in the lower-division baccalaureate/associate degree category, 3 semester hours in electricity or electronics, 3 in radar systems, and 1 in communications laboratory (10/77).

NV-1715-0852
ELECTRONICS TECHNICIAN COMMUNICATIONS EQUIPMENT FUNDAMENTALS, CLASS A1
Course Number: A-102-0226.
Location: Service School Command, Great Lakes, IL.
Length: 13 weeks (422 hours)
Exhibit Dates: 10/77-Present

Objectives: To develop troubleshooting skills using generic communications systems. Credit Recommendation: In the vocational certificate category, 2 semester hours in telecommunications equipment (10/77); in the lower-division baccalaureate/associate degree category, 3 semester hours in communications laboratory (10/77).

NV-1715-0853
ELECTRONICS TECHNICIAN COMMUNICATIONS—NUCLEAR FIELD, CLASS A1
Course Number: A-102-0226.
Location: Service School Command, Great Lakes, IL.
Length: 22 weeks (791 hours)
Exhibit Dates: 10/77-Present

Objectives: To provide nuclear field electronics technicians with a basic knowledge of electronics fundamentals and develop troubleshooting skills using generic communications equipment. Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics technology, troubleshooting procedures, basic electronics test equipment and common hand tools, introduction to communications, principles of operation, 3M documentation, corrective and preventive maintenance techniques for generic communications equipment (AN/WRC-1, R-1051, AN/URC-23, AN/URC-35, AN/URC-23, and AN/UHCA-38). Credit Recommendation: In the vocational certificate category, 6 semester hours in electricity and electronics, 6 in radar systems, 4 in communications equipment, and 2 in electronics laboratory (10/77), in the lower-division baccalaureate/associate degree category, 3 semester hours in electricity or electronics, 3 in radar systems, and 1 in communications laboratory (10/77).

NV-1715-0854
ELECTRONICS TECHNICIAN RADAR BASIC
(Electronics Technician Radar, Class A1)
Course Number: A-104-0173.
Location: Service School Command, Great Lakes, IL.
Length: 17 weeks (619 hours)
Exhibit Dates: 10/77-Present

Objectives: To provide knowledge and skills in electronic fundamentals and circuit analysis. Credit Recommendation: In the vocational certificate category, 6 semester hours in electricity and electronics, 6 in radar systems, 2 in electronics laboratory (10/77), in the lower-division baccalaureate/associate degree category, 3 semester hours in electricity or electronics, 3 in radar systems, and 1 in communications laboratory (10/77).
I-260 COURSE EXHIBITS

degree category, 3 semester hours in electricity and electronics, 3 in radar systems (10/77)

NV-1715-0855

ELECTRONICS TECHNICIAN RADAR EQUIPMENT FUNDAMENTALS, CLASS A
Course Number: A-104-0174
Location: Service School Command, Great Lakes, IL
Length: 12 weeks (400 hours)
Exhibit Dates: 10/77-Present
Objectives: To develop troubleshooting skills in radar systems.
Instruction: Course includes principles of operation, 3M documentation, corrective and preventive maintenance techniques for generic radar systems AN/SPS-10, Mk X, IFF, AN/SPA-25; electronic liquid cooling and dry air systems.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics, and in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics laboratory (10/77).

NV-1715-0856

ELECTRONICS TECHNICIAN RADAR CLASS A
Course Number: A-104-0172
Location: Service School Command, Great Lakes, IL
Length: 21 weeks (729 hours)
Exhibit Dates: 10/77-Present
Objectives: To train nuclear field electronics technicians with a basic knowledge of electronics fundamentals and to develop troubleshooting skills using generic radar equipment.
Instruction: Subjects are basic electronic technology and troubleshooting procedures including use of basic electronics test equipment and common hand tools, introduction to troubleshooting, basic principles of operation, 3M documentation, corrective and preventive maintenance techniques for generic radar equipment AN/SFS-10; electronics liquid cooling and dry air systems.
Credit Recommendation: In the vocational certificate category, 6 semester hours in electricity and electronics, 2 in laboratories, 6 in radar systems and 2 in electronics laboratory (10/77), in the lower-division baccalaureate/associate degree category, 1 semester hour in electronics laboratory (10/77).

NV-1715-0857

SONAR AN/SQS-11/IVDS OPERATOR
(Sonar AN/SQS-23 Series) Operator Basic
Course Number: A-130-0084
Location: Fleet Antisubmarine Warfare Training Center, San Diego, CA
Length: 3 weeks (94 hours)
Exhibit Dates: 7/77-Present
Instruction: Lectures and practical exercises in the operation of AN/SQS-23 sonar sets and associated equipment.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (8/77).

NV-1715-0858

SONAR AN/SQS-35(V)/AN/SQS-38 OPERATOR
(Sonar AN/SQS-35(V) AN/SQS-38 Operator Basic)
Course Number: A-130-0085
Location: Fleet Antisubmarine Warfare Training Center, San Diego, CA
Length: 2 weeks (63 hours)
Exhibit Dates: 5/75-Present
Objectives: Course trains Naval and Coast Guard personnel to operate the AN/SQS-35/38 sonar.
Instruction: Course contains topics pertinent only to the specified sonar.
Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (8/77).

NV-1715-0859

SONAR AN/SQ-23A (PAIR) ORGANIZATIONAL MAINTENANCE
Course Number: A-130-0096
Location: Fleet Antisubmarine Warfare Training Center, San Diego, CA
Length: 25 weeks (745 hours)
Exhibit Dates: 5/75-Present
Objectives: To train selected enlisted personnel to operate and maintain the AN/SQ-23A sonar system.
Instruction: Classroom and laboratory experiences related to the operation and maintenance of the sonar AN/SQ-23A. Includes circuit analysis and troubleshooting, system turn on and troubleshooting, receiver subsystems analysis and troubleshooting, solid state transmitters, and recorder/reproducer.
Credit Recommendation: In the vocational certificate category, 3 semester hours in electronic troubleshooting (8/77).

NV-1715-0860

SONAR AN/SQ-23 (PAIR) OPERATOR BASIC
Course Number: A-130-0097
Location: Fleet Antisubmarine Warfare Training Center, San Diego, CA
Length: 5 weeks (239 hours)
Exhibit Dates: 8/77-Present
Objectives: To train selected personnel with sonar technician "G" rating to operate the AN/SQ-23 PAIR sonar and to perform operator preventive maintenance.
Instruction: Classroom instruction and laboratory practice activities related to basic operation and preventive maintenance of the sonar AN/SQ-23.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (8/77).

NV-1715-0861

SONAR AN/SQS-35 OPERATOR BASIC
Course Number: A-130-0103
Location: Fleet Antisubmarine Warfare Training Center, San Diego, CA
Length: 3 weeks (116 hours)
Exhibit Dates: 8/76-Present
Objectives: To prepare personnel to operate the AN/SQS-35 sonar system.
Instruction: Course content concerns the operation of the specified sonar system.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the training (8/77).

NV-1715-0862

SONAR AN/SQR-17 ORGANIZATIONAL MAINTENANCE
(Sonar AN/SQR-17 and AN/SKR-4 Organizational Maintenance)
Course Number: A-130-0110
Location: Fleet Antisubmarine Warfare Training Center, San Diego, CA
Length: 11 weeks (352 hours)
Exhibit Dates: 4/76-Present
Objectives: To provide surface sonar technicians with skills and knowledge to maintain the sonar signal processing set AN/SQR-17 and telemetric data receiving set AN/SKR-4A.
Instruction: Classroom and laboratory experiences in theory and applications of maintenance procedures and techniques unique to the sonar AN/SQR-17. Also includes basic integrated circuit nomenclature and spectrum analyzer operation and maintenance.
Credit Recommendation: In the vocational certificate category, 1 semester hour in advanced instrumentation (8/77).

NV-1715-0863

SONAR AN/SQS-24 BX MAINTENANCE
Course Number: A-130-0046
Location: Fleet Antisubmarine Warfare Training Center, San Diego, CA
Length: 20 weeks (625 hours)
Exhibit Dates: 12/76-Present
Objectives: Course prepares personnel with Sonar Technician "G" rating to maintain the sonar AN/SQS-26BX system.
Instruction: Topics such as servo control logic, transmitter testing, signal processing, and fault isolation of the specified sonar system.
Credit Recommendation: In the vocational certificate category, 6 semester hours in electronic troubleshooting (8/77).

NV-1715-0864

SONAR AN/SQS-23 D-G SERIES (TRAM) MAINTENANCE
(Sonar AN/SQS-23 D-G Series TRAM, NIP, LORA Maintenance)
Course Number: A-130-0049
Location: Fleet Antisubmarine Warfare Training Center, San Diego, CA
Length: 12 weeks (375 hours)
Exhibit Dates: 8/76-Present
Objectives: To train sonar technicians in the maintenance of the AN/SQS-23 sonar system.
Instruction: Lectures and practical exercises in preventive and corrective maintenance of sonar and associated support equipment. Includes heater and DC power supplies, transmission circuits, transmitting cooling systems, performance monitor equipment, system test circuits, presentation and receiving circuits, and related topics.
Credit Recommendation: In the vocational certificate category, 3 semester hours in electronic troubleshooting (8/77).

NV-1715-0865

SONAR AN/BQS-11/12/13 MAINTENANCE
(Submarine Sonar AN/BQS-11/12/13 System Maintenance)
(Sonar Detecting Ranging Set AN/BQS-11/12/13 Combined Maintenance)
Course Number: A-130-0065
Location: Fleet Antisubmarine Warfare Training Center, San Diego, CA
Length: 10 weeks (400 hours)
Exhibit Dates: 5/74-Present.
Objectives: To train AN/BQS-11/12/13 sonar technicians in the preventive and corrective maintenance of the AN/BQS-11/12/13 sonar systems with emphasis on troubleshooting techniques.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronic troubleshooting (8/77).

NV-1715-0866
SONAR AN/SQS-35(V) MAINTENANCE
Course Number: A-130-0069
Location: Fleet Antisubmarine Warfare Training Center, San Diego, CA
Length: 17 weeks (680 hours)
Exhibit Dates: 8/77-Present
Objectives: To train AN/SQS-35(V) sonar technicians to maintain, calibrate, and operate the AN/SQS-35(V) sonar system and associated equipment.

Instruction: Lectures and practical exercises in the operation and maintenance of the AN/SQS-35(V) sonar system and associated timing, transmitter, receiver, and service equipment.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronic troubleshooting (8/77).

NV-1715-0867
SONAR ELECTRONICS INTERMEDIATE (SEI)
Course Number: A-130-0039
Location: Fleet Antisubmarine Warfare Training Center, San Diego, CA
Length: 17 weeks (680 hours)
Exhibit Dates: 8/77-Present
Objectives: To provide enlisted personnel with the knowledge of electronic circuits, electronics, and computer logic circuits.

Instruction: Topics include basic electronics and electronics, DC and AC theory, vacuum tubes, solid state devices, transformer operation, power supplies, amplifiers, wave form generators, analog computer circuits, digital numbering, and wave and flip-flop switching, memory devices, and biasing techniques.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electricity and electronics, 3 in computer logic circuits (8/77).

NV-1715-0868
SONAR DETECTING/RANGING SET AN/BQS-6B, 10A, 14A Sonar System Maintenance
Course Number: A-130-0036
Location: Fleet Antisubmarine Warfare Training Center, San Diego, CA
Length: 3 weeks (60-90 hours)
Exhibit Dates: 1/76-Present
Objectives: Students learn to operate the AN/BQS-6B/10A, 14A and 20 and detect malfunctions.

Instruction: Topics pertain specifically to sonar system equipment.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (8/77).

NV-1715-0869
DD-663 FACILITIES CONTROL QUALITY MONITORING PROCESSING UNIT OPERATORS
Course Number: A-201-0021
Location: Service School Command, San Diego, CA
Length: 3 weeks (90 hours)
Exhibit Dates: 7/77-Present
Objectives: To provide the skills and knowledge necessary to operate a radio communications system.

Instruction: Course provides instruction in theaters, RF and control sections, power supplies, antennas, and use of test equipment to troubleshoot and repair the specified equipment.

Credit Recommendation: In the vocational certificate category, 3 semester hours in communications systems (11/77).

NV-1715-0870
COMMUNICATIONS SYSTEM MAINTENANCE FOR DD-663 CLASS SHIPS, CLASS C-1
Course Number: A-101-0096
Location: Service School Command, San Diego, CA
Length: 6 weeks (240 hours)
Exhibit Dates: 11/77-Present
Objectives: To provide the skills and knowledge necessary to operate and maintain the common user information exchange system.

Instruction: Students attend ten separate courses in sequence. Units of instruction include the operation and maintenance of the TT-624 line printer, RD-397/U (XN-1) signal data recorder-reproducer, ON-143 (V3) data recorder-reproducer group, AN/USH-22(V) magnetic tape subsystem, and the AN/USH-23(V) magnetic disk subsystem.

Credit Recommendation: In the vocational certificate category, 3 semester hours in digital computer systems (11/77).

NV-1715-0871
SUBMARINE SATELLITE INFORMATION EXCHANGE SYSTEM (SSIDX) OPERATIONAL CONTROL CENTER MAINTENANCE
Course Number: A-101-0081
Location: Service School Command, San Diego, CA
Length: 10 weeks (300 hours)
Exhibit Dates: 9/75-Present
Objectives: To provide the skills and knowledge necessary to operate and maintain a satellite information exchange system operational control center.

Instruction: Students attend seven separate courses in sequence. Units of instruction include the operation and maintenance of the AN/WSC-3 satellite communications set, AN/K-20 (A) interconnecting group, AN/143(V3)/USQ interconnecting group, and associated communications systems.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics technician training, 3 in computer peripherals maintenance, and 1 in troubleshooting techniques (11/77), in the lower-division baccalaureate/associate degree category, 3 semester hours in digital computer systems (11/77).

NV-1715-0874
FLEET SATELLITE COMMUNICATIONS UNIT MAINTENANCE (ELECTRONICS TECHNICIAN, CLASS C1)
Course Number: A-101-0085, A-101-0086
Location: Service School Command, San Diego, CA
Length: 2 weeks (65 hours)
Exhibit Dates: 1/77-Present
Objectives: To provide the skills and knowledge necessary to operate and maintain the common user information exchange system.

Instruction: Students attend ten separate courses in sequence. Units of instruction include the operation and maintenance of the TT-624 line printer, RD-397/U (XN-1) signal data recorder-reproducer, ON-143 (V3) data recorder-reproducer group, AN/USH-22(V) magnetic tape subsystem, and the AN/USH-23(V) magnetic disk subsystem.

Credit Recommendation: In the vocational certificate category, 3 semester hours in digital computer systems (11/77), in the lower-division baccalaureate/associate degree category, 3 semester hours in digital computer systems (11/77).
COURSE EXHIBITS

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics laboratory (11/77).

NV-1715-0875

NAVAL MODULAR AUTOMATED

- COMMUNICATIONS SYSTEM

Course Number: A-101-0089
Location: Service School Command, San Diego, CA
Length: 20 weeks (600 hours).
Exhibit Dates: 9/75-Present.
Objectives: To provide the skills and knowledge necessary to operate and maintain a modular automated communications system.

Instruction: Students attend ten separate courses in sequence. Units of instruction include digital computers TT-624 line printer, AN/WSC communications equipment, and various troubleshooting and maintenance laboratory procedures.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics technology for completion of all components of the entire course (9/77), in the lower-division baccalaureate/associate degree category, 3 semester hours in electronics technology for completion of all components of the entire course (9/77).

NV-1715-0881

NAVIGATION TECHNICIAN SSN 688 CLASS

Course Number: A-193-0103
Location: Submarine Training Center, Pacific, Pearl Harbor, HI.
Length: 13 weeks (320 hours).
Exhibit Dates: 5/76-Present.
Objectives: To provide study of a navigational system consisting of a digital computer and satellite receiver, and to teach fault isolation and repair of the equipment, and to provide familiarization with system programs used to operate and diagnose the system.


Credit Recommendation: In the vocational certificate category, 5 semester hours in electronics technology for completion of all components of the entire course (9/77).

NV-1715-0882

FBM ELECTRONIC SURVEILLANCE MEASURES (ESM) TECHNICIAN

Course Number: A-231-0047
Location: Submarine Training Center, Pacific, Pearl Harbor, HI.
Length: 20 weeks (540 hours).
Exhibit Dates: 9/77-Present.
Objectives: A combined series of courses involving sophisticated electronic equipment aboard submarines.

Instruction: Courses is a combination of the following: IFF AN/APX-72 and AN/UPX-17 Combined Maintenance (A-102-0229), Radar AN/BPS-12, 13, 14 Combined Maintenance (A-102-0265), ESM AN/WLR-1 F/3A Combined Maintenance (A-233-0034), Radio Direction Finder AN/BRD-6 Combined Maintenance (A-102-0159), and Perspectiv Type 8B and IS Line E/E Adapter Combined Maintenance (A-233-0032).

Credit Recommendation: In the vocational certificate category, 6 semester hours in electromechanical technology for completion of all components of the course (9/77); in the lower-division baccalaureate/associate degree category, 3 semester hours in electronics engineering technology for completion of all components of the course (9/77).
NV-1715-0883
ELECTRONIC SURVEILLANCE MEASURES
(ESM) TECHNICIAN SSN 633 CLASS, CLASS C-1
Course Number: A-233-0044
Location: Submarine Training Center, Pacific, Pearl Harbor, HI
Length: 22 weeks (600 hours)
Exhibit Dates: 7/22-23/77
Objectives: To provide non-nuclear submarine electronics technician personnel training in sophisticated electronic equipment and submarine systems.

Instruction: Course presents training in the operation and maintenance of specified electronic equipment and is a combination of the following courses:

- Electronic Surveillance Measures (ESM) AN/WL-6 Combined Maintenance (A-233-0041), IFF AN/ANPX-72 and AN/UPX-17 Combined Maintenance (A-102-0229), Radar AN/BPS-12, 13, 14 Combined Maintenance (A-104-0165), and Periscope Type 15 BD and E Adapter Combined Maintenance (A-233-0077)

Credit Recommendation: In the vocational certificate category, 12 semester hours in electronics technology for completion of all components of the entire course (9/77).

NV-1715-0884
MISSILE TEST AND READINESS EQUIPMENT
(MTRE) MK 1 PROGRAMMER/TIMER
DIGITAL MULTIMETER ADVANCED TRAINING, CLASS C-1
Course Number: A-121-0262
Location: Submarine Training Center, Pacific, Pearl Harbor, HI
Length: 2 weeks (60 hours)
Exhibit Dates: 6/74-Present

Objectives: To teach the theory of operation, adjustment, fault isolation, and repair of a special-purpose digital program and timer for military equipment using a locally designed digital multimeter.

Instruction: Course includes a study of the functional operation of a digital programmer and timer utilizing circuit logic and logic diagrams including control, program, and sequential operations. Use of test equipment including a special-purpose digital multimeter to isolate faults, make adjustments, calibrate, troubleshoot, and repair electronic equipment.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in electronics technology (9/77)

NV-1715-0885
SUBMARINE COMMUNICATIONS EQUIPMENT COMBINED MAINTENANCE
(Submarine Communications Equipment) (Radar Equipment, Submarine Maintenance)
Course Number: A-101-0061, A-101-0062
Location: Submarine School, New London, CT; Submarine Training Center, Pacific, Pearl Harbor, HI
Length: 21 weeks (840 hours)
Exhibit Dates: 7/77-Present

Objectives: Course is designed to train technicians to operate, maintain, and repair a submarine communications system.

Instruction: Lectures and practical exercises on a submarine communications system including various types of antennas, antenna couplers, receivers, and transmitter systems. Course covers block-diagram functional description of each subsection, signal tracing using schematics, preventive maintenance, alignment, adjustment, calibration, and troubleshooting to isolate the fault to the board or component level. Combination course consists of the following courses:


Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics technology for completion of all components of the course (9/77).

NV-1715-0886
INTERIOR COMMUNICATIONS (IC)
-PARKER CABLE FOR SSN/SSBN
Course Number: A-623-0030
Location: Submarine Training Center, Pacific, Pearl Harbor, HI
Length: 10 weeks (400 hours)
Exhibit Dates: 7/77-Present

Objectives: To provide theory and skills for operation and maintenance of various subsystems aboard submarines.

Instruction: Course consists of the following courses:


Credit Recommendation: In the vocational certificate category, 4 semester hours in electronics technology for completion of all components of the course (9/77).

NV-1715-0887
3316/3308, FTB CONVERSION TRAINING
Course Number: A-121-0460
Location: Submarine Training Center, Pacific, Pearl Harbor, HI; Submarine School, New London, CT
Length: 16 weeks (540 hours)
Exhibit Dates: 1/77-Present

Objectives: This is a conversion course designed to train a fire control (ballistic missile) control technician to operate, maintain, and repair a subsystems aboard submarines.

Instruction: Combination course consisting of the following courses:

- AN/BPS-15 Combined Maintenance (A-103-0209), IFF AN/ANPX-72 and AN/UPX-17 Combined Maintenance (A-103-0229), An Integrated Computer System (A-103-0029), and Mk 80 FCS Combined Maintenance (A-103-0040)

Credit Recommendation: In the vocational certificate category, 5 semester hours in electronics technology for completion of the entire course (9/77).

NV-1715-0888
633 CLASS ESM ELINT TECHNICIAN
(ESM ELINT Technician SSN 633 CLASS, CLASS C-1)
Course Number: A-233-0045
Location: Submarine Training Center, Pacific, Pearl Harbor, HI; Submarine School, New London, CT
Length: 15 weeks (600 hours)
Exhibit Dates: 6/74-Present

Objectives: To teach the theory and skills for operation and maintenance of various subsystems aboard submarines.

Instruction: Course consists of the following courses:

- Basic Computer Theory (A-100-0042, A-100-0043) and ESM AN/BAD Combined Maintenance (A-102-0127)

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 4 semester hours in electronics technology or computer technology for completion of the entire program to include all component parts (9/77).

NV-1715-0889
ELECTRONIC SURVEILLANCE MEASURES
(ESM) TECHNICIAN SSN 633 CLASS, CLASS C-1
Course Number: A-233-0046
Location: Submarine Training Center, Pacific, Pearl Harbor, HI; Submarine School, New London, CT
Length: 28 weeks (1120 hours)
Exhibit Dates: 4/75-Present

Objectives: To provide non-nuclear submarine electronics technician personnel training in the operation and maintenance of specified equipment.

Instruction: Course is a combination of the following courses:

- AN/BPS-15 Combined Maintenance (A-103-0209), IFF AN/ANPX-72 and AN/UPX-17 Combined Maintenance (A-103-0229), An Integrated Computer System (A-103-0029), and Mk 80 FCS Combined Maintenance (A-103-0040)

Credit Recommendation: In the vocational certificate category, 10 semester hours in electronics technology or computer technology for completion of the entire program to include all component parts (9/77).
COURSE EXHIBITS

puter technology, all to be granted only for completion of all components of the entire course (9/77).

NV-1715-0890
MK 112 MOD 2 FIRE CONTROL SYSTEM (FCS) MAINTENANCE, CLASS C
Course Number: A-113-0059
Location: Submarine Training Center, Pacific, Pearl Harbor, HI.
Length: 2 weeks (60 hours).
Exhibit Dates: 3/73-Present.
Objectives: Provides necessary theory and skills required to maintain the large number of subsystems comprising a fire control system.
Instruction: Course provides primary training on the systems level in data processing, target tracking, and torpedo subsystems. Includes study of induction motors, generators, hysteresis motors, test equipment, number systems, and basic switching logic also at the systems level. Electromechanical components such as brakes, clutches, switches, relays, synchros, and solenoids are studied. Course includes classroom and laboratory study.
Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics technology (9/77).

NV-1715-0891
ALIGNMENT GROUP MK 1 MODS 2 AND 1, CLASS F-1
Course Number: A-121-0283, L-121-0056
Location: Submarine Training Center, Pacific, Pearl Harbor, HI.
Length: 2 weeks (60 hours).
Exhibit Dates: 10/74-Present.
Objectives: Provides corrective maintenance training related to alignment group Mk 1 Mods 0 and 1.
Instruction: To teach maintenance supportive theory and laboratory work involving fault isolation, alignment, adjustment, and calibration procedures.
Credit Recommendation: In the lower.division basic associate/degree category, 1 semester hour in electronics engineering technology (9/77).

NV-1715-0892
CONTROLLERS AND INDICATORS, FIRE CONTROL SYSTEM (FCS) MK 80, CLASS F-1
Course Number: A-121-0279, L-121-0053
Location: Submarine Training Center, Pacific, Pearl Harbor, HI.
Length: 2 weeks (79 hours).
Exhibit Dates: 10/74-Present.
Objectives: To provide training for maintenance and repair of the Mk. 49 control console and the attack, center indicating panel MK 225.
Instruction: Course includes maintenance supportive theory which does not involve signal or electronic flow or detailed mechanical breakdown except for the specified equipment. Student obtains skills to perform fault isolation and repairs on specified equipment.
Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (9/77).

NV-1715-0893
POLARIS TARGET CARD COMPUTER SYSTEM MK 148 MOD 0 MAINTENANCE, CLASS F-1
Course Number: A-121-0276.
Location: Submarine Training Center, Pacific, Pearl Harbor, HI.
Length: 2 weeks (60 hours).
Exhibit Dates: 8/74-Present.
Objectives: This is an application course utilizing theory acquired in the Polaris Target Card Computer System MK 148 Mod 0 Theory course (A-121-0275).
Instruction: Course offers training in corrective maintenance of the Polaris target card computer system (PTCCS) Mk 148 Mod 0. Corrective maintenance stressed.
Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics technology (9/77).

NV-1715-0894
POLARIS TARGET-CARD COMPUTER SYSTEM MK 148 MOD 0 THEORY, CLASS C
Course Number: A-121-0275, L-121-0049
Location: Submarine Training Center, Pacific, Pearl Harbor, HI.
Length: 3 weeks (90 hours).
Exhibit Dates: 8/74-Present.
Objectives: To present a theory course supporting corrective maintenance of the Polaris target card computer system Mk 148 Mod 0.
Instruction: Course offers advanced theory involving control, logic, signal flow, and sequential operation of the Polaris target card computer system (PTCCS), includes fault isolation procedures, repair and replacement of components, as well as functional integration with the remainder of the weapons system including power requirements and input and output signals in terms of type, format, source and destination.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in logic and control systems (9/77).

NV-1715-0895
DATA COMPUTATION AND TRANSMISSION LOOPS FIRE CONTROL SYSTEM (FCS) MK 80, CLASS C
Course Number: A-121-0280, L-121-0052
Location: Submarine Training Center, Pacific, Pearl Harbor, HI.
Length: 3 weeks (90 hours).
Exhibit Dates: 10/74-Present.
Objectives: To provide training for corrective maintenance of the FCS MK 80 Mods 2 and 3.
Instruction: Course offers maintenance support theory which does not involve signal or electronic flow or detailed mechanical components breakdown except for the specialized equipment specified.
Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (9/77).

NV-1715-0896
ELECTRONIC TEST EQUIPMENT BASIC OPERATOR, CLASS F-1
(Shock and Vibration Equipment Operation)
Course Number: A-193-0023, L-193-0012
Location: Submarine Training Center, Pacific, Pearl Harbor, HI.
Length: 2 weeks (60 hours).
Exhibit Dates: 6/72-Present.
Objectives: To provide the training necessary to enable the student to effectively care for and use common types of test equipment.
Instruction: The course, explains the proper care and use of DC current and voltmeters, AC voltmeters, ohmmeters, vacuum tube voltmeters, differential voltmeters, and the electronic milliammeter. Meter scale reading accuracy and the loading effects of a voltmeter are explained. Practical exercises using an ohmmeter to test transistors and the use of meters in transistor and tube circuits are given. Oscilloscopes, RF generators, and frequency counters operation are explained and their use in aligning a superhet demodulator receiver is given as a practical exercise.
Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics technology (9/77).

NV-1715-0897
POLARIS TARGET CARD COMPUTER SYSTEM PERIPHERAL EQUIPMENT, CLASS C
Course Number: A-121-0277, L-121-0051.
Location: Submarine Training Center, Pacific, Pearl Harbor, HI.
Length: 4 weeks (120 hours).
Exhibit Dates: 9/74-Present.
Objectives: Teaches corrective maintenance of a computer tape reader, a card punch/reader, and an IBM selective typewriter transmitter receiver.
Instruction: Course concentrates on operational tests and procedures for the maintenance of the equipment specified; provides the theory necessary to support all corrective maintenance without going into signal or electronic flow detail. Mechanical component breakdown except for those components unique to the peripheral equipment. Also provides skills to perform fault isolation and make repairs with limited supervision to the card punch/reader, punched tape reader, and the typewriter transmitter receiver.
Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics technology (9/77).

NV-1715-0898
CONTROLLERS AND CIRCUIT BREAKERS (Combined Maintenance)
(Controllable Breakers and Circuit Breakers)
(Controllers Circuit Breakers, Class F-1)
Course Number: A-662-0038, L-662-0013.
Location: Submarine Training Center, Pacific, Pearl Harbor, HI; or Basic Muscle Training Center, Charleston, SC; Submarine School, Groton, CT.
Length: 2 weeks (60-62 hours).
Exhibit Dates: 6/72-Present.
Objectives: To provide necessary principles of circuit breakers and controllers to enable effective maintenance and repair of equipment used on submarines.
Instruction: Approximately 30 percent of course devoted to theory and characteristics of circuit breakers, under voltage relays, under frequency relays, various tripping devices and the fundamentals of DC voltmeters and AM meters. Student learns purpose, characteristics, and the principle of operation, maintenance and adjustments on 6 types of circuit breakers and 5 types of controllers used aboard submarines.
Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics technology (9/77).

NV-1715-0899
POLARIS LORAN 'C' ADVANCED TRAINING
(Lozan 'C' Advanced Maintenance)
(Lozan 'C' ANWPN Refresher Maintenance, Class F-1)
Location: Submarine Training Center, Pacific, Pearl Harbor, HI.

Length: 2 weeks (6 hours).

Exhibit Dates: 9/74-Present.

Objectives: To offer the theory of operation of a Loran 'C' receiver and to teach the student to perform fault isolation and maintenance.

Instruction: Course covers timed loop, modes, frequencies, input/output signals, sequential operation, control and indicators, and signal loop search of a Loran 'C' receiver, and teaches the student to perform systematic fault isolation, operational tests utilizing test equipment, repair, alignment, adjustment, and calibration procedures of the equipment.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics technology (9/77).

NV-1715-0900
SUBMARINE EMERGENCY COMMUNICATIONS TRANSMITTER (SEC) (AN/BST-1) MAINTENANCE (SECT Buoy AN/BST-1 Basic Maintenance (SEC-L1-2)) (AN/BST-1 SEC Maintenance for Submarine Tender Technician)

Course Number: A-130-0144, L-101-0013.

Location: Submarine Training Center, Pearl Harbor, HI, Fleet Ballistic Missile Submarine Training Center, Charleston, SC, Submarine School, New London, CT.

Length: 2 weeks (60 hours).

Exhibit Dates: 2/74-Present.

Objectives: To provide theory and skills necessary for the operation, maintenance, and repair of the SEC buoy AN/BST-1.

Instruction: Majors in area of course cover troubleshooting and programming of the specialized equipment specified.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics technology (9/77).

NV-1715-0901
GENERATOR REGULATORS, CLASS F-1

Course Number: L-662-0023

Location: Submarine Training Center, Pacific, Pearl Harbor, HI.

Length: 2 weeks (60 hours).

Exhibit Dates: 7/72-Present.

Objectives: To provide a basic course in the operation, maintenance and troubleshooting of static regulators.

Instruction: Approximately 60 percent of this course is devoted to classroom work on AC theory and vector analysis of circuits and components with the remainder of the time spent in troubleshooting 2000 KW voltage regulators and 300 KV speed/voltage regulators. Time is given to review of previous training.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in electrical engineering technology (power option) (9/78).

NV-1715-0902
MAINTENANCE ANALYSIS TEST SET NAVY-2 (Class F-1)

Course Number: A-121-0285; L-121-0030.

Location: Submarine Training Center, Pacific, Pearl Harbor, HI.

Length: 2 weeks (45-60 hours).

Exhibit Dates: 12/65-12/77.

Objectives: To present theory of operation of specific military equipment and fault isolation and repair of that equipment.

Instruction: Course presents a study of the theory of operation of specialized military equipment utilizing logic and digital circuits, and their sequential operation. Students will perform fault isolation tests and make repairs on the equipment.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics (9/77).

NV-1715-0903
RADIO DIRECTION FINDER AN/BRD-6 COMBINED MAINTENANCE (Radio Direction Finder AN/BRD-6, Operational Maintenance) (AN/BRD-6B Combined Maintenance, Class F1)


Location: Submarine School, New London, CT, Submarine Training Center, Pacific, Pearl Harbor, HI.

Length: 2 weeks (60 hours).

Exhibit Dates: 11/73-Present.

Objectives: To teach the theory of operation and maintenance of special military equipment.

Instruction: Course offers theory of operation of special military equipment including antenna loops, pre-amps, food detectors, RF units, IF units, power supplies, and synchro units. Students learn to perform adjustments, fault isolation, signal trace, and to make repairs to the component level.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics (9/77).

NV-1715-0904
DIGITAL FUNDAMENTALS, BASIC (Basic Digital Computer Theory) (Basic Digital Fundamentals, Class F1)

Course Number: A-100-0045, L-000-0058, F-000-0080.

Location: Submarine Training Center, Pacific, Pearl Harbor, HI, Fleet Ballistic Missile Submarine Training Center, Charleston, SC.

Length: 3 weeks (90 hours).

Exhibit Dates: 6/76-Present.

Objectives: To provide an introduction to digital fundamentals, including number systems, Boolean algebra, logic conventions, combinatorial and sequential circuits, memory A/D and D/A converters, digital logic families, and organization of a typical computer.

Instruction: Course offers a study of binary, octal, duodecimal, BCD, and hexadecimal number systems includes conversions between number systems, binary arithmetic, complements, excess three code, and negative number representation, Boolean algebra, Venn diagrams, graphical symbols, gates, flip-flops, counters and registers. Topics include a study of the control unit, arithmetic units, memory units and I/O. Ellor detectors and collection, analog-to-digital, digital-to-analog programming, diagnostics, digital logic families, and the organization of a general purpose computer.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 5 semester hours in electronics technology or computer technology (9/77).

NV-1715-0905
SPECIAL TECHNOLOGY I

Course Number: A-100-0046; L-000-0035.

Location: Submarine Training Center, Pacific, Pearl Harbor, HI.

Length: 4-6 weeks (120-180 hours).

Exhibit Dates: 4/75-6/76.

Objectives: To provide the student working in communications with a thorough practical knowledge of basic electronics.

Instruction: Course covers AC and DC circuits, with vacuum tubes, amplifiers, and an introduction to solid-state devices, also covers structure of digital and analog circuits, also covers structure of digital and analog circuits, such as resistors, capacitors, and transistors. Ohm's law, Kirchoff's laws for DC series, parallel, and series-parallel circuits, DC bridge circuits, voltage dividers, reading schematic diagrams, use of a multimeter AC voltage generation and characteristics of a sine wave, ideal transformers, AC, and AC series and parallel circuits with respect to current, voltage, power, impedance and resonance, characteristics of tube- type diodes and their application to power supplies and amplifiers. After January 1976 course included arithmetic and an overall review of the course.

Credit Recommendation: In the vocational certificate category, 6 semester hours in electronics (9/77).

NV-1715-0906
SPECIAL TECHNOLOGY II

Course Number: A-100-0047, L-000-0034.

Location: Submarine Training Center, Pacific, Pearl Harbor, HI.

Length: 2 weeks (60 hours).

Exhibit Dates: 4/75-6/76.

Objectives: To provide a practical course in basic electronics.

Instruction: Topics covered include tubes, transistors, amplifiers, oscillators, modulation, filters, multimeters, wave guides, power supplies, antennas, and troubleshooting procedures.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics engineering technology (9/77).

NV-1715-0907
SPECIAL TECHNOLOGY III

Course Number: A-100-0048, L-000-0035.

Location: Submarine Training Center, Pacific, Pearl Harbor, HI.

Length: 2 weeks (60 hours).

Exhibit Dates: 2/75-Present.

Objectives: To provide the student working in communications with a thorough practical knowledge of basic radio receiver circuits.

Instruction: Course is structured to be the apex of Special Technology I and II and is designed primarily for technicians working with radio frequencies. Principles of operation of a TRF, superheterodyne, and single-sideband receivers are given, including the RF, IF, and audio amplifiers, detector circuits, oscillator circuits, and mixer circuits. The advantages and disadvantages of a TRF, superheterodyne and single-sideband circuits are explained on schematic diagrams, signal flow, and troubleshooting procedures are given. Students use a VVTM, RF signal generator, and an oscilloscope in troubleshooting a superheterodyne circuit.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics (9/77).

Navy 1-265
COURSE EXHIBITS

NV-1715-0908

MISSILE TEST AND READINESS EQUIPMENT (MTRE) Mk 1 Measurement, Display and Simulation Groups (ADTRE) Mk 3 Advanced Training

(Missile Test and Readiness Equipment (MTRE) Mk 3 Mods 4 and 5 Measurement, Display and Simulation Groups Advanced Training) (Class F1)

Course Number: A-121-0261
Location: Submarine Training Center, Pacific, Pearl Harbor, HI
Length: 2 weeks (60 hours)

Exhibit Dates: 7/76-Present

Objectives: To learn functional operations and to isolate faults and make repairs on special-purpose military equipment.

Instruction: Course teaches the functional operation of special military equipment utilizing circuit and logic diagrams including control, logic, program sequence, sequential operations, alarms and displays, and to isolate faults, troubleshoot, repair, adjust, and calibrate the equipment studied.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in electronics technology (9/77).

NV-1715-0909

POLARIS/POSEIDON RADIO NAVIGATION SET AN/BRN-3 READER ADVANCED TRAINING, CLASS F1

(Course Numbers A-193-0046, F-193-0046, Location Submarine Training Center, Pacific, Pearl Harbor, HI, Submarine School, New London, CT, Length: 2 weeks (60 hours)

Exhibit Dates: 7/75-Present

Objectives: To provide knowledge and skills required for corrective maintenance, fault isolation and repair of a navigation control console.

Instruction: Course offers classroom and laboratory style in advanced theory and corrective maintenance of a radio navigation receiver.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (9/77).

NV-1715-0911

POLARIS/POSEIDON RADIO NAVIGATION SET AN/BRN-3 RECEIVER ADVANCED TRAINING, CLASS F1

(Course Number: A-193-0261
Location: Submarine Training Center, Pacific, Pearl Harbor, HI, Fleet Ballistic Missile Submarine Training Center, Charleston, SC, Submarine School, New London, CT
Length: 2 weeks (60 hours)

Exhibit Dates: 7/75-Present

Objectives: To provide knowledge and skills required for corrective maintenance, fault isolation and repair of a navigation control console.

Instruction: Course offers classroom and laboratory style in advanced theory and corrective maintenance of a radio navigation receiver.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (9/77)

NV-1715-0912

SONAR REEIVING SET AN/BQR-15 MOD 9 ADVANCED MAINTENANCE, CLASS F1

(Sonar Receiving Set AN/BQR-15 Mod 9, Operator and Maintenance)

(Course Number: A-140-0025, F-140-0025, Location Submarine Training Center, Pacific, Pearl Harbor, HI, Submarine School, New London, CT, Submarine School, New London, CT, Length: 2 weeks (67 hours)

Exhibit Dates: 7/75-Present

Objectives: To provide theory of operation and maintenance on the specific military equipment.

Instruction: Course includes the study of the theory of operation of specialized military equipment. Student learns to perform fault isolation, calibration, and adjust the equipment.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (9/77).

NV-1715-0913

LORAN AN/WRN-5 COMBINED MAINTENANCE

(Satellite Navigation System AN/WRN-5 Combined Maintenance)

(Course Number: A-193-0054, Location Submarine Training Center, Pacific, Pearl Harbor, HI, Submarine School, New London, CT
Length: 3 weeks (90 hours)

Exhibit Dates: 7/73-Present

Objectives: To provide the necessary skills and theory to operate, repair, and maintain a satellite receiver/computer.

Instruction: Course discusses at the functional level using analog and digital logic, input/output devices, analog-to-digital conversion, and phase modulation detection. More than 50 percent of the course is devoted to operational description of the equipment.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics technology (9/77).

NV-1715-0914

IEF AN/APX-72 AND AN/UPX-17 COMBINED MAINTENANCE

(IFR Navigation Equipment AN/APX-72 and AN/UPX-17 Combined Maintenance, Class F1)

Course Number: A-102-0229, A-102-0161
Location: Submarine Training Center, Pacific, Pearl Harbor, HI, Submarine School, Groton, CT; Submarine School, New London, CT
Length: 2 weeks (60 hours)

Exhibit Dates: 11/76-Present

Objectives: To provide training in the operation and maintenance of the AN/APX-72 and AN/UPX-17 IFF equipments aboard submarines.

Instruction: Major emphasis of course is on qualitative functional and operational description of the specified equipment concentrating on corrective maintenance.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics technology (9/77)

NV-1715-0915

POLARIS/POSEIDON RADIO NAVIGATION SET AN/BRN-3, DATA PROCESSOR ADVANCED TRAINING, CLASS F1

(Course Number: A-193-0260
Location: Submarine Training Center, Pacific, Pearl Harbor, HI, Fleet Ballistic Missile Submarine Training Center, Charleston, SC, Submarine School, New London, CT
Length: 2 weeks (60 hours)

Exhibit Dates: 7/75-Present

Objectives: Course offers a review of theory and maintenance procedures for radio navigation equipment.

Instruction: Course includes block diagram study of receivers, computers, and peripheral equipment, also includes approximate 25 hours of alignment procedures for receivers, computers, data processors, and peripheral equipment. Remainder of course time is devoted to troubleshooting equipment.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics technology (9/77)

NV-1715-0916

SHIPS INERTIAL NAVIGATION SYSTEM (SINS) MK 2 MOD 6 SELECTRIC TYPETRAYER, CLASS F1

(SINS MK 2 Mod 6 Selectric Typewriter Advanced Maintenance)

(Course Number: A-193-0266
Location: Submarine Training Center, Pacific, Pearl Harbor, HI, Fleet Ballistic Missile Submarine Training Center, Charleston, SC, Submarine School, New London, CT
Length: 2 weeks (60 hours)

Exhibit Dates: 11/75-Present

Objectives: To provide theory of operation of a selectric typewriter and to teach fault isolation, adjustment, and repair of the equipment.

Instruction: Course teaches theory of operation of a selectric typewriter, including controls, clutches, gears, cams, latches, linkages and springs. Students will perform fault isolation and make adjustments and repairs to the equipment.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electromechanical technology (9/77)
SHIPS INERTIAL NAVIGATION SYSTEM

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in electronics technology (9/77).

NV-1715-0924

VERDAN COMPUTER THEORY AND MAINTENANCE I

(Verdan Theory and Maintenance, Class A-193)

Course Number: A-193-0291
Location: Submarine Training Center, Pacific, Pearl Harbor, HI
Length: 2 weeks (60 hours)
Exhibit Dates: 1/75-Present
Objectives: To teach the theory of operation of a special-purpose digital computer and performance of fault isolation and repair on the equipment.

Instruction: Course covers theory of operation of the I/O-section of a digital computer including input and output logic and coding, I/O diagnostic tests, control panel, switches and diagrams, keyboard, displays, and types of failure bufer circuitry, and teaches performance of fault isolation and equipment repair. As conducted after 10/77 course includes functional description and operation of tape reader, including amplifiers, solenoid drivers, photodisector sensors and control signals.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics technology (9/77).

NV-1715-0925

RADIO NAVIGATION SET AN/BRN-3/3A COMPUTER ADVANCED TRAINING

(AN/BRN-3 Computer, Advanced Training)

Course Number: A-193-0271
Location: Submarine Training Center, Pacific, Pearl Harbor, HI
Length: 2 weeks (60 hours)
Exhibit Dates: 1/75-Present
Objectives: To present the theory of operation of a digital data processing computer with tape reader/punch and to perform fault isolation, corrective maintenance, and repairs on the equipment.

Instruction: Course presents a study of digital data processing computer using block, logic, and schematic diagrams of the control and state counters, memory access, memory selection, and registers for shift, hold, add, increment, decrement, counting, merge, and extract operations. Interface circuitry for the tape reader and tape punch, and perform fault isolation, mechanical adjustment, and repairs on the equipment.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics technology (9/77).

NV-1715-0926

NAVAL DATA AUTOMATED COMPUTER

(NAVDAC: Advanced Training)

Course Number: A-193-0282
Location: Submarine Training Center, Pacific, Pearl Harbor, HI
Length: 4 weeks (120 hours)
Exhibit Dates: 1/75-Present
Objectives: To teach the theory of operation and performance of fault isolation, and to teach repair on specialized military equipment.

Instruction: Course includes study of logic circuits and elements as they relate to timing, storage, control, input/output, arithmetic and power supplies for specific military equipment. Students will learn to per-
1-268 COURSE EXHIBITS

form fault analysis and make repairs on the equipment.

Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics (9/77).

NV-1715-0927

SUBMARINE COMMUNICATION APPLICATION AND THEORY MODULE 1 (SCATMOD 1)

Course Number: A-100-0035
Location: Submarine School, New London, CT; Submarine Training Center, Pacific, Pearl Harbor, HI
Length: 4 weeks (120 hours)
Exhibit Dates: 3/75-Present
Objective: To present the theory of RC shaping circuits and applications, CW keying and applications, CW transmitters, modulators, AM transmitters, frequency shift keying, single sideband, transmission lines, antennas, and wave propagation.
Credit Recommendation: In the vocational certificate category, 4 semester hours in electronics (9/77).

NV-1715-0930

SUBMARINE COMMUNICATION APPLICATION AND THEORY MODULE 4 (SCATMOD 4)

Course Number: A-100-0051
Location: Submarine School, New London, CT; Submarine Training Center, Pacific, Pearl Harbor, HI
Length: 2 weeks (60 hours)
Exhibit Dates: 3/75-Present
Objective: To present basic arithmetic and algebra, including linear equations, and to introduce electricity and the study of DC circuits.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electronics (9/77).

NV-1715-0931

SUBMARINE COMMUNICATION APPLICATION AND THEORY MODULE 5 (SCATMOD 5)

Course Number: A-100-0052
Location: Submarine School, New London, CT; Submarine Training Center, Pacific, Pearl Harbor, HI
Length: 2 weeks (60 hours)
Exhibit Dates: 3/75-Present
Objective: To present a study of the behavior of transistors, receivers, including CW and SSB, and to teach students to perform troubleshooting on the equipment, with the use of oscilloscopes and signal generators.
Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics (9/77).

NV-1715-0932

SUBMARINE COMMUNICATION APPLICATION AND THEORY MODULE 6 (SCATMOD 6)

Course Number: A-100-0053
Location: Submarine School, New London, CT; Submarine Training Center, Pacific, Pearl Harbor, HI
Length: 3 weeks (90 hours)
Exhibit Dates: 11/75-Present
Objective: To present a study of military procedures and technical manual layouts and the use of hand tools and soldering equipment, and to perform adjustments, alignment, and calibration procedures on equipment.
Instruction: The course presents a study of military procedures and technical manual layouts and the use of hand tools and soldering iron to develop skills in using hand tools and soldering equipment, and to perform adjustments, alignment, and calibration procedures on equipment.
Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics (9/77).

NV-1715-0933

AN/ALR-5 COUNTERMEASURES RECEIVING SET INTERMEDIATE MAINTENANCE

Course Number: C-102-0393
Location: Naval Air Maintenance Training Detachment, NAS Miramar, CA; Naval Air Maintenance Training Detachment, NAS Oceana, VA; NAS Lemoore, CA; Naval Air Maintenance Training Detachment, NAS Cecil Field, FL; Naval Air Maintenance Training Detachment, NAS Whidbey Island, WA
Length: 5 weeks (152 hours)
Exhibit Dates: 6/74-Present
Objective: To provide instruction in the maintenance of the specific countermeasures receiving set consisting of a pulse analyzer, an amplifier detector, azimuth indicator, and peripheral equipment.
Instruction: The course provides instruction in the maintenance of the specific countermeasures receiving set consisting of a pulse analyzer, an amplifier detector, azimuth indicator, and peripheral equipment.
Credit Recommendation: In the vocational certificate category, 3 semester hours in electronics laboratory (2/78), in the lower-division baccalaureate/associate degree category, 2 semester hours in electronics laboratory (2/78).

NV-1715-0934

ELECTRONIC HOVERING AND DEPTH CONTROL COMBINER MAINTENANCE

(Electronic Hovering and Missle Compensation)

Course Number: A-623-0041
Location: Fleet Ballistic Missile Submarine Training Center, Charleston, SC; Submarine School, Groton, New London, CT
Length: 2 weeks (63 hours)
Exhibit Dates: 2/75-Present
Objective: To train technicians to operate, align, repair, and perform preventive maintenance on equipment to stabilize a submarine during missile launch.
Instruction: The course provides instruction in the maintenance of electronic circuits and equipment, including oscillators, pulse and wave shaping, RF powers amplifiers, Clipping and Transistors, modulators, modulation, AM transmitters, TFSK, single sideband, transmission lines, antennas and waveguides.
Credit Recommendation: No credit because of the limited specialized nature of the course (9/77).

NV-1717-0001

AVIATION MAINTENANCE

Course Number: E-4D-10.
NV-1717-0002
RA-5C PLANE CAPTAINS ORGANIZATIONAL MAINTENANCE
Course Number: Not available.
Location: Air Maintenance Training Detachment, Albany, NY. Air Maintenance Training Detachment, San Antonio, TX. Length: 1 week (40 hours)
Exhibit Dates: 1/65-2/73
Objectives: To train noncommissioned officers in organizational maintenance activities.
Instruction: Lectures and practical exercises in aircraft structural and hydraulic, electrical, power plant, environmental, and fuel systems maintenance, corrosion control, and flight and inlet/duct airflow control systems and maintenance.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hours in maintenance management (2/74).

NV-1717-0003
NAVAL AVIATION MAINTENANCE/ MATERIAL MANAGEMENT, CLASS B
Course Number: Not available.
Location: Naval Air Technical Training Center, Norfolk, VA. Length: 2 weeks (72 hours)
Exhibit Dates: 6/74-10/74
Objectives: To train noncommissioned officers in the study of weapons materiel management and processes.
Instruction: Lectures and practical exercises in the study of weapons materiel management and processes.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in maintenance management (2/74).

NV-1717-0004
WARFARINE ORGANIZATIONAL MAINTENANCE
Course Number: C-AOC-0901
Location: Air Maintenance Training Detachment, Lemoore, CA. Length: 2 weeks (60 hours)
Exhibit Dates: 2/70-2/71
Objectives: To train noncommissioned officers in the operational and mission capabilities of the RA-5C weapon system.
Instruction: Lectures and practical exercises in the operational and mission capabilities of the RA-5C weapon system.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (7/74).

NV-1717-0005
AVIATION MAINTENANCE CONTROL - ADMINISTRATION
Course Number: C-000-3204
Location: Air Maintenance Training Detachment, Lemoore, CA. Length: 3 weeks (120 hours)
Exhibit Dates: 2/70-2/71
Objectives: To train noncommissioned officers in the operational and mission capabilities of the RA-5C weapon system.
Instruction: Lectures and practical exercises in the operational and mission capabilities of the RA-5C weapon system.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (7/74).

NV-1717-0006
PROSPECTIVE ENGINEER OFFICER
Course Number: K-4116-465
Location: Fleet Training Center, San Diego, CA. Length: 8 weeks (240 hours).
Exhibit Dates: 2/73-2/74
Objectives: To train junior officers as prospective engineering and damage control officers on steam- and diesel-drive ships.
Instruction: Lectures and practical exercises in the study of engineering, damage control, and nuclear, biological, and chemical warfare defense.
Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours as an elective in engineering (7/74).

NV-1717-0007
WAREHOUSE OPERATIONS MANAGEMENT
Course Number: A-8C-0001
Location: Naval Supply Center, Oakland, CA. Length: 2 weeks (64 hours)
Exhibit Dates: 2/73-2/74
Objectives: To train noncommissioned officers in the study of warehouse management and processes.
Instruction: Lectures and practical exercises in the study of warehouse management and processes.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (7/74).

NV-1717-0008
FL. Air Maintenance Training Detachment, Lemoore, CA. Length: 2 weeks (80 hours)
Exhibit Dates: 2/71-2/72
Objectives: To train enlisted personnel in the administrative practices and procedures of aviation maintenance.
Instruction: Lectures and practical exercises in the study of aviation maintenance and procedures.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (7/74).
1-270  COURSE EXHIBITS

quality control, maintenance data collection system, and maintenance equipment

Credit Recommendation: In the vocational certificate category, 2 semester hours in maintenance management (7/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in maintenance management (7/74); in the upper-division baccalaureate category, 2 semester hours in maintenance management (12/68).

NV-1717-0012 PARACHUTE RIGGER SCHOOL, CLASS B
Course Number: None.
Location: Air Technical Training Unit, Lakehurst, NJ.
Length: 12 weeks (496 hours).
Exhibit Dates: 1/66-12/68.
Objectives: To provide parachute riggers with administrative, theoretical, and practical backgrounds for operating squadrons.
Instruction: Lectures and practical exercises in supervision and management, aircraft maintenance skills, sewing machine adjustments and repairs, liquid oxygen and oxygen regulators, and pressure suits and components.
Credit Recommendation: In the vocational certificate category, 2 semester hours in maintenance management, 1 in sewing and sewing machine maintenance, 5 in liquid oxygen regulators and 2 in pressure suits (5/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in maintenance management (5/74), in the upper-division baccalaureate category, 2 semester hours in maintenance management (12/68).

NV-1717-0013 LEADERSHIP AND MANAGEMENT FOR OFFICERS (LMT)
(Leadership and Management for Petty Officers (LMT)).
Course Number: A-7C-00018, A-500-0031.
Location: Various Naval Training Centers, USA.
Length: 2 weeks (80 hours).
Exhibit Dates: 4/75-Present.
Objectives: To provide officers and petty officers with the latest and most pertinent information, leading methods, management techniques, and skills for applying the Navy's Human Goals Plan.
Instruction: Instruction covers responsibility, accountability, and authority; management and motivation; organizational development; interpersonal communications; problem-solving applications; crisis management; and human resources management information.
Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (3/76).

NV-1720-0001 SUBMARINE TENDER RADIOLOGICAL CONTROLS
Course Number: F-000-034.
Location: Submarine School, Groton, CT.
Length: 12 weeks (360 hours).
Exhibit Dates: 12/67-Present.
Objectives: To train enlisted personnel in the basic theory of radiological controls as applied to nuclear support ships and shore facilities.
Instruction: Lectures and practical exercises in basic theory of radiological controls as applied to nuclear support ships and shore facilities Course includes basic mathematics, slide rule, use, radiological controls, and testing of samples for radiation.
Credit Recommendation: In the vocational certificate category, 1 semester hour in laboratory procedures (6/74).

NV-1721-0001 REMOTE SENSOR SYSTEM FOR PHYSICAL SECURITY, CLASS C
Course Number: A-198-0030.
Location: Service School Command.
Great Lakes, IL.
Length: 4 weeks (120 hours).
Exhibit Dates: 8/77-Present.
Objectives: To train selected students to maintain the remote sensor physical security systems, to measure and control the system, and to perform physical security systems tests.
Instruction: Topics include troubleshooting and maintenance of remote sensing equipment such as static, magnetic, and sonic, and keeping equipment operating properly under all conditions.
Credit Recommendation: In the vocational certificate category, 2 semester hours in security systems maintenance (9/77).

NV-1721-0002 NOISE MEASUREMENT AND REDUCTION
Course Number: F-210-0014.
Location: Service School Command.
Great Lakes, IL.
Length: 2 weeks (60 hours).
Exhibit Dates: 7/73-Present.
Objectives: To train enlisted personnel to use sound measurement equipment to isolate problems in noise-critical machinery, to reduce submarine noise, and to perform in-place dynamic balancing.
Instruction: Lectures and practical exercises in the use of sound measurement equipment, the isolation of noise in noise-critical machinery, and the reduction of noise in noise-critical machinery.
Credit Recommendation: In the vocational certificate category, 1 semester hour in sound and vibration (5/74), in the lower-division baccalaureate/associate degree category, 1 semester hour in mechanical technology laboratory (sound and vibration) or as an elective in mechanical technology (sound and vibration) (5/74).

NV-1721-0003 NOISE AND VIBRATION MEASUREMENT
Course Number: L-210-015.
Location: Fleet Submarine Training Facility, Pearl Harbor, HI.
Length: 2 weeks (60 hours).
Exhibit Dates: 11/72-Present.
Objectives: To train enlisted personnel to operate sound- and vibration-monitoring equipment.
Instruction: Lectures and practical exercises in the measurement of sound- and vibration-monitoring equipment, including sound and vibration theory, general radio equipment calibration, vibration-monitoring equipment calibration, sound level meters, and data analysis, in-place balance theory, vibration isolation, data acquisition, and equipment maintenance.
Credit Recommendation: In the vocational certificate category, 2 semester hours in sound and vibration (5/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in mechanical technology laboratory (sound and vibration) or as an elective in mechanical technology (sound and vibration) (5/75).

NV-1721-0004 INSTRUMENTS, CLASS A
Course Number: A-670-0010.
Location: Service School Command.
Great Lakes, IL.
Length: 17 weeks (546 hours).
Exhibit Dates: 11/70-Present.
Objectives: To train enlisted personnel to repair manual typewriters and measuring instruments.
Instruction: Lectures and practical exercises in manual typewriter troubleshooting and repair, high- and low-pressure pneumatic and hydraulic measuring instruments, and repair and calibration of tachometers, torque, and displacement measuring instruments, temperature measuring instruments, and use of remote sensors.
Credit Recommendation: In the vocational certificate category, 5 semester hours in typewriter repair, 6 in instrument repair, 6 in mechanical technology (5/74), in the lower-division baccalaureate/associate degree category, 7 semester hours in mechanical technology (5/74).

NV-1721-0005 WATCH AND CLOCK REPAIR, CLASS C (INSTRUMENTEN—Watch Repair)
Course Number: A-670-0011.
Location: Service School Command.
Great Lakes, IL.
Length: 10 weeks (480 hours).
Exhibit Dates: 6/70-Present.
Objectives: To train enlisted personnel to perform as watch and clock repairmen.
Instruction: Lectures and practical exercises in the lubrication, cleaning, disassembly, reassembly, and testing of clocks, watches, and indicators, including use of watchmaker's tools (e.g., tool, drill and plug, balance staff, jewel setting, winding stem and clock spring), and repairing of watches.
Credit Recommendation: In the vocational certificate category, 15 semester hours in horology or watch and clock making (6/74), in the lower-division baccalaureate/associate degree category, 8 semester hours in horology or watch and clock making (6/74), in the lower-division baccalaureate/associate degree category, 7 semester hours in horology or watch and clock making (6/74).

NV-1721-0006 A-7A/B ATTITUDE HEADING AND REFERENCE SYSTEM INTERMEDIATE MAINTENANCE
Course Number: Not Available.
Location: Air Maintenance Training Detachment, Lemoore, CA; Air Maintenance Training Detachment, Cecil Field, FL.
Length: 2 weeks (80 hours).
Exhibit Dates: 5/71-Present.
Objectives: To train maintenance personnel in the operation and maintenance of the A-7A/B attitude, heading, and reference system.
Instruction: Lectures and practical exercises on the A-7A/B attitude, heading, and reference system, including introduction to the system and review of gyroscopic and transistor fundamentals, detailed theory of the displacement gyro, amplifier power supply, compass adapter compensator, computer controller and switching rate gyro, attitude indicator coupling, attitude indicator indicator, and intermediate maintenance and test procedures.
Credit Recommendation: In the vocational certificate category, 3 semester hours in instrumentation maintenance (6/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in instrument maintenance (6/74).

NV-1721-0007

OPTICALMEN, CLASS A
Course Number: A-670-0018.
Location: Service School Command, Great Lakes, IL.
Length: 17 weeks (540 hours).
Exhibit Dates: 1/6-8/74.
Objectives: To train rated personnel as opticalmen in the duties of opticalmen of the fleet or in shore activities.

Instruction: Lectures and practical exercises in the duties of opticalmen, including basic mathematics, hand tools and measuring instruments, drills and drilling machines, grinders, basic layout operation, basic milling machine operation, maintenance and material management, fundamentals of optics, optical instrument components, optical instruments, lens cementing and painting, primary telescopes, and navigational instruments.

Credit Recommendation: In the vocational certificate category, 3 semester hours in instrument repair (6/75), in the lower-division baccalaureate/associate degree category, 2 semester hours in instrument repair (6/75), in the lower-division baccalaureate/associate degree category, 3 semester hours in instrument repair (6/75), in the lower-division baccalaureate/associate degree category, 8 semester hours in instrumentation, electrical laboratory, and/or electronic laboratory, and/or 4 semester hours in weather equipment maintenance or instrument repair (6/75), Group B. Credit Recommendation: Group A: In the vocational certificate category, 12 semester hours in weather equipment maintenance or instrument repair (6/75), in the lower-division baccalaureate/associate degree category, 8 semester hours in instrumentation, electrical laboratory, and/or electronic laboratory, and/or 4 semester hours in weather equipment maintenance or instrument repair (6/75), Group B. Credit Recommendation: Group A: In the vocational certificate category, 12 semester hours in weather equipment maintenance or instrument repair (6/75), in the lower-division baccalaureate/associate degree category, 8 semester hours in instrumentation, electrical laboratory, and/or electronic laboratory, and/or 4 semester hours in weather equipment maintenance or instrument repair (6/75), in the lower-division baccalaureate/associate degree category, 5 semester hours in instrumentation, electrical laboratory, and/or electronic laboratory (6/75).

NV-1721-0008

GYROCOMPASS TECHNICIAN MECHANICAL, CLASS C1
Course Number: All Versions. A-670-0014
Version 2: A-670-014
Location: Service School Command, Great Lakes, IL.
Length: Version 1: 5 weeks (167 hours)
Version 2: 10 weeks (400 hours).
Exhibit Dates: Version 1: 9/71-Present
Objectives: To train interior communications technicians to operate, maintain, and repair Sperry and Arma mechanical gyrocompasses.

Instruction: Lectures and practical exercises in the operation, maintenance, and repair of Sperry and Arma gyrocompasses, including principles of gyrocompasses, operation procedures, disassembly and assembly procedures, and inspection, overhaul, and repair procedures.

Credit Recommendation: Version 1: In the vocational certificate category, 3 semester hours in industrial-mechanical technology (9/71). Version 2: In the vocational certificate category, 3 semester hours as an elective in industrial or mechanical technology (8/74).

NV-1721-0009

METEOROLOGICAL EQUIPMENT, CLASS C/ENLISTED
Course Number: C-198-2010
Location: Air Technical Training Center, Lakelhurst, NJ.
Length: 14 weeks (176-688 hours).
Exhibit Dates: 4/74-Present.
Objectives: To train electronic technicians to operate and maintain meteorological equipment in use within the Naval Weather Service Command and the Marine Corps Weather Service Division.

Instruction: Course consists of the following nine phases: I—Radarsonde Receptor Equipment, II—Weather Satellite Equipment, III—Transmitting Equipment, IV—VVR Converter, V—Cloud Height Equipment, VI—Surface Observational Equipment, VII—Weather Radar Equipment, VIII— Radar-Telephone Transmission Systems, IX—Ravin Sounder Equipment. Students will attend all or part of the course, depending on their ultimate assignment. Group A: Students will complete all nine phases; Group B: Students will complete phases I and II; and Group C students will complete phases III, IV, and V.

Credit Recommendation: Group A: In the vocational certificate category, 12 semester hours in weather equipment maintenance or instrument repair (6/75), in the lower-division baccalaureate/associate degree category, 8 semester hours in instrumentation, electrical laboratory, and/or electronic laboratory, and/or 4 semester hours in weather equipment maintenance or instrument repair (6/75), Group B: In the vocational certificate category, 4 semester hours in weather equipment maintenance or instrument repair (6/75), and 4 semester hours in instrumentation, electrical laboratory, and/or electronic laboratory (6/75).

NV-1722-0001

AVIATION BOATSWAIN'S MATE G

GASOLINE SCHOOL, CLASS A
Course Number: Not available
Location: Naval Aviation Middle Technical School, Philadelphia, PA.
Length: 9 weeks (350 hours).
Objectives: To qualify enlisted personnel as aviation boatswain's mates (gasoline handling).

Instruction: Lectures and practical exercises in aircraft carrier air department organization, hydraulics principles, spare parts, rescue, aircraft fire fighting and damage control fire fighting, aviation fueling, firefighting, and hangar operations, fuel and oil storage and transfer, maintenance, and fire fighting.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/74).

NV-1722-0002

NAVY MAINTENANCE TRAINING

GASOLINE SCHOOL, CLASS A
Course Number: G-060-6305
Location: Amphibious School, Norfolk, VA.
Length: 2-3 weeks (68-105 hours).
Exhibit Dates: 7/68-Present.
Objectives: To train personnel to perform the duties of a boatswain's mate.

Instruction: Lectures and practical exercises on duties of a boatswain's mate, including honors and ceremonies, marineship seamanship, ground tackle and mooring, painting and equipment, damage control, gunnery, and rules of the road.

Credit Recommendation: In the vocational certificate category, 2 semester hours in seamanship (5/74).

NV-1722-0003

COASTAL PATROL CRAFT TRAINING

Course Number: H-00-1800; H-000-1800
Location: Inshore Operations Training Center, Mare Island, CA.
Length: 9 weeks (487-561 hours).
Exhibit Dates: 7/69-Present.
Objectives: To train personnel for riverine/coastal warfare operations.

Instruction: Lectures and practical exercises on riverine/coastal warfare operations, including team training for coastal patrol craft crews in boat operations, tactics, navigation, seamanship, gunnery, and communications, specialized training in small arms, engineering, hull, damage control and salvage, survival-in-water training, and counterinsurgency and survival, and language training.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/74).

NV-1722-0004

FIN STABILIZER SYSTEM (SPERRY AND LEDGWOOD CONTROLS)

MAINTENANCE, CLASS C
Course Number: A-670-0020
Location: Service School Command, Great Lakes, IL.
Length: 6 weeks (180 hours).
Exhibit Dates: 4/77-10/79.
Objectives: To train personnel to perform the duties of a boatswain's mate.

Instruction: Lectures and practical exercises in the operation and maintenance of the fin stabilizer system, including servoa- amplifier systems, hydraulic systems, and system troubleshooting procedures.

Credit Recommendation: In the vocational certificate category, 3 semester hours in electromechanical and hydraulic systems (9/77).
COURSE EXHIBITS

NV-1722-0005

Basic Boatswain's Mate (General)

Course Number: J-660-0622, J-660-6221
Location: Fleet Training Center, Newport, RI
Length: 3 weeks (105 hours)
Exhibit Dates: 8/71-Present

Objectives: To provide nonrated naval personnel with the skills of the general boatswain's mate rating

Instruction: Lectures and practical exercises on the responsibilities of the general boatswain's mate rating, including: service in the ward, boat services, sound signals, man handling, painting and equipment, and the responsibilities of the deck for navigation, weather, and operations.

Credit Recommendation: Not recommended because of the limited technical nature of the course (7/74).

NV-1722-0009

Swift Boat Crew Training

Course Number: H-000-5324, H-000-5324
Location: Amphibious School, Coronado, CA
Length: 9 weeks (260 hours)
Exhibit Dates: 11/66-Present

Objectives: To provide personnel for duty as Swift boat crewmen

Instruction: Lectures and practical exercises in navigation, ship handling, and crew operations.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/74).

NV-1722-0006

Destroyer Officer

Course Number: A-00-0107
Location: Naval Destroyer School, Newport, RI
Length: 26 weeks (780 hours)
Exhibit Dates: 6/66-Present

Objectives: To train officers in the operations, weapon systems, and engineering departments aboard naval destroyers

Instruction: Lectures in ship handling and operations, weapons systems, anti-submarine warfare, fuel oil system, electrical systems, the study of hull systems, and the study of damage control

Credit Recommendation: In the vocational certificate category, 5 semester hours in industrial technology (7/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in machinery repair (5/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in hand tools and measuring instruments, principles and applications of blueprint reading, mathematics, portable equipment, machine shop procedures, benchwork, and diagnostics, repair, assembly, and testing, basic intermediate and advanced operations on drilling, shaping, turning, milling, grinding, sawing, and engraving machines, the fabrication of parts and repair of valves, and maintenance management.

Credit Recommendation: In the vocational certificate category, 6 semester hours in machinery repair (5/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in machinery repair (5/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in machine tools and hand tools and measuring instruments, principles and applications of blueprint reading, mathematics, portable equipment, machine shop procedures, bench work, and diagnostics, repair, assembly, and testing, basic intermediate and advanced operations on drilling, shaping, turning, milling, grinding, sawing, and engraving machines, the fabrication of parts and repair of valves, and maintenance management.

Credit Recommendation: In the vocational certificate category, 6 semester hours in machinery repair (5/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in machinery repair (5/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in machine tools and hand tools and measuring instruments, principles and applications of blueprint reading, mathematics, portable equipment, machine shop procedures, bench work, and diagnostics, repair, assembly, and testing, basic intermediate and advanced operations on drilling, shaping, turning, milling, grinding, sawing, and engraving machines, the fabrication of parts and repair of valves, and maintenance management.

Credit Recommendation: In the vocational certificate category, 6 semester hours in machinery repair (5/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in machinery repair (5/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in machine tools and hand tools and measuring instruments, principles and applications of blueprint reading, mathematics, portable equipment, machine shop procedures, bench work, and diagnostics, repair, assembly, and testing, basic intermediate and advanced operations on drilling, shaping, turning, milling, grinding, sawing, and engraving machines, the fabrication of parts and repair of valves, and maintenance management.

Credit Recommendation: In the vocational certificate category, 6 semester hours in machinery repair (5/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in machinery repair (5/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in machine tools and hand tools and measuring instruments, principles and applications of blueprint reading, mathematics, portable equipment, machine shop procedures, bench work, and diagnostics, repair, assembly, and testing, basic intermediate and advanced operations on drilling, shaping, turning, milling, grinding, sawing, and engraving machines, the fabrication of parts and repair of valves, and maintenance management.

Credit Recommendation: In the vocational certificate category, 6 semester hours in machinery repair (5/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in machinery repair (5/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in machine tools and hand tools and measuring instruments, principles and applications of blueprint reading, mathematics, portable equipment, machine shop procedures, bench work, and diagnostics, repair, assembly, and testing, basic intermediate and advanced operations on drilling, shaping, turning, milling, grinding, sawing, and engraving machines, the fabrication of parts and repair of valves, and maintenance management.

Credit Recommendation: In the vocational certificate category, 6 semester hours in machinery repair (5/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in machinery repair (5/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in machine tools and hand tools and measuring instruments, principles and applications of blueprint reading, mathematics, portable equipment, machine shop procedures, bench work, and diagnostics, repair, assembly, and testing, basic intermediate and advanced operations on drilling, shaping, turning, milling, grinding, sawing, and engraving machines, the fabrication of parts and repair of valves, and maintenance management.

Credit Recommendation: In the vocational certificate category, 6 semester hours in machinery repair (5/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in machinery repair (5/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in machine tools and hand tools and measuring instruments, principles and applications of blueprint reading, mathematics, portable equipment, machine shop procedures, bench work, and diagnostics, repair, assembly, and testing, basic intermediate and advanced operations on drilling, shaping, turning, milling, grinding, sawing, and engraving machines, the fabrication of parts and repair of valves, and maintenance management.
NV-1723-0005
SHIPFITTERS HULL MAINTENANCE TECHNICIAN, CLASS A, PHASE 2
Course Number: A-700-010
Location: Training Center, San Diego, CA
Length: 12 weeks (353 hours)
Exhibit Dates: 1/72-Present
Objectives: To train enlisted personnel in shipfitting and hull maintenance
Instructor: Lectures and practical exercises in shipfitting and hull maintenance, including basic materials, base metalurgy, welding, brazing, arc welding, manual welding, oxyacetylene welding, and steel erection
Credit Recommendation: In the vocational certificate category, 9 semester hours in construction and advanced steelwork (7/76)

NV-1723-0009
STEELWORKERS, CLASS A
Course Number: A-711-0015
Location: Construction Training Center, Gulfport, MS; Construction Training Center, Port Hueneme, CA
Length: Version 1: 9 weeks (265 hours) Version 2: 12 weeks (360-361 hours)
Exhibit Dates: Version 1: 7/75-Present
Version 2: 12/63-6/75
Objectives: To train enlisted personnel to be steelworkers
Instruction: Lectures and practical exercises in erection of steel structures, including basic materials, blueprint reading, sketching, metal layout, metal working, and welding. Topics also include sheet erection and rigging.
Credit Recommendation: In the vocational certificate category, 6, 7 semester hours in construction (5/74)

NV-1723-0006
SHIPFITTERS, CLASS A (METALSMITH)
Course Number: Not available
Location: Training Center, San Diego, CA
Length: 12 weeks (360 hours)
Exhibit Dates: 5/63-12/68
Objectives: To train enlisted personnel to be metalsmiths
Instruction: Lectures and practical exercises in metalsmithing, including shipfitting responsibilities, mathematics, blueprint reading and symbols, tools and materials, basic metalurgy, welding, brazing and soldering, and basic metalsmithing.
Credit Recommendation: In the vocational certificate category, 8 semester hours in metalsmithing (5/74)

NV-1723-0007
STEELWORKER/SHEET METAL, CLASS C
(SW"C" Sheetmetal)
Course Number: A-703-0010
Location: Construction Training Center, Gulfport, MS; Construction Training Center, Port Hueneme, CA; Construction Battalion Center, Davisville, RI.
Length: 18 weeks (360-361 hours)
Exhibit Dates: 1/72-Present
Objectives: To train petty officers to perform as sheet metal technicians.
Instruction: Lectures and practical exercises in sheet metal work and blueprint reading and estimating, including mathematics, blueprint reading, plumbing, and estimating, sheet metal pattern layout; sheet metal tools and equipment; soldering; sheet metal fabrication and installation; materials requisitioning; pattern layout, and duties and responsibilities of the supervisor.
Credit Recommendation: In the vocational certificate category, 4 semester hours in sheet metal (5/74).

NV-1723-0008
STEELWORKER, CLASS J (SW"J")
Course Number: A-711-0018
Location: Construction Training Center, Port Hueneme, CA; Construction Training Center, Gulfport, MS; Construction School, Davisville, RI.
Length: 14-15 weeks (420-454 hours)
Exhibit Dates: 9/63-Present
Objectives: To train personnel to perform as steelworkers with construction battalions
Instruction: Lectures and practical exercises in the techniques of control and supervision and the materials and tools used in the planning and erection of steel structures, including foremanship, applied mathematics, metal working, oxyacetylene welding, metal fabrication, and steel erection.
Credit Recommendation: In the vocational certificate category, 9 semester hours in construction and advanced steelwork (7/76)

NV-1723-00001
MACHINERY REPAIRMEN, CLASS B
Course Number: A-702-0020
Location: Physical Training Command, San Diego, CA
Length: Version 1: 17 weeks (510 hours) Version 2: 18 weeks (600 hours)
Objectives: To train personnel to serve as machinery repairmen.
Instruction: Lectures and practical exercises in machinery repair. Course includes shop mathematics, interpretation of drawings, manufacture of machine tool components, tooling, the safe handling of radioactive by-products, and the safe handling of radioactive by-products, including metals and materials, and the fundamentals of machine tool maintenance and materials management.
Credit Recommendation: In the vocational certificate category, 6 semester hours in machine shop (5/74), in the lower-division baccalaureate/associate degree category, 4 semester hours in physical metallurgy, 4 in heat treating (5/74), in the lower-division baccalaureate/associate degree category, 4 semester hours in physical metallurgy, 4 in heat treating (5/74).

NV-1724-0001
HEAT TREATMENT OF METALS, CLASS C
Course Number: A-702-0021
Location: Service Schools Command, San Diego, CA
Length: 7 weeks (234 hours)
Exhibit Dates: 10/64-Present
Objectives: To train personnel as heat treatment specialists.
Instruction: Lectures and practical exercises in the heat treatment of metals, including the properties of metals, thermal alloy systems, identification and classification of metals, corrosion, and surface treatment, and maintenance and material management.
Credit Recommendation: In the vocational certificate category, 8 semester hours in physical metallurgy, 4 in heat treating (5/74), in the lower-division baccalaureate/associate degree category, 4 semester hours in physical metallurgy, 4 in heat treating (5/74).

NV-1724-0002
NONDESTRUCTIVE TESTING OF METALS
Course Number: A-701-017
Location: Welding School, Class C, San Diego, CA
Length: 14-19 weeks (420-665 hours)
Exhibit Dates: 3/65-Present
Objectives: To train personnel in the nondestructive testing of metals.
Instruction: Lectures and practical exercises in Atomic Energy Commission rules and regulations pertaining to radiography and the safe handling of radioactive by-products, and the fundamentals of nondestructive testing, including NDCT-related inspections and mathematics, fundamentals of radiation as applied to industrial radiography, radiation control, and measurement, magnetic particle and liquid penetrant testing, ultrasonic testing, and Radiographic inspection.
Credit Recommendation: In the vocational certificate category, credit in metals testing on the basis of institutional evaluation (5/74), in the lower-division baccalaureate/associate degree category, credit in metals testing on the basis of institutional evaluation (5/74), in the upper-division baccalaureate category, credit in metals testing on the basis of institutional evaluation (5/74).

NV-1723-0012
MOLDERS, CLASS B
Course Number: Not available
Location: Molders Class School, San Diego, CA
Length: 12 weeks (1350 hours)
Exhibit Dates: 2/65-Present
Objectives: To train enlisted personnel to manage a foundry.
Instruction: Lectures and practical exercises in the management of a foundry. Topics include a review of mechanical drawings, mathematics, and foundry calculations; fundamentals of foundry casting, metalworking equipment, leadership, metallurgy of metal casting, identification and testing of metal casting, nonferrous alloy casting technology, and foundry management.
Credit Recommendation: In the vocational certificate category, 10 semester hours in foundry practice and management (6/74), in the lower-division baccalaureate/associate degree category, 8 semester hours in foundry practice and management (7/74).
COURSE EXHIBITS

NV-1726-0001
SHIP SERVICEMAN/CLASS C/SHIPBOARD BARBER
Course Number: A 840-0012, A 840-0013.
Location: Norfolk, Va.
Length: 6 weeks (40 hours)
Exhibit Dates: 4/69-Present
Objectives: To train personnel to perform as barbers.
Instruction: Lectures and practical exercises in the organization and management of barbershop operations, including use and maintenance of barbershop equipment, hair cutting, barber tools and equipment, managemen and operation, skin diseases and prevention, honing and stropping, and neck shaving.
Credit Recommendation: In the vocational certificate category, 3 semester hours in barbering (6/74)

NV-1728-8001
COUNTERINSURGENCY TRAINING
Course Number: G-00-6250, G-000-6250
Location: Norfolk, Va.
Length: 3 weeks (205 hours)
Exhibit Dates: 6/68-Present
Objectives: To train and prepare naval officers and enlisted personnel for duty in countries subject to insurgency warfare. The course presents a geopolitical orientation to a country under wartime conditions, and prepares the individual to survive hostile conditions.
Instruction: Fundamentals of insurgency warfare, counterinsurgency, weapons, technology, survival, evacuation, resistance, and escape.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (11/72)

NV-1728-0002
NAVAL INTERNAL SECURITY FORCE TRAINING
Course Number: H-00-5240, H-000-5240
Location: Naval Amphibious School, Coronado, San Diego, CA.
Length: 4 weeks (97 hours)
Exhibit Dates: 6/67-Present
Objectives: To provide training in internal security and counterinsurgency operations, and to provide a basic geopolitical orientation to a specific foreign country.
Instruction: History of insurgent movements, fundamentals of counterinsurgency; communism; ideology, organization and goals, general principles of guerrilla and counterinsurgency operations, naval tactics and techniques which have application in combating insurgent movements, general principles of psychological operations and civilian affairs, area and cultural orientation, intelligence and counterintelligence orientation, voice communication procedure, and internal security. Instruction further acquaints student with basic techniques of personal and physical security and qualifies him in areas of physical fitness, marksmanship, and communications skills.
Credit Recommendation: In the vocational certificate category, 3 semester hours in criminal justice (11/73)

NV-1728-0003
COUNTERINSURGENCY PRE-DEPLOYMENT
Course Number: H-00-5221, H-000-5221.
Location: Naval Amphibious School, Coronado, San Diego, CA.
Length: 13 weeks (508 hours)
Exhibit Dates: 1/69-Present
Objectives: To provide maximum training in internal security and counterinsurgency. The course acquaints officers and personnel enroute to duty in an advisory capacity or in a billet which will require close operational contact with the indigenous population in a Pacific Ocean Area area where revolvement is inspexible.
Instruction: Ideologies theory and applications, area studies, insurgency and counterinsurgency, psychological operations, intelligence and counterintelligence, guerrilla and counterguerrilla warfare, communications, engineering, medical, weapons training, field tactics, survival, evasion, resistance, interrogation, and escape techniques.
Credit Recommendation: In the upper-division baccalaureate category, 3 semester hours in fire fighting (1/74).

NV-1728-0004
FIRE FIGHTER INSTRUCTOR COURSE
(Firefighting Instructor)
Course Number: A-780-0024, A-780-0025
Location: Damage Control Training Center, Philadelphia, PA, Damage Control Training Center, Treasure Island, CA.
Length: 4 weeks (128-140 hours)
Exhibit Dates: 3/64-Present
Objectives: To prepare enlisted personnel as instructors of fire fighters.
Instruction: Lectures and practical experience in the use and care of firefighting equipment, firefighting techniques, lesson planning, and instruction.
Credit Recommendation: In the vocational certificate category, 4 semester hours in firefighting (1/74), in the lower-division baccalaureate/associate degree category, 4 semester hours in firefighting (1/74).

NV-1728-0005
AVIATION BOATSWAIN'S MATES (F/FLIGHT), CLASS A
Course Number: C-821-2010
Location: Naval Air Technical Training Center, Lakehurst, NJ, Naval Air Technical Training Center, Philadelphia, PA.
Length: 28 weeks (200-210 hours)
Exhibit Dates: 6/36-Present
Objectives: To train enlisted personnel in the specialized techniques of ship firefighting.
Instruction: Lectures and practical experience in firefighting equipment, survival, and firefighting procedures, fuel and volatile liquid types, inspection and maintenance of transfer systems, and shore based refuelers and service unit systems.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (3/74)

NV-1728-0006
AVIATION CRASH CREW-MAN CLASS C
Course Number: C-780-2010
Location: Air Technical Training Center, Memphis, TN.
Length: 4 weeks (160 hours)
Exhibit Dates: 7/64-Present
Objectives: To train enlisted personnel who have backgrounds in aviation fundamentals to perform as aviation crash crew men.
Instruction: Lectures and practical exercises in the functions of aviation crash crewmen, including theory of fire and fire extinguishing, aircraft familiarization, mobile fire-fighting equipment, and crash rescue and fire-fighting techniques.
Credit Recommendation: In the vocational certificate category, 3 semester hours in firefighting (5/74)

NV-1728-0007
SAFETY INSPECTOR CLASS C
Course Number: None.
Location: Naval Ships Construction, Pottstown, PA, Naval Ships Construction, Naval, N. VA, Naval Ships Construction, Gulfport, MS.
Length: 2 weeks (94 hours)
Exhibit Dates: 5/72-Present
Objectives: To train enlisted personnel to be safety inspectors in construction battalions.
Instruction: Lectures and practical exercises in naval safety programs and chain of command, safety administrative procedures, safety section organization and functions, transportation and construction equipment safety, power tools, hand tools, safety, utilities construction and electrical safety, and steelworker and builder safety.
Credit Recommendation: In the vocational certificate category, 1 semester hour in safety inspection (5/74)

NV-1728-0009
NBC DEFENSE FOR Petty Officers
Course Number: A-780-0016
Length: 2 weeks
Exhibit Dates: 10/72-Present
Objectives: To train personnel in damage control.
Instruction: Lectures and practical exercises in damage control, including damage control organization, access closures and fittings, general degrees and material conditions of readiness, shipboard systems, damage control communications, damage control equipment, oxygen breathing apparatus, portable pumping equipment, plastic repair, entering sealed compartments, investigation of damage, and planned maintenance system.
Credit Recommendation: Insufficient data for evaluation (5/74)

NV-1728-0011
DAMAGE CONTROL ASSISTANT
Course Number: A-4G-0011, A-4G-0010
Location: Naval Control Training Center, San Francisco, CA, Naval Control Training Center, Philadelphia, PA.
Length: 9 weeks (266 hours)
Exhibit Dates: 3/77-Present
Objectives: To train officers to be damage control officers.
Instruction: Lectures in fire prevention and firefighting techniques, including extinguishing random fires, shipboard fire prevention, research and development of firefighting equipment, operation of oxygen breathing apparatus and other fire-fighting equipment, practical damage control, including underwater damage repair, plugging and patching, ships systems operation and repair procedures, and damage control battle organization, and nuclear, biological, and chemical warfare defense operations.
Credit Recommendation: In the vocational certificate category, 3 semester hours in ships engineering, 1, in fire prevention
(5/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in ships engineering. 1 in fire fighting (5/74), in the upper-division baccalaureate category. 3 semester hours in ships engineering (5/74).

NV-1728-0012

**DAMAGE CONTROL MEN CLASS A HT-A Phase 2**

<table>
<thead>
<tr>
<th>Course Number:</th>
<th>A-780-0003; A-780-0036</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location:</td>
<td>Damage Control Training Center, Philadelphia, PA, Damage Control Training Center, Treasure Island, CA</td>
</tr>
<tr>
<td>Length:</td>
<td>7-8 weeks (240 hours)</td>
</tr>
<tr>
<td>Exhibit Dates:</td>
<td>7/70-Present</td>
</tr>
</tbody>
</table>

**Objectives:** To train enlisted personnel in damage control techniques.

*Instruction:* Lectures and practical exercises in hull and hull systems, casualty control, shoring, hull and pipe patching, plastic repairs, fire fighting, basic nuclear physics, characteristics of nuclear burns, classification and detection of biological and chemical agents, shipboard decontamination, use and operation of firefighting equipment.

**Credit Recommendation:** Credit is recommended because of the military-specific nature of the course (4/74).

NV-1728-0013

**AVIATION BOATSWAIN'S MATE J**

<table>
<thead>
<tr>
<th>Course Number:</th>
<th>Not available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location:</td>
<td>Amter Material Center, Philadelphia, PA</td>
</tr>
<tr>
<td>Length:</td>
<td>9 weeks (360 hours)</td>
</tr>
<tr>
<td>Exhibit Dates:</td>
<td>5/7-2/58</td>
</tr>
</tbody>
</table>

**Objectives:** To train boatswain's mates in the use and maintenance of aviation catapults and arresting gear.

*Instruction:* Lectures and practical exercises in the use and maintenance of catapults and arresting gear, including marinising, wire rope handling, hydraulics, fundamentals of firefighting, general information and preventive maintenance of catapults and arresting gear systems.

**Credit Recommendation:** Credit is not recommended because of the military-specific nature of the course (4/74).

NV-1728-0014

**AVIATION BOATSWAIN'S MATE H**

<table>
<thead>
<tr>
<th>Course Number:</th>
<th>C-822-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location:</td>
<td>Naval Technical Training Center, Philadelphia, PA, Air Technical Training Center, Lakehurst, NJ</td>
</tr>
<tr>
<td>Length:</td>
<td>7 weeks (250 hours)</td>
</tr>
</tbody>
</table>

**Objectives:** To train enlisted personnel as aviation boatswain's mates.

*Instruction:* Lectures and practical exercises on aircraft carrier firefighting, aircraft-carrying equipment maintenance, and spotting and handling of aircraft, including spotting and emergency equipment, aircraft familiarization and handling, aircraft carrier firefighting and personnel rescue, aircraft crash firefighting equipment and techniques, aircraft carrier crash firefighting equipment ashore, and crash fire and rescue drills.

**Credit Recommendation:** In the vocational certificate category, 4 semester hours in firefighting training (6/74), in the lower-division baccalaureate/associate degree category, 3 semester hours in fire science (6/74), in the upper-division baccalaureate category, 2 semester hours in industrial safety, and security (6/74).

NV-1728-0015

**MILITARY JUSTICE, NON-LAWYER**

<table>
<thead>
<tr>
<th>Course Number:</th>
<th>A-5F-0014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location:</td>
<td>Naval Justice School, Newport, RI</td>
</tr>
<tr>
<td>Length:</td>
<td>5 weeks (120-148 hours)</td>
</tr>
<tr>
<td>Exhibit Dates:</td>
<td>Version J, 8/72-Present, Version 2, 3/70-7/72</td>
</tr>
</tbody>
</table>

**Objectives:** To train commissioned officers to act as paralegal professionals.

*Instruction:* Lectures and practical exercises in the duties and skills necessary to act as a paralegal professional in legal and court situations. Course includes court procedures, an in-depth study of criminal, civil, and military law, prosecution and judicial processes, and legal advising.

**Credit Recommendation:** In the upper-division baccalaureate category, 4 semester hours in criminal justice or criminology (7/74); Version 2 in the upper-division baccalaureate category, 2 semester hours in political science (12/68).

NV-1728-0016

**MILITARY JUSTICE (LAWYER)**

<table>
<thead>
<tr>
<th>Course Number:</th>
<th>K-00-0030, K-00-060</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location:</td>
<td>Naval Justice School, Newport, RI</td>
</tr>
<tr>
<td>Length:</td>
<td>10 weeks (400 hours)</td>
</tr>
<tr>
<td>Exhibit Dates:</td>
<td>7/72-Present</td>
</tr>
</tbody>
</table>

**Objectives:** To provide lawyers with a basic organization of military and administrative law.

*Instruction:* includes lectures in military and administrative law, criminal procedure, military tribunals, and rules of evidence, court martial exercises, and trial clinics. Students are required to do some library research.

**Credit Recommendation:** Undergraduate credit is not recommended because of the professional nature of the course (6/75).

NV-1728-0017

**MILITARY JUSTICE (OFFICERS)**

<table>
<thead>
<tr>
<th>Course Number:</th>
<th>K-00-0044, K-00-060</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location:</td>
<td>Fleet Training Center, San Diego, CA</td>
</tr>
<tr>
<td>Length:</td>
<td>3 weeks (90 hours)</td>
</tr>
<tr>
<td>Exhibit Dates:</td>
<td>2/71-Present</td>
</tr>
</tbody>
</table>

**Objectives:** To prepare personnel to perform the duties of a discipline or legal officer.

*Instruction:* Instruction provides the student with an overview of military justice, including court martial procedure, laws of evidence, court martial punishments, and search and seizure.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 1 semester hour in evidence or criminal investigation (6/75).

NV-1729-0001

**FOOD SERVICES AND DISBURSING**

<table>
<thead>
<tr>
<th>Course Number:</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location:</td>
<td>Naval Supply Center, Oakland, CA</td>
</tr>
<tr>
<td>Length:</td>
<td>2 weeks (70 hours)</td>
</tr>
<tr>
<td>Exhibit Dates:</td>
<td>10/71-Present</td>
</tr>
</tbody>
</table>

**Objectives:** To acquaint experienced supply officers with new developments, and procedures in food service management.

*Instruction:* New developments in food service management, techniques in food service, and preparation of food service management.

**Credit Recommendation:** Credit is not recommended because of the limited technical nature of the course (12/73).

NV-1729-0002

**COMMISSARYMAN-STeward CLASS C**

<table>
<thead>
<tr>
<th>Course Number:</th>
<th>A-800-0015, A-800-014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location:</td>
<td>Naval School, San Diego, CA</td>
</tr>
<tr>
<td>Length:</td>
<td>9 weeks</td>
</tr>
<tr>
<td>Exhibit Dates:</td>
<td>9/71-Present</td>
</tr>
</tbody>
</table>

**Objectives:** To provide students with advanced knowledge and skills in food services and supervision.

*Instruction:* Management and administration principles, organization, personnel management, technical aspects, sanitation and nutrition.

**Credit Recommendation:** In the lower-division baccalaureate/associate degree category, 6 semester hours in hotel-restaurant management (12/73), in the upper-division baccalaureate category, 6 semester hours in food service management (12/73).

NV-1729-0003

**COMMISSARYMAN-STeward CLASS A**

<table>
<thead>
<tr>
<th>Course Number:</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location:</td>
<td>Naval School, San Diego, CA</td>
</tr>
<tr>
<td>Length:</td>
<td>8 weeks (240 hours)</td>
</tr>
<tr>
<td>Exhibit Dates:</td>
<td>8/71-Present</td>
</tr>
</tbody>
</table>

**Objectives:** To provide trainees with advanced knowledge and skills in food services.

*Instruction:* Advanced training in food production and baking, with emphasis on fine food and classical cuisine, basic accounting, equipment, sanitation, and standard recipes.

**Credit Recommendation:** In the vocational certificate category, 6 semester hours in hotel-restaurant institutions (12/73), in the lower-division baccalaureate/associate degree category, 3 semester hours in hotel-restaurant management (12/73), in the upper-division baccalaureate category, 3 semester hours in hotel-restaurant institutions (12/73).

NV-1729-0004

**COMMISSARYMAN-Scalew CLASS A**

<table>
<thead>
<tr>
<th>Course Number:</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location:</td>
<td>Naval School, Newport, RI, Naval School, San Diego, CA</td>
</tr>
<tr>
<td>Length:</td>
<td>8 weeks (240 hours)</td>
</tr>
<tr>
<td>Exhibit Dates:</td>
<td>4/68-Present</td>
</tr>
</tbody>
</table>

**Objectives:** To provide enlisted personnel with the technical knowledge and skills required to perform as commissarymen or stewards, in food service facilities.

*Instruction:* Organization of supply department, methods of food service computation; principles of nutrition and their application to menu planning, sanitation and safety precautions; principles, methods, and techniques of cooking and baking.

**Credit Recommendation:** In the vocational certificate category, 3 semester hours in hotel-restaurant institutions (12/73), in the lower-division baccalaureate/associate degree category, 3 semester hours in hotel-restaurant management (12/73), in the upper-division baccalaureate category, 3 semester hours in hotel-restaurant institutions (12/73).
COURSE EXHIBITS

NV-1729-0005

STEWARDS, CLASS A

Course Number: None.
Location: Naval School, San Diego, CA.
Length: 6/7 weeks (180-210 hours).
Exhibit Dates: 9/62-12/68.
Objectives: To train personnel to cook and serve meals, prepare menus, and maintain records.

Instruction: A basic course in food production principles, covering cooking, baking, menu planning, sanitation, receiving, and storage.

Credit Recommendation: In the vocational certificate category, 3 semester hours in hotel-restaurant institutions (12/73), in the lower-division baccalaureate/associate degree category, 3 semester hours in hotel-restaurant institutions (12/73).

NV-1729-0006

COMMISARIATE, CLASS B

Course Number: None.
Location: Naval School, San Diego, CA; Naval School, Bainbridge, MD.
Length: 15 weeks (450 hours).
Exhibit Dates: 5/62-12/68.
Objectives: To prepare food service personnel for supervisory and advanced technical duties.

Instruction: Essentially an advanced volume-food service management course with emphasis on the finer points of cooking, baking, menu planning, purchasing, and management.

Credit Recommendation: In the vocational certificate category, 5 semester hours in hotel-restaurant institutions (12/73); in the lower-division baccalaureate/associate degree category, 3 semester hours in hotel-restaurant institutions (12/73), in the upper-division baccalaureate category, 3 semester hours in hotel-restaurant institutions (12/73).

NV-1729-0007

STEWARD APPRENTICE, CLASS P

(Class P Steward's Apprentice)

Course Number: None.
Location: Naval Training Center, San Diego, CA; Naval School, Great Lakes, IL; Naval School, Bainbridge, MD.
Length: 6 weeks (103 hours).
Exhibit Dates: 3/56-12/68.
Objectives: To train stewards in dining room preparation and individual food service.

Instruction: Lectures and practical exercises in dining room preparation and individual food service, including table setting and meal service; preparation of salads, soups, meats, eggs, beverages, and desserts; food storage and preparation precautions; and securing for sea.

Credit Recommendation: In the vocational certificate category, 2 semester hours in catering or food service (6/74); in the lower-division baccalaureate/associate degree category, 2 semester hours in catering or food service (6/74).

NV-1729-0008

STEWARD (Commissioned Officers' Mess Closed Mess Management)

Course Number: A-801-015.

- Location: Mess Management Training Facility, Patuxent River, MD.
- Length: 8 weeks (240 hours).
- Objectives: To train stewards to manage mess halls.

Instruction: Lectures and practical exercises in the management of mess halls, full-service and self-service, covering menu planning, accounting, mathematical analysis, accounting procedures, sanitation, table and banquet planning, and accounting. Also includes an introduction to food preparation and service, including table setting and meal service, preparation of salads, eggs, beverages, and desserts; food storage and preparation; and layout and facilities.

Credit Recommendation: In the vocational certificate category, 6 semester hours in food service management (12/73), in the lower-division baccalaureate/associate degree category, 6 semester hours in food preparation (or 3 in introduction to food service and 3 in catering), in the upper-division baccalaureate/associate degree category, 6 semester hours in food service management (12/68).

NV-1729-0009

MANAGEMENT OF NAVY OPEN MESSES

(Management of officers and petty officers' messes)

Course Number: S-8E-0010.
- Location: Submarine School, Groton, CT.
- Length: 6 weeks (120-140 hours).
- Exhibit Dates: 1/77-Present.
- Objectives: To train enlisted personnel and civilians to manage officers' and petty officers' messes.

Instruction: Version 1: Instruction includes lectures, audio-visual presentations, and practical exercises designed to develop managerial skills needed to successfully operate Navy Open Messes. Included are club regulations, accounting, cost controls, and personnel management.

Credit Recommendation: In the vocational certificate category, 2 semester hours in food and beverage management (5/74), in the upper-division baccalaureate category, 3 semester hours in food and beverage management (12/68).

NV-1730-0001

BASE REFIRERATION THEORY AND MAINTENANCE

Course Number: L-652-021.
- Location: Fleet Submarine Training Facility, Pearl Harbor, HI.
- Length: 2 weeks (60 hours).

Exhibit Dates: 11/72-Present.
Objectives: To train enlisted personnel to operate, test, and repair refrigeration systems.

Instruction: Lectures and practical exercises in basic refrigeration theory and maintenance. Course includes the theory of operation of the vapor-compression refrigeration system, a study of system components, and practice in troubleshooting, servicing, and maintaining small refrigeration systems.

Credit Recommendation: In the vocational certificate category, 2 semester hours in refrigeration maintenance (5/74).

NV-1730-0002

AUXILIARY EQUIPMENT PACKAGE

- Location: Submarine School, Groton, CT.
- Length: 2 weeks (60 hours).
- Objectives: To train enlisted personnel to operate and service refrigeration equipment, pumps, and air compressors.

Instruction: Lectures and practical exercises in maintaining and servicing refrigeration equipment. Course includes pumps, air compressors, and hydraulic and pneumatic systems.

Credit Recommendation: In the vocational certificate category, 3 semester hours in refrigeration systems—operation and servicing (5/74).

NV-1730-0003

SUBMARINE REFRIGERATION AND AIR CONDITIONING R-12

Course Number: F-652-014.
- Location: Submarine School, Groton, CT.
- Length: 2 weeks (60 hours).
- Exhibit Dates: 3/68-Present.
- Objectives: To train enlisted personnel to maintain and service large refrigeration systems.

Instruction: Lectures and practical exercises in the maintenance of large refrigeration units. Topics include system components, troubleshooting, and the general construction, operation, and servicing of large refrigeration systems employing reciprocating compressors.

Credit Recommendation: In the vocational certificate category, 2 semester hours in mechanical servicing of refrigeration systems (5/74).

NV-1730-0004

SUBMARIINE (SSN/SSBN) AUXILIARY MACHINERY OPERA TION AND MAINTENANCE

Course Number: F-652-010.
- Location: Fleet Training Group, Pearl Harbor, HI; Submarine School, Groton, CT; Mine Warfare Training Center, Charleston, SC.
- Length: 10 weeks (300 hours).
- Exhibit Dates: 8/70-Present.
- Objectives: To train enlisted personnel to maintain and service refrigeration systems containing reciprocating or centrifugal compressors, and lithium-bromide absorption units.

Instruction: Lectures and practical exercises in the maintenance and operation of refrigeration systems. Includes general mechanical aspects of the construction and operation of refrigeration systems employing reciprocating or centrifugal compressors, lithium-bromide absorption systems, hydraulic systems, and air compressors.
C-2A ENVIRONMENTAL SYSTEMS

ORGANIZATIONAL MAINTENANCE
Course Number: Not available.
Location: Air Maintenance Training Detachment, North Island, CA.
Length: 2 weeks (60 hours)
Exhibit Dates: 10/69-Present.
Objectives: To train enlisted personnel to maintain the C-2A air conditioning and pressurization systems.

Instruction: Lectures and practical exercises in C-2A air conditioning and pressurization systems, including air conditioning and pressurization fundamentals, utility and survival systems, emergency equipment, and system operation and maintenance procedures.

Credit Recommendation: In the vocational certificate category, 3 semester hours in refrigeration equipment (5/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in refrigeration equipment, mechanical/service, and maintenance (7/74).

NY-1730-0005
REFRIGERANT II AIR CONDITIONING
(Air Conditioning Refrigerant II)
Course Number: L-652-0010; L-652.010
Location: Fleet Submarine Training Facility, Pearl Harbor, HI.
Length: 2 weeks (62 hours)
Exhibit Dates: 5/67-Present.
Objectives: To provide maintenance training to enable the trainee to understand required R-11 compressor operation, maintenance and troubleshooting, to include associated auxiliary equipment and safety problems.

Instruction: Provides instruction in the components and functions of mechanical systems, principles of operation and safety precautions. Training covers the operation, disassembly, reassembly, maintenance, and overhaul of R-11 units.

Credit Recommendation: In the vocational certificate category, 2 semester hours in mechanical servicing of refrigeration systems (6/77).

NY-1730-0006
ADVANCED NUCLEAR POWER
(V02 Nuclear Reactor Theory)
Course Number: B-651.0024; B-651.010
Location: Construction School, Davisville, RI.
Length: 2 weeks (650-690 hours)
Exhibit Dates: 5/67-Present.
Objectives: To train officers in nuclear reactor operation and operation of nuclear power plant system operation.

Instruction: Lectures and practical exercises in advanced mathematics, atomic and nuclear physics, reactor engineering, servo-mechanisms, nuclear and power plant control theory, metallurgy, thermodynamics, nuclear power plant systems and components, reactor control systems and components, and health physics. When the course was established in the mid-1950's, the office was able to obtain the curricula list from the Department of the Navy and have it evaluated. The course was changed and the curriculum appeared to have been substantially strengthened, although the course materials were classified for military security reasons and could not be evaluated. Nevertheless, the course as it has been offered since 1961 is considered to be academically stronger than the earlier program. Inasmuch as the credit listed below is for the program as it was given prior to 1961, the course would be justified in granting that amount of credit plus additional credit as determined by institutional evaluation.

Credit Recommendation: In the vocational certificate category, 12 semester hours in nuclear power plant operation (see Note above) (5/74); in the lower-division baccalaureate/associate degree category, 6 semester hours in nuclear engineering technology (see Note above) (5/74), in the upper-division baccalaureate category, 3 semester hours in introductory atomic physics or nuclear technology (see Note above) (12/68).

NY-1732-0002
ADVANCED NUCLEAR POWER
(V02 Nuclear Reactor Theory)
Course Number: Not available.
Location: Submarine School, Mare Island, CA, Submarine School, New London, CT, Submarine School, Bainbridge, MD.
Length: 2 weeks (368 hours)
Exhibit Dates: 7/56-Present.
Objectives: To train officers in nuclear reactor engineering theory and nuclear reactor power plant system operation.

Instruction: Lectures and practical exercises in advanced mathematics, atomic and nuclear physics, reactor engineering, servo-mechanisms, nuclear and power plant control theory, metallurgy, thermodynamics, nuclear power plant systems and components, reactor control systems and components, and health physics. When the course was established in the mid-1950's, the office was able to obtain the curricula list from the Department of the Navy and have it evaluated. The course was changed and the curriculum appeared to have been substantially strengthened, although the course materials were classified for military security reasons and could not be evaluated. Nevertheless, the course as it has been offered since 1961 is considered to be academically stronger than the earlier program. Inasmuch as the credit listed below is for the program as it was given prior to 1961, the course would be justified in granting that amount of credit plus additional credit as determined by institutional evaluation.

Credit Recommendation: In the vocational certificate category, 12 semester hours in nuclear power plant operation (see Note above) (5/74); in the lower-division baccalaureate/associate degree category, 6 semester hours in nuclear engineering technology (see Note above) (5/74); in the upper-division baccalaureate/associate degree category, 3 semester hours in reactor engineering (see Note above) (12/68).

NY-1732-0005
DATM MACHINIST'S MATE MAINTENANCE
(600 PSI MM Maintenance)
Course Number: A-720-0012, A-720-0016
Location: Training Center, Gulfport, MS, Construction School, Davisville, RI.
Length: 3 weeks (105 hours)
Exhibit Dates: 11/72-Present.
Objectives: To train machinist's mates and boilermen in the maintenance and repair of main propulsion machinery and its auxiliaries.

Instruction: Lectures and practical exercises in the maintenance and repair of main propulsion machinery and its auxiliaries, including the operation, maintenance, and troubleshooting of these systems, blueprints and micrometers, valve repair, steam traps, main turbines and reduction gears, flexible couplings, auxiliary turbines, main feed pump, centrifugal and reciprocating pumps, deaerating feed tank, high- and low-pressure air compressors, lubricating oil pumps, and lube oil purifier.

Credit Recommendation: In the vocational certificate category, 2 semester hours in maintenance machinist or power plant technology (5/74); in the lower-division baccalaureate/associate degree category, 1 semester hour in maintenance machinist or power plant technology (5/74); in the upper-division baccalaureate category, 2 semester hours in maintenance machinist or power plant technology (5/74).

NY-1732-0006
UTILITYSMA N, CLASS A (UT "A")
Course Number: A-720-0012, A-720-0016
Location: All Versions Construction Training Center, Gulfport, MS, Construction School, Davisville, RI.
Length: Version 1: 11-14 weeks (331-420 hours); Version 2: 12 weeks (368 hours)
Objectives: To train enlisted personnel to be utilities men.

Instruction: Lectures and practical exercises in utilities operation, including plumbing, field sanitation, internal combustion engine pumps, compressors, water treatment, refrigeration, and boiler operation.

Credit Recommendation: Version 1: In the vocational certificate category, 8 semester hours in utilities (1/57); in the lower-division baccalaureate/associate degree category, 2 semester hours in utilities (6/76), Version 2: In the vocational certificate category, 8 semester hours in theory of water purification (5/74), in the lower-division baccalaureate/associate degree category, 2 semester hours in theory of water purification (5/74), in the upper-division baccalaureate/associate degree category, 2 semester hours in theory of water purification (5/74).
4.1 BUILDER/MILLWORKER, CLASS C

Parachute Rigger (Survival), Class A
Course Number: Not available
Location: Air Technical Training Center, Lackhurst, NJ
Length: 10 weeks (400 hours).

Exhibit Dates: 3/56-7/65.
Objectives: To train enlisted personnel to perform as parachute riggers (survival).

Instruct: Lectures and practical exercises in parachute rigging, construction, and repair, including nomenclature, inspection, packing, testing, and maintenance of service parachutes; descent techniques; fleet-type sewing machine operation; use of all dropable air-sea rescue and personal and fixed-avation survival equipment; and land and sea survival techniques.

Credit Recommendation: In the vocational certificate category, 4 semester hours in aeronautical technology, 2 in sewing machines and fabrics (5/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in aeronautical technology (3/74).

NV-1736-0001
Builder/Millworker, Class C
(BU"C4 Millworker)
Course Number: A-712-0011.
Location: Construction Training Center, Fort Hueneke, CA; Obstruction Training Center, Gulfport, MS; Construction School, Davisville, RI.
Length: 6-9 weeks (180-275 hours).

Exhibit Dates: 11/70-Present.
Objectives: To provide advanced instruction in the methods of millwork.

Instruct: Lectures and practical exercises in advanced rough-lumber manufacturing, including the manufacturing of doors, windows, finish stalls, and various types of trim, operation and operator maintenance of millworking machines, the preparation of jigs for precutting and prefabrication of mass-produced, items such as rafters and trusses, shop layout, planning, and estimation of millwork and cabinet construction.

Credit Recommendation: In the vocational certificate category, 4 semester hours in millwork (7/76).

NV-2202-0001
Carrier Fixed Wing Antisubmarine (AASW) Warfare Tactics
Course Number: E-2D-056.
Location: Fleet Aviation Specialized Operating Training Group, Pacific, San Diego, CA.
Length: 3 weeks (105 hours).

Exhibit Dates: 5/70-Present.
Objectives: To instruct Naval officers in basic oceanography and antisubmarine warfare tactical procedures.

Instruction: Instruction covers basic oceanography and antisubmarine warfare tactical procedures.

Instruct: Lectures and practical exercises in oceanography and antisubmarine warfare, with specific emphasis on technical procedures utilized in the employment of carrier fixed-wing antisubmarine warfare systems.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/76).

NV-2202-0002
Navy Sniper Training
Course Number: H-000-1000.
Location: Operations Training Center, Cpl. Roberts, CA.
Length: 3 weeks (124 hours).

Exhibit Dates: 1/70-Present.
Objectives: To train highly skilled riflemen to perform as snipers from river assault and river patrol boats.

Instruction: Lectures and practical exercises in sniper orientation, sniper equipment, marksmanship, and field tactics.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (2/74).

NV-2202-0003
Nurse Corps Indocritnation
Course Number: A-00-0053; A-00-4602.
Location: Women Officers School, Newport, RI.
Length: 4 weeks (173 hours).

Exhibit Dates: 3/72-Present.
Objectives: To provide commissioned officers in the nurse corps with military orientation.

Instruction: Lectures in personnel administration; leadership; the naval medical department; legal aspects of military nursing; physical and moral development; personal grooming; and naval history, customs, and traditions.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 2 semester hours in personnel administration and management (2/74).

NV-2202-0004
Medical Officer Indocritnation
Course Number: None.
Location: Officer Indocritnation School, Newport, RI.
Length: 3 weeks (106 hours).

Exhibit Dates: 5/70-8/70.
Objectives: To teach the student basic naval subjects to prepare him to assume the duties of a shipboard medical officer.

Instruction: Lectures on Navy organization, national security, general administration, and fleet familiarization.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (8/72).

NV-2202-0005
Amphibious Command Indocritnation
Course Number: G-2E-6303.
Location: Amphibious School, Newport, RI.
Length: 2 weeks (14-16 hours).

Exhibit Dates: 5/69-Present.
Objectives: To orient or refresh commanding officers, executive officers, and senior staff officers of amphibious ships in the organization and functions of amphibious forces.

Instruction: Lectures and practical exercises in operations, planning, readiness training, communications, engineering, weather conditions, and command and staff responsibilities.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (2/74).

NV-2202-0006
Amphibious Tactical Air Control Party
(Tactical Air Control Party)
Location: Naval Amphibious School, Norfolk, VA; Naval Amphibious School, San Diego, CA.
Length: 3 weeks (98-106 hours).

Exhibit Dates: 1/66-5/68.
Objectives: To train officers to control and coordinate tactical air support.

Instruction: Procedures of tactical air support planning and request, techniques of forward air controlling, helicopter planning and employment, and practical field exercises.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (2/74).

NV-2202-0007
Naval Preparatory School
Course Number: None.
Location: Naval Training Center, Bainbridge, MD, Naval Training Center, San Diego, CA.
Length: 9 weeks.

Exhibit Dates: 1/69-Present.
Objectives: To provide prospective engineering and science students with a college-preparatory course in mathematics and English.

Instruction: Lectures and practical exercises in English grammar and syntax; techniques of improving written and oral expression, algebra, trigonometry, analytical geometry, calculus, and chemistry and physics.

Credit Recommendation: Credit is not recommended because of the college preparatory nature of the course (1/74).

NV-2202-0008
Rotary Wing Antisubmarine Warfare Tactics
Course Number: E-2C-012.
Location: Fleet Airborne Electronics Training Unit, Pacific, San Diego, CA.
Length: 3 weeks (102 hours).

Exhibit Dates: 2/71-Present.
Objectives: To instruct Naval aviators in antisubmarine warfare tactical procedures and general oceanography as applied to antisubmarine warfare tactics.

Instruction: Instruction covers oceanography and antisubmarine warfare, with specific emphasis on tactical procedures utilized in the employment of helicopter antisubmarine warfare systems.

Credit Recommendation: Credit is not recommended because of the limited, specialized nature of the course (5/76).

NV-2202-0009
Torpedo Tube Mk 65 Basic Maintenance
Course Number: A-123-0157.
Location: Submarine School, New London, CT; Fleet Ballistic Missile School, Charleston, SC; Submarine Training Center, Pacific, Pearl Harbor, HI.
Length: 6-7 weeks (Present hours).

Exhibit Dates: 2-6.
Objectives: To provide the theory and skills required to perform organizational maintenance of the Mk 65 torpedo tube (all marks) aboard operating submarines.

Instruction: Course is largely descriptive involving the maintenance of torpedo tubes, including air hydraulic and ejection systems, safety precautions, loading and firing procedures; actual tube line up and firing are accomplished.

Credit Recommendation: Credit is not recommended because of the limited specialized nature of the course (9/77).
NV-2202-0010

VIETNAM ORIENTATION

Course Number: None
Location: Amphibious School, San Diego, CA.
Length: 2 weeks (80 hours)
Exhibit Dates: U/L/2-present.
Objectives: To provide personnel with a broad overview of the military, political, social, and economic policies of South Vietnam.

Institution: Geographical, historical, and cultural aspects of South Vietnam, weapons, survival, and medical training; communications, defense planning, logistics, methods of emergency and counterintelligence, administrative organization.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (1/74)

NV-2202-0011

VIETNAM ORIENTATION

Course Number: A-011-0014
Location: Amphibious School, San Diego, CA.
Length: 3 weeks (110 hours)
Exhibit Dates: U/L/2-present.
Objectives: To provide personnel with a broad overview of the military, political, social, and economic situation in South Vietnam.

Institution: Nature of the Vietnam conflict, national objectives and strategies in Southeast Asia, U.S. Navy role in Southeast Asia, Vietnamese geographical, historical, and cultural introduction; weapons, medical and survival training.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (1/74)

NV-2202-0012

SONAR WATCH SUPERVISOR AND ADVANCED WATCHSTANDER TRAINING

Course Number: F-210-011.
Location: Submarine School, Groton, CT.
Length: 2 weeks (34 hours)
Exhibit Dates: 11/2-present.
Objectives: To provide experienced watch supervisors or prospective watch supervisors with advanced training in passive sonar contact procedures.

Instruction: Foreign patrol craft and warship acoustic analysis, foreign diesel and nuclear submarines, sonar identification and classification translation; radio and sonar filter operation.

Credit Recommendation: In the vocational certificate category, 1 semester hour in electronics (1/74)

NV-2202-0013

SUBMARINE OFFICERS ADVANCED

Course Number: A-2E-0030.
Location: Submarine School, Groton, CT.
Length: 24 weeks (752 hours)
Exhibit Dates: 7/71-present.
Objectives: To train selected junior officers in the technical and administrative management of nuclear submarines.

Instruction: Procedures of shipboard management and administration, electronic equipment techniques, foreign nuclear weapon systems, navigational skills, naval communications, principles of electronic warfare.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 3 semester hours in personnel management and administration, 3 in electrical engineering (1/74); in the upper-division baccalaureate/associate degree category, 3 semester hours in personnel management and administration, 3 in electrical engineering (1/74)

NV-2202-0014

BASIC MILITARY TRAINING (Recruit Training)

Course Number: None.
Location: Recruit Training Command, San Diego, CA, Recruit Training Command, Great Lakes, IL, Recruit Training Command, Orlando, FL.
Length: 7-8 weeks (265-267 hours)
Exhibit Dates: 12/79-present.
Objectives: To assimilate recruits into the Navy way of life and to prepare them for further advanced training in specialized Navy occupations.

Instruction: Student will receive indoctrination and physical conditioning to prepare for the rigors and unique demands of naval service, Observance of naval customs and traditions, will be taught in a manner to foster pride in the nation and in patriotic behavior, high standards of conduct, and respect for civilian and military authority.

Credit Recommendation: In the lower-division baccalaureate/associate degree category, 1 semester hour in personal fitness/conditioning, 1 in personal/community health, 2 in first aid and safety (10/79)

NV-2202-0015

A-SA CONVENTIONAL WEAPONS

Course Number: None.
Location: Naval Air Maintenance Training Group, Oceana, VA; Naval Air Maintenance Training Group, Whidbey Island, WA.
Length: 2 weeks (80 hours)
Exhibit Dates: 4/71-present.
Objectives: To provide ordnance personnel with a broad understanding of suspensory and launching equipment and conventional weaponry.

Instruction: Aircraft familiarization, assembly, installation, and disassembly procedures for conventional weapons, safety features and procedures for conventional weapons.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (1/74)

NV-2202-0016

WARRANT OFFICER (WO) AVIATION INDOCTRINATION

Course Number: None.
Location: Naval Air Basic Training Command, Pensacola, FL.
Length: 24 weeks (213-300 hours)
Exhibit Dates: 6/65-Present.
Objectives: To train warrant officers to perform managerial and supervisory functions in the aviation field.

Instruction: Procedures in the basic principles of management, including human relations, personnel management, basic psychology, world affairs, effective written and oral communication, military justice, and military organization.

Credit Recommendation: In the upper-division baccalaureate category, 3 semester hours in naval science (12/68)

NV-2202-0017

SURFACE EXPLOSIVE ORDNANCE DISPOSAL Basic

Course Number: A-4E-0022, A-431-0012
Location: Naval School, Indian Head, MD.
Length: 12 weeks (440 hours)
Exhibit Dates: 10/72-Present.
Objectives: To provide personnel of all branch services in the techniques of explosive ordnance disposal.

Instruction: Basic electricity, elementary physics, demolition procedures, identification and disposition of underwater explosive ordnance.

Credit Recommendation: In the upper-division baccalaureate category, 3 semester hours in metallurgical engineering (1/74)

NV-2202-0018

UDT-SEAL EXPLOSIVE ORDNANCE DISPOSAL INDOCTRINATION

Course Number: A-431-0023.
Location: Naval School, Indian Head, MD.
Length: 5 weeks (175 hours)
Exhibit Dates: 10/72-Present.
Objectives: To provide naval personnel with the skills necessary to recognize, evaluate, recover, and dispose of conventional ordnance and explosives.

Instruction: Basic physics and principles of electricity, fuse operation; characteristics and methods of disposal of explosive fillers, procedures of explosive demolition; identification and classification of placed, projected, and dropped munitions.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (1/74)

NV-2202-0019

EXPLOSIVE ORDNANCE DISPOSAL—RESERVE OFFICER TRAINING

Course Number: A-4E-0045
Location: Naval School, Indian Head, MD.
Length: 2 weeks (75 hours)
Exhibit Dates: 10/72-Present.
Objectives: To train reserve officers in the procedures for recovering, evaluating, and disposing of non-nuclear explosive ordnance.

Instruction: Underwater ordnance and principles of operation, performance of qualification dives and swims; principles of explosive ordnance disposal reconnaissance; methods of munitions projection, hazing, precautions, and disposal procedures for dropped munitions; type, employment, and operation of guided missiles.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (1/74)

NV-2202-0020

EXPLOSIVE ORDNANCE DISPOSAL NAVY Basic

Course Number: None.
Location: Naval School, Indian Head, MD.
Length: 10 weeks (328 hours)
Exhibit Dates: 8/72-Present.
Objectives: To train naval personnel to recover, evaluate, render safe, and dispose of underwater explosive ordnance.

Instruction: Lectures in the theory, concepts, and operations of torpedoes, exploded...
ers, and mines; requalification exercises in open- and semi-closed circuit schools.

Credit Recommendation: In the vocational certificate category, 6 semester hours in ordnance engineering (1/74), in the lower-division baccalaureate category, 3 semester hours in ordnance engineering (1/74), in the upper-division baccalaureate category, 3 semester hours in ordnance engineering (1/74).

NV-2202-0021
AVIATION ANTISUBMARINE WARFARE (AASW) FOR SECOND TOUR PILOTS, P-1C
Course Number: E-2D-0071, E-2D-071
Location: Fleet Aviation Specialized Operational Training Group; Pacific, Moffett Field, CA.
Length: 2-3 weeks (77-91 hours).
Exhibit Dates: 9/72-Present.
Objectives: To provide experienced Naval aviators with supplementary training to prepare them for duty in the Pacific.
Instruction: Training includes oceanography and underwater acoustics, aviation antisubmarine warfare tactical procedures, a basic knowledge of aviation antisubmarine warfare sensors and associated equipment, and familiarization with current electronic warfare detection, capabilities, limitations, and requirements.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/76).

NV-2202-0022
FLEET OFFICER AND FLEET ENLISTED AIR INTELLIGENCE
Course Number: None.
Location: Operational Intelligence Training, Alameda, CA.
Length: 6 weeks (199 hours).
Exhibit Dates: 3/72-Present.
Objectives: To train military personnel in the operational aspects of air intelligence.
Instruction: Administrate and functional aspects of security, classified accounting procedures and methods, management and handling of classified material, meteorology, map and chart reading, procedures of NON-IC data, basic terminology, types and characteristics of nuclear weapons, radar characteristics; photography; Sino-Soviet air defense systems; stereoscopy.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (12/68).

NV-2202-0023
FLEET AIR INTELLIGENCE OFFICER
Course Number: K-3A-5002, K-3A-516.
Location: Fleet Operational Intelligence Training Center, San Diego, CA.
Length: 3 weeks (152 hours).
Exhibit Dates: 1/72-3/70-Present.
Objectives: To train Navy and Marine Corps officers in the operational aspects of air intelligence.
Instruction: Lectures on fundamentals of intelligence; recognition and capabilities of Eurasian-communist weapons systems; practical intelligence work and briefs; radar and weapons equipment; imagery interpretation and photography; geopolitical topics; and intelligence requirements and reporting.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (1/74).

NV-2202-0024
CVA/CVS AIR LAUNCHED WEAPONS
GENERAL ORDINANCE
Course Number: None.
Length: 3 weeks (120 hours).
Exhibit Dates: 1/71-Present.
Objectives: To teach weapon handlers assigned to aircraft carriers the procedures and safety precautions of air launched weapons handling.
Instruction: Lectures and practical exercises in basic carrier operation, ammunition handling, pyrotechnics, aircraft munitions, and air launched missiles.
Credit Recommendation: In the vocational certificate category, 3 semester hours in explosive handling (2/74).

NV-2202-0025
BATTALION STAFF OFFICERS (AMPHIBIOUS PLANNING)
Course Number: G-2E-4231
Location: Amphibious Base, Little Creek, VA.
Length: 2 weeks (77 hours).
Exhibit Dates: 12/71-Present.
Objectives: To train battalion officers to function effectively as members of a battalion executive in amphibious environments.
Instruction: Lectures on amphibious operations, organization for combat, organization and functioning of battalion staff, the sequence of command and staff action, and principles of intelligence, operations, logistics, embarkation, supporting arms, and communications.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (2/74).

NV-2202-0026
1. JUMPMASTER NAVAL PARACHUTIST, CLASS C1
2. NAVAL JUMPMASTER CLASS C
Course Number: C-602-2022
Location: Naval Air Technical Training Center, Lakehurst, NJ.
Objectives: To train Navy and Marine Corps personnel to safely and efficiently organize and conduct parachute operations.
Instruction: Lectures and practical exercises in theory of parachuting; organization and direction of parachute jumping; jumpmaster equipment; maps and photos; communications; and parachute operations, including day, night, land, and water jumps.
Credit Recommendation: In the vocational certificate category, 1 semester hour in parachuting (2/74).

NV-2202-0027
SURFACE WARFARE OFFICER SCHOOL
Course Number: None.
Location: Surface Warfare Officer School, Newport, RI.
Length: 5 weeks (202 hours).
Exhibit Dates: 11/71-Present.
Objectives: To provide instruction for surface line officers in division officer and watch-standing duties.
Instruction: Lectures and practical exercises in administration and organization, shipboard damage control, watch standing, seamanship, engineering, and ship handling.
Credit Recommendation: In the vocational certificate category, 2 semester hours in personnel management and administration (2/74); in the lower-division baccalaureate/associate degree category, 3 semester hours in personnel management and administration (2/74); in the upper-division baccalaureate category, 3 semester hours in personnel management and administration (2/74).

NV-2202-0028
GUN FIRE CONTROL SYSTEM (GFCS) MK 63 MAINTENANCE
Course Number: K-113-2074.
Location: Fleet Training Center, San Diego, CA.
Length: 2 weeks (60 hours).
Exhibit Dates: 10/72-Present.
Objectives: To prepare fire control technicians and designated storesmen to maintain the Mark 63 Gunfire Control System (GFCS MK 63).
Instruction: Lectures on the description and operation of GFCS MK 63 and practical exercises in checks and adjustments in the maintenance of GFCS MK 63.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (2/74).

NV-2202-0029
BASIC ENLISTED SUBMARINE
Course Number: A-060-0011; F-000-010
Location: Submarine School, Groton, CT.
Length: 6-8 weeks (165-236 hours).
Exhibit Dates: 10/67-Present.
Objectives: To prepare enlisted personnel for assignment to an operational submarine.
Instruction: Lectures and practical experience in standard submarine organization and regulations, systems and principles of submarine operation, submarine escape tank training, and interior communications.
Credit Recommendation: In the vocational certificate category, credit in submarine operations on the basis of institutional evaluation (2/74).

NV-2202-0030
1. BASIC NAVAL PARACHUTIST, CLASS C1
2. BASIC NAVAL PARACHUTIST COURSE, NP; CLASS C
(Naval Parachutist, Basic, Class C)
Course Number: C-602-2020
Location: Air Technical Training Center, Lakehurst, NJ.
Objectives: To train military personnel to become qualified parachutists.
Instruction: Lectures and practical exercises in the history of parachuting; aircraft performance; canopy control, and pre-jump, during-jump, and post-jump procedures.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (2/74).

NV-2202-0031
AMPHIBIOUS PLANNING
Course Number: None.
Location: AMPHIBIOUS Planning.
Length: 6 weeks (195 hours).
Exhibit Dates: Present.
Objectives: To train amphibious planning officers in the planning of amphibious operations.
Instruction: Lectures and practical exercises in amphibious planning principles and procedures, including the history of amphibious planning, amphibious operation planning, and amphibious mission planning.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (2/74).
Location: Amphibious School, Norfolk, VA. Amphibious Schools, San Diego, CA. Location: Naval Training Center, San Diego, CA.

Exhibit Dates: 1/71-Present.

Objectives: To provide officers with the knowledge and skills necessary to plan amphibious operations.

Instruction: Lectures and practical exercises in planning amphibious operations, including ship-to-shore movement, intelligence, communications, and general military planning procedures.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-2202-0035
LIGHT AIRBORNE MULTIPURPOSE SYSTEM (LAMPS) TACTICS

Course Number: E-2C-013.
Location: Fleet Airborne Electronics Training Unit, Pacific, San Diego, CA.
Length: 3 weeks (103 hours).
Exhibit Dates: 10/72-Present.

Objectives: To train officers in basic oceanography and tactical procedures.

Instruction: Lectures include basic oceanography, antisubmarine warfare, and anti-ship missile defense, with emphasis on current tactical procedures used by light airborne multipurpose system squadrons.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-2202-0036
AIRBORNE EARLY WARNING, CLASS O

Course Number: None.
Location: Air Technical Training Center, Glynco, GA.
Length: 7 weeks (280 hours).
Exhibit Dates: 1/68-12/68.

Objectives: To provide flight officers with training in airborne early warning systems.

Instruction: Lectures on airborne early warning and antisubmarine warfare systems, and basic air control; simulated training in anti-air warfare; and flight training.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-2202-0037
SHORE FIRE CONTROL PARTY

Course Number: C-041-6436.
Location: Amphibious School, Little Creek, Norfolk, VA.
Length: 3 weeks (117-121 hours).
Exhibit Dates: 1/66-12/66.

Objectives: To train enlisted personnel in the duties of shore fire control party men.

Instruction: Lectures and practical exercises in communications, map reading, fire support ships and ammunition, naval gunfire spotting, and simulated firing training.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-2202-0038
BASIC CIC TECHNIQUES FOR ENLISTED PERSONNEL

Course Number: K-221-0019.
Location: Fleet Anti-Air Warfare Training Center, San Diego, CA.
Length: 3 weeks ($5 hours).
Exhibit Dates: 5/72-12/72.

Objectives: To teach enlisted personnel basic concepts and intelligence communications (CIC) techniques.

Instruction: Lectures and practical exercises in the basic CIC techniques, including concepts of CIC, radiotelephone nets and radiotelephone procedures, allied naval signal book, internal communications and sound-powered telephone procedures, logic principles, and radar, maneuvering-board function.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-2202-0039
VS CRAG ENLISTED AIRCREWMAN ASW INDOCTRINATION AND EQUIPMENTS

Course Number: D-050-011.
Location: Fleet Airborne Electronics Training Unit, Atlantic, Norfolk, VA.
Length: 5 weeks (150 hours).
Exhibit Dates: 1/66-12/66.

Objectives: To train enlisted personnel to operate ASW equipment.

Instruction: Lectures on ASW operations, submarine characteristics and operating procedures, radar, ECM, and Zebele operational techniques, and ASW equipment, AQA-1, and Julie operator techniques and duties, and tactical display and navigational equipment introduction.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (3/74).

NV-2202-0040
VP CRAG PILOT ASW INDOCTRINATION, EQUIPMENTS AND TACTICS

Course Number: D-2A-011.
Location: Fleet Airborne Electronics Training Unit, Atlantic, Norfolk, VA.
Length: 6 weeks (150 hours).
Exhibit Dates: 1/66-12/66.

Objectives: To train VP pilots to operate the VP aircraft weapons systems.

Instruction: Lectures and synthetic trainer exercises in submarine operating characteristics, various search techniques, including radar, ECM, Zebele, SODUS, visual search, exhaust trail indicator equipment and tactics, and search planning and execution, visual, contact, and podborne localization tactics and equipment, and VP aircraft weapon systems, including tactical navigational equipment, tactical pilots, and ASA-16 capabilities, operation, and limitations.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (4/74).

NV-2202-0041
P/A/B VP READINESS TACTICAL COORDINATOR

(ASW CRAG Tactical Coordinator ASW Indocmentation, Equipments and Tactics)

Course Number: D-2D-0010; D-2D-010.
Location: Fleet Airborne Electronics Training Unit, Atlantic, Norfolk, VA.
Length: 7 weeks (210-235 hours).
Exhibit Dates: 1/66-12/66.

Objectives: To train VP CRAG tactical coordinators in the operation, capabilities, limitations, and tactical applications of VP aircraft.

Instruction: Lectures in VP weapons system introduction, detection and contact classification theory, visual search techniques, radar characteristics, equipment, and tactics, and various weapons system equipment operation.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (12/68).
COURSE EXHIBITS

NV-2202-0042
ASW TACTICS—VS PILOT/NAVAL FLIGHT OFFICER
(VS CRAG Pilot, ASW Indoc, Equipment, and Tactics—S-2E Aircraft)

Course Number: D-2A-0013, D-2A-013
Location: Fleet Airborne Electronics Training Unit, Atlantic, Norfolk, VA
Length: 3-6 weeks (150-187 hours).
Exhibit Dates: 1/66-Present.
Objectives: To train pilots to operate the S-2E aircraft.

Instruction: Lectures and practical exercises in submarine operating characteristics, underwater sound, radar and ECM equipment and tactics, submarine evasion tactics, tactical navigation equipment operation, and synthetic trainer exercises.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (12/68).

NV-2202-0043
ASW TACTICS—FIRST TOUR VP PILOT
(VS CRAG Pilot ASW Indoc, Equipment, and Tactics—S-2D Aircraft)

Course Number: D-2A-0011, D-2A-012
Location: Fleet Airborne Electronics Training Unit, Atlantic, Norfolk, VA
Length: 5-7 weeks (150-235 hours)
Exhibit Dates: 1/66-Present.
Objectives: To train pilots to operate the S-2D aircraft.

Instruction: Lectures in ASW organization, VS weapons system introduction, submarine operating characteristics, underwater sound, radar, ECM equipment and tactics, submarine evasion tactics, attack criteria, and coordinated submarine/air/ship systems.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (12/68).

NV-2202-0044
VP CRAG ENLISTED AIRCREWMAN ASW INDOC, EQUIPMENT

Course Number: D-050-010
Location: Fleet Airborne Electronics Training Unit, Atlantic, Norfolk, VA
Length: 5 weeks.
Exhibit Dates: 7/66-12/68.
Objectives: To train enlisted personnel in ASW equipment operation.

Instruction: Lectures in ASW background and organization, methods of aircrew designation, submarine characteristics and operating procedures, radar and ECM operator techniques and duties, and tactical navigation and tactical display equipment introduction.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (12/68).

NV-2202-0045
AMPHIBIOUS WARFARE INDOC

Course Number: G-00-501
Location: Amphibious School, Little Creek, VA
Length: 2 weeks (69-73 hours).
Exhibit Dates: 10/72-Present.
Objectives: To train officers in the organization and capabilities of amphibious forces and the basic principles and techniques of amphibious warfare.

Instruction: Lectures and practical exercises on amphibious warfare, including concepts of amphibious operations, organization and command, naval orientation in amphibious forces, supporting arms, amphibious planning, intelligence, communications, and logistics, and shore movement.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/74).

NV-2202-0046
AMPHIBIOUS JUNIOR OFFICER

Course Number: H-00-5223
Location: Amphibious School, San Diego, CA
Length: 9 weeks (268 hours).
Exhibit Dates: 6/70-12/68.
Objectives: To enable junior officers with previous shipboard experience to perform as administrators, division officers, and watch standers.

Instruction: Lectures and practical exercises on amphibious indoctrination, including amphibious warfare indoctrination, naval amphibious communications and drill, landing craft control, duties of boat officers, boat handling and salvage operations, division organization and administration, indoctrination of new personnel, amphibious shipboard indoctrination, and courses from fleet training centers.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/74).

NV-2202-0047
WEAPONS DELIVERY SYSTEM (OFFICERS)

Course Number: F-4E-013
Location: Submarine School, Groton, CT
Length: 11 weeks (307 hours)
Exhibit Dates: 4/70-12/68.
Objectives: To train submarine officers in the functions, operations, and effective employment of the BQQ-2 sonar system, the Mk 113 fire control system, the Mk 48 weapons system, and the Mk 28 SUBROC missile.

Instruction: Lectures and practical exercises in weapons delivery systems, including the capabilities, operations, and employment of the BQQ-2 sonar system, the Mk 113 UWFCS, the Mk 48 torpedo and all other operational torpedoes, and the Mk 28 SUBROC. To train in the duties of the fire control party and the approach officer, and techniques of passive ranging and target motion analysis.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/74).

NV-2202-0048
MOBILE RIVERINE FORCES STAFF OFFICER

Course Number: H-00-1501
Location: Inshore Operations Training Center, Mare Island, CA
Length: 6 weeks (256 hours).
Exhibit Dates: 4/69-Present.
Objectives: To train officers in the techniques and tactics of riverine warfare.

Instruction: Lectures and practical exercises on riverine warfare techniques, including survival in water, counterinsurgency, survival training, riverine warfare orientation and operations, organization and command, small arms, search and support weapons, communications, combat support, combat service support, and tactical boat operations.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/74).

NV-2202-0049
SHIP LANDING PARTY INDOC

Course Number: G-2E-4606, G-010-4606
Location: Landing Force Training Command, Norfolk, VA
Length: 2 weeks (76 hours).
Exhibit Dates: 10/72-Present.
Objectives: To train personnel to conduct small-unit operations ashore and to quell civil riots and disorders.

Instruction: Lectures and practical exercises on the conduct of small-unit tactics, including individual training, weapons, riot control, amphibious landing, small-unit tactics, helicopter orientation, amphibious training and camouflage.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/74).

NV-2202-0050
CHIEF PETTY OFFICER LEADERSHIP

Course Number: None
Location: Air Training Command, Pensacola, FL
Length: 5 weeks (220 hours).
Exhibit Dates: 7/59-12/68.
Objectives: To impart the leadership qualities of chief petty officers.

Instruction: Lectures and practical exercises on leadership areas including duties, responsibilities, capabilities, discipline, morale, management, moral leadership, inspections, military justice, drill and command, teaching techniques, job analysis, drill review, conference speaking, world affairs, naval history, and naval traditions.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (12/68).

NV-2202-0051
JUDGE ADVOCATE GENERAL'S CORPS

Course Number: A-00-0046
Location: Officer Training School, Newport, RI
Length: 8 weeks (280 hours).
Exhibit Dates: 11/72-Present.
Objectives: To train legal officers in basic Navy Judge Advocate General's Corps duties.

Instruction: Lectures in basic naval subjects, including protocol, administration, development of policy, history, concepts of sea power, carrier and submarine operations, combined military operations, shipboard organization, communications, formations and maneuvering, propulsion and damping control, and amphibious warfare.

Credit Recommendation: Credit is not recommended because of the military specific nature of the course (5/74).

NV-2202-0052
1 ANTI-SUBMARINE AIR CONTROL
2 ANTI-SUBMARINE AIR CONTROL
   OFFICER AND ENLISTED
3 ANTI-SUBMARINE AIR CONTROL, CLAS
   S C/O

Course Number: K-00-5501, J-221-0321; K-00-1013, J-221-3212; J-221-3212.
Location: Version 1 Fleet Combat Direction Systems Training Center, Atlantic, Dam Neck, VA, Fleet Anti Submarine War...
firing School, San Diego, CA. Version 2. Air Technical Training Center, Glycine, GA. Version 2. 3-4 weeks (105-141 hours) Version 2. 4-5 weeks (152-164 hours)

Objective: To train officers and senior enlisted personnel to perform as antisubmarine warfare controllers using fixed and rotary-wing techniques and procedures.

Instruction: Lectures and practical exercises in antisubmarine warfare control using fixed and rotary-wing techniques and procedures, including search and rescue, oceanography, submarine capabilities, coordinated antisubmarine warfare operations, intelligence procedures, aircraft control, attack procedures, communications and emergency procedures, helicopters and sonar characteristics, and associated light, multipurpose systems.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (2/74).

NV-2202-0053
NAVAL GUNFIRE AIR SPOTTER
Course Number: H-2G-5443
Location: Amphibious School, San Diego, CA
Length: 3 weeks (114-163 hours).

Exhibit Dates: 2/66-Present

Objectives: To train officers to request and control artillery and close air support, and to perform as gunfire air spotters.

Instruction: Lectures and practical exercises in the procedures for requesting and controlling artillery and close air support, and the function of gunfire air spotters, including amphibious operations, use of artillery, air support, and supporting arms coordination; ordnance and weapons systems; fire observation; map reading; shipboard gunnery control systems, fire procedures, communications, and aviation ordnance and effects.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (12/68).

NV-2202-0054
BASIC SIGNALMAN
*Course Number: K-201-2115; J-201-615; K-201-640
Location: Fleet Training Center, San Diego, CA, Fleet Training Center, Newport, RI; Fleet Training Center, Pearl Harbor, HI.
Length: 6 weeks (180 hours).

Exhibit Dates: 10/63-Present

Objectives: To train enlisted personnel as watchstanders.

Instruction: Lectures and practical exercises in visual communications procedures, including international Morse code, flag identification and flaghoist signaling, publications, flashing light and semaphore drills and positions, and message construction and interpretation.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/74).

NV-2202-0055
SUPPORTING ARMS COORDINATION (Supporting Arms Coordinator)
Course Number: G-2G-6449.
Location: Amphibious School, Little Creek, Norfolk, VA.
Length: 3 weeks (218-227 hours).

Exhibit Dates: 10/69-Present.

Objectives: To qualify officers to perform as supporting-arms coordinators on amphibious staffs.

Instruction: Lectures and practical exercises in the planning and coordination of naval gunfire with air and artillery support, planning naval gunfire support of amphibious operations, and SACC operations. Includes: map reading, and supporting-arms coordination, planning naval gunfire support of operations ashore, conduct of fire, and supporting-arms coordination.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/74).

NV-2202-0056
SUBMARINE OFFICERS Indoctrination
Course Number: A-2E-0029, F-00-012
Location: Submarine School, Groton, CT
Length: 5 weeks (134-142 hours).

Exhibit Dates: 8/70-Present.

Objectives: To qualify officers who have had training in nuclear power as officers on nuclear-powered submarines.

Instruction: Lectures and practical exercises in the duties of officers on nuclear-powered submarines, including vital ship control systems (hydraulics, steering and diving, trim and draft, movement, high- and low-pressure air, main ballast tanks, electrical distribution, ventilation, and snowplows), diving principles, recovery operations, communications, shiphandling, navigational principles, submarine sensors (including sonar), sonar propagation principles, and basic electronics procedures.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/74).

NV-2202-0057
TROOP NAVAL GUNFIRE SPOTTER
Course Number: G-2E-6435, G-2G-6435, G-041-6435.
Location: Amphibious School, Little Creek, VA.
Length: 3 weeks (108-116 hours).

Exhibit Dates: 10/66-Present.

Objectives: To train officers and noncommissioned officers to perform as naval gunfire spotters.

Instruction: Lectures and practical exercises in troop organization and coordination of naval gunfire at the spotter level, including administration, gunfire support, communications, fire support ships and ordnance, fire planning and coordination, conduct of fire, principles of observation, gunfire teams and communication nets, characteristics and operation of the radar beacon, and communications equipment.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/74).

NV-2202-0058
NAVAL GUNFIRE LIAISON OFFICER
Course Number: G-2G-6434
Location: Amphibious School, Little Creek, VA.
Length: 6-9 weeks (271-390 hours).

Exhibit Dates: 1/68-Present

Objectives: To train officers to perform as gunfire liaison officers.

Instruction: Lectures and practical exercises in the duties of gunfire liaison officers, including troop organization and operations, communications, map reading, conduct of fire, gunfire spotting, supporting arms, gunfire support planning, and command and control.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/74).

NV-2202-0059
NAVAL GUNFIRE AIR SPOTTER
Course Number: G-2G-6438
Location: Amphibious School, Little Creek, Norfolk, VA.
Length: 2 weeks (88 hours).

Exhibit Dates: 12/72-Present.

Objectives: To train officers as naval gunfire air spotters.

Instruction: Lectures in naval gunfire support introduction, fire support ships operation, ordnance and gunnery, naval gunfire planning and coordination, air observer procedures, administrative procedures, and physical training.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/74).

NV-2202-0060
NAVAL GUNFIRE LIAISON OFFICER
Course Number: H-2G-5444
Location: Amphibious School, Coronado, San Diego, CA.
Length: 7 weeks (265-339 hours).

Exhibit Dates: 1/66-Present.

Objectives: To train officers to be naval gunfire liaison officers.

Instruction: Lectures and practical exercises in troop organization and operation, spotting and coordination of naval gunfire with air and artillery support, planning naval gunfire support of amphibious operations, communications, map reading, target intelligence, aerial reconnaissance, identification, ammunition, and physical training.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (12/68).

NV-2202-0061
SHORE FIRE CONTROL PARTY ENLISTED
(MODIFIED FOR U.S. MARINE CORPS RESERVE)
Course Number: H-041-5442A
Location: Amphibious School, Coronado, San Diego, CA.
Length: 2 weeks (78 hours).

Exhibit Dates: 7/70-Present.

Objectives: To train fire control personnel as communicators and spotters on shore fire control parties.

Instruction: Lectures and practical exercises in amphibious operations, administration, military organization, map reading, naval ordnance and weapons systems, and communications equipment and procedures.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/74).

NV-2202-0062
SHORE FIRE CONTROL PARTY ENLISTED
Course Number: H-041-5442.
Location: Amphibious School, Coronado, San Diego, CA.
Length: 3-4 weeks (132-210 hours).

Exhibit Dates: 7/66-Present.

Objectives: To train enlisted personnel in naval gunfire techniques.

Instruction: Lectures and practical exercises in amphibious operations, administration, military organization, map reading, naval ordnance, and weapons systems, and communications equipment and procedures.

Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (5/74).
COURSE EXHIBITS

设备、操作、程序、机读、目标，以及战斗技术。

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (5/74).

NV-2202-0063
GUNNER'S MATE SPECIALIZED TRAINING
Course Number: A-071-0021
Location: Amphibious School, Coronado, San Diego, CA.
Length: 2 weeks (72 hours)
Exhibit Dates: 11/72-Present
Objectives: To train officers and enlisted personnel in the tactical, technical, and administrative phases of the Gunner's Mate Specialty.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (5/74).

NV-2202-0064
NAVAL GUNFIRE SPOTTERS (TROOP OFFICERS)
Course Number: H-2G-5445
Location: Amphibious School, Coronado, San Diego, CA.
Length: 3 weeks (115-153 hours)
Exhibit Dates: 7/66-Present
Objectives: To train officers to supervise gunnery spotting and to perform as gunnery spotting personnel.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (12/68).

NV-2202-0065
LEADERSHIP SCHOOLS CLASS C-1
Course Number: Not available
Location: Service School Command, San Diego, CA; Naval Schools Command, Norfolk, VA; Naval Schools Command, Great Lakes, IL.
Length: 4 weeks (120 hours)
Exhibit Dates: 1/61-12/68
Objectives: To provide enlisted personnel with leadership training.

Instruction: Lectures in leadership training, including the Navy's role in world af-, fairs, human relations, petty officer duties and responsibilities, and command leadership training programs.

Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (5/74).

NV-2202-0066
BOAT GROUP OFFICERS
Course Number: H-2E-5313
Location: Amphibious School, Coronado, San Diego, CA.
Length: 6 weeks (240 hours)
Exhibit Dates: 4/72-12/68
Objectives: To train officers to supervise boat groups in ship-to-shore amphibious operations.

Instruction: Lectures and practical exercises in landing craft and amphibious vehicle operation, control of assault boat miles in practice movements, beaching and re-
NV-2202-0075

**ELECTRIC HYDRAULIC POWER DRIVE FOR 5"/38 CALIBER DUAL PURPOSE SINGLE MOUNT**

**Course Number**: K-041-2050
**Location**: Fleet Training Center, San Diego, CA
**Length**: 2 weeks (60 hours)
**Exhibit Dates**: 10/72-Present

**Objectives**: To train enlisted personnel to operate, maintain, repair, and analyze the 5"/38 caliber and Mk 6 elevation power drive.

**Instruction**: Lectures and practical exercises in the maintenance and repair of the electric hydraulic power drive for the 5"/38 caliber gun mount. Course includes hydraulic systems, electronic systems, local and automatic control, elevation, and train indicator receiver regulator, and the interlocking command system.

**Credit Recommendation**: Credit is not recommended because of the limited technical nature of the course (6/74).

NV-2202-0076

**BASIC QUARTERMASTER**

**Course Number**: K-772-600
**Location**: Fleet Training Center, Pearl Harbor, HI
**Length**: 4 weeks (120 hours)
**Exhibit Dates**: 6/64-12/68

**Objectives**: To train enlisted personnel to stand quartermaster watches.

**Instruction**: Lectures and practical exercises in charts and related publications, navigational aids, time and timetapes, logs, compasses and compass error, weather, tides and currents, sunrise and sunset, azimuths, aircraft bearings, symbols, type of fixes, set and drift, speed and distance, and plotting problems.

**Credit Recommendation**: Credit is not recommended because of the limited technical nature of the course (7/74).

NV-2202-0077

**A-4 CONVENTIONAL WEAPONS COURSE**

**Course Number**: Not available.
**Location**: Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, El Toro, CA; Air Maintenance Training Detachment, Cecil Field, FL; Air Maintenance Training Detachment, San Diego, CA
**Length**: 4 weeks (160 hours)
**Exhibit Dates**: 3/68-Present

**Objectives**: To train enlisted personnel to install and disassemble armament carried on A-4 aircraft.

**Instruction**: Lectures and practical exercises in the installation and disassembly of armament carried on A-4 aircraft. Course includes explosives introduction, safety procedures, aircraft bombs, fuzes, and rockets and launchers.

**Credit Recommendation**: Credit is not recommended because of the limited technical nature of the course (7/74).

NV-2202-0078

**2F87P-3 WEAPON SYSTEM FOLLOW-ON TRAINING**

**Course Number**: Not available
**Location**: Fleet Aviation Specialized Operational Training Group, Pacific, Moffett Field, CA
**Length**: 2 weeks (64 hours)
**Exhibit Dates**: 4/73-Present

**Objectives**: To train flight crew personnel in weapon systems.

**Instruction**: Lectures and practical exercises in weapon systems, including operating sensors for detection, identification, and destruction of enemy submarines.

**Credit Recommendation**: Credit is not recommended because of the military-specific nature of the course (7/74).

NV-2202-0079

**HELICOPTER (HS) ANTI-SUBMARINE WARFARE OPERATOR**

**Course Number**: Not available
**Location**: Fleet Aviation Specialized Operational Training Group, Pacific, Moffett Field, CA
**Length**: 2 weeks (64 hours)
**Exhibit Dates**: 4/73-Present

**Objectives**: To train enlisted personnel to operate the 2F87P-3 weapon system.

**Instruction**: Lectures and practical exercises in 2F87P-3 weapon system operation, including operating sensors required to detect, identify, localize, and destroy hostile submarines.

**Credit Recommendation**: Credit is not recommended because of the military-specific nature of the course (7/74).

NV-2202-0080

**COUNTERINSURGENCY ORIENTATION**

**Course Number**: K-0430-947
**Location**: Amphibious School, Camp Pendleton, CA
**Length**: 2 weeks (80 hours)
**Exhibit Dates**: 11/72-Present

**Objectives**: To train enlisted personnel in airborne sonar operation, including airborne sonar search procedures, aerial plotting, vector beam patterns, sound recognition, group training, and weapon system training.

**Credit Recommendation**: No credit is required.

NV-2202-0081

**COUNTERINSURGENCY ORIENTATION**

**Course Number**: H-000-5219, H-00-5219
**Location**: Fleet Airborne Electronics Training Unit, Pacific North Island, CA
**Length**: 2 weeks (80 hours)
**Exhibit Dates**: 11/72-Present

**Objectives**: To train enlisted personnel in airborne sonar operator.

**Instruction**: Lectures and practical exercises in airborne sonar operation, including airborne sonar search procedures, aerial plotting, vector beam patterns, sound recognition, group training, and weapon system training.

**Credit Recommendation**: No credit is required.

NV-2202-0082

**TALOS TELEMETRY DATA REDUCTION**

**Course Number**: Not available
**Location**: Guided Missiles School, Dam Neck, VA; Schools Command, Mare Island, CA
**Length**: 3 weeks (60 hours)
**Exhibit Dates**: 2/68-Present

**Objectives**: To train officers and enlisted personnel to perform data reduction and analysis of Talos guided missile telemetered flight records.

**Instruction**: Lectures and practical exercises on Talos telemetering data reduction, including fire control system, telemetering system, airborne telemetering equipment, telemeter ground station, and associated evaluation equipment, preparing procedures, Talos data reduction, and flight analysis.

**Credit Recommendation**: Credit is not recommended because of the limited technical nature of the course (7/74).

NV-2202-0083

**TERRIER TELEMETRY DATA REDUCTION**

**Course Number**: Not available
**Location**: Fleet Sonar Operator, AN/AQS-133
**Length**: 3 weeks (90 hours)
**Exhibit Dates**: 4/72-Present

**Objectives**: To train officers and enlisted personnel to perform data reduction and analysis on TERRIER guided missile telemetered flight records.

**Instruction**: Lectures and practical exercises on data reduction and analysis of TERRIER guided missile telemetered flight records, including introduction to airborne and ground station telemetering systems; TERRIER guided missile systems, heads, telemeter ground stations and associated equipment, and specific TERRIER guided missile functional description, data reduction and flight analysis.

**Credit Recommendation**: Credit is not recommended because of the limited technical nature of the course (7/74).

NV-2202-0084

**ASTOR/SUBROC OPERATOR MAINTENANCE**

**Course Number**: K-000-947
**Location**: Nuclear Weapons Training Center, Pacific North Island, CA
**Length**: 3 weeks (90 hours)
**Exhibit Dates**: 5/68-Present

**Objectives**: To train COMSUBPAC personnel in the operation and maintenance of the ASTOR torpedo warhead and the SUBROC warhead.

**Instruction**: Lectures and practical exercises in the operation and maintenance of the ASTOR torpedo warhead and SUBROC warhead, including nuclear weapons administration, nuclear training, and weapons training.

**Credit Recommendation**: Credit is not recommended because of the military-specific nature of the course (7/74).

NV-2202-0085

**3"50 CALIBER RAPID FIRE GUN MOUNT MAINTENANCE**

**Course Number**: K-041-2052
**Location**: Fleet Training Center, San Diego, CA
**Length**: 2 weeks (60 hours)
**Exhibit Dates**: 10/72-Present

**Objectives**: To train enlisted personnel to operate, maintain, adjust, and repair the 3"50 caliber rapid fire gun and mount.

**Instruction**: Lectures and practical exercises in 3"50 caliber rapid fire gun and mount operation, maintenance, and repair, including stand, carriage, training gear, cle-
1-286 COURSE EXHIBITS

vating gear, power drives, electrical installations, gun assembly, and loader
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (8/74).

NV-2202-0086
NAVY NUCLEAR WEAPONS ADVANCED MAINTENANCE
Course Number: A-644-0015
Location: Defense Atomic Support Agency, Albuquerque, NM
Length: 4 weeks (126 hours)
Exhibit Dates: 11/72-Present
Objectives: To train limited-duty officers to maintain nuclear warheads.
Instruction: Lectures and practical exercises in the depot-level maintenance of nuclear warheads, including theory of nuclear warhead components, disassembly, inspection, testing, maintenance, general handling, and safety, and preparation and testing of sealant compounds.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (8/74).

NV-2202-0087
AVIATION INDOCTRINATION, LIMITED DUTY OFFICER (LDO)
Course Number: None
Location: Air Base Training Command, Pensacola, FL.
Length: 8 weeks (296 hours)
Exhibit Dates: 10/64-Present
Objectives: To train limited-duty officers to assume various aviation-related duties.
Instruction: Lectures and practical exercises in aviation indoctrination for limited-duty officers. Course includes naval leadership, organization, administration, naval history and operations, and physical training.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (8/74).

NV-2202-0088
AVIATION RESERVE OFFICER CANDIDATE (AVROC)
Course Number: None
Location: Air Base Training Command, Pensacola, FL.
Length: Version 1: 16 weeks (440 hours), Version 2: 12-16 weeks (404-489 hours)
Objectives: To train military personnel to be aviation officers.
Instruction: This course is the same as NV-2202-0087, except that reserve personnel complete it in two 6- or 8-week summer sessions. Topics include: naval history, orientation to the Navy, world affairs, physics, and mathematics; engineering; aerodynamics; aviation physiology; navigation and seamanship, physical fitness and swimming, and applied leadership training.
Credit Recommendation: Version 1: Credit is not recommended because of the military-specific nature of the course (8/74). Version 2: Credit is not recommended because of the military-specific nature of the course (8/74).

NV-2202-0092
ENLISTED-SUBMARINE INDOCTRINATION
Course Number: A-060-0012
Location: Amphibious School, Coronado, San Diego, CA
Length: 6 weeks (197-237 hours)
Exhibit Dates: 7/66-12/68
Objectives: To provide Navy and Marine Corps officers with knowledge and skills in nuclear gunfire planning and employment.
Instruction: Lectures and practical exercises in history of naval gunfire, amphibious raids, organization of military combat units, supporting arms, air control, communications, with special emphasis on landing force aspects.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (7/74).

NV-2202-0093
WOMEN OFFICER CANDIDATE SCHOOL
Course Number: A-00-0051
Location: Women Officer School, Newport, RI.
Length: Version 1: 16 weeks (480 hours), Version 2: 2-3 weeks (182-240 hours)
Objectives: To provide women officer candidates with instruction and training in essential naval subjects which will prepare them to perform duties as naval officers.
Instruction: Study of the Navy role in support of national objectives, international security organization, leadership, management and personnel administration, military justice, and communication skills development.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (7/74).

NV-2202-0094
LIMITED DUTY OFFICER (LDO), INDOCTRINATION
Course Number: None
Location: Naval Schools Command, Newport, RI.
Length: Version 1: 1-3 weeks (217 hours), Version 2: 10 weeks (300 hours), Version 3: 5 weeks (150 hours)
Objectives: To provide orientation and familiarization to newly commissioned officers in the broad scope of customs, traditions, and regulations of the Navy.
Instruction: Lectures and practical exercises in naval leadership, administration, customs, military courtesy, seamanship, military justice, and naval operations.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (11/74).

NV-2202-0095
NAVAL SCHOOL, OFFICER WOMEN (RESERVE)
Course Number: None
Location: Naval Schools Command, Newport, RI.
Length: 15-16 weeks (450-488 hours)
Exhibit Dates: 4/54-Present
Objectives: To provide indoctrination and training in general subjects for personnel on duty in reserve forces.
Instruction: Lectures and practical exercises in basic naval subjects to include administration, communication, operation, naval techniques, regulations, essential techniques and basic psychology of leadership, and naval ideals, customs, and traditions.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (8/74).

NV-2202-0096
CARRIER AVIATION ANTI-SUBMARINE WARFARE (AASW) ACoustic OPERATOR (PA1/AAS)
Course Number: E-210-51
Location: Fleet Airborne Electronics Training Unit, San Diego, CA
Length: 4 weeks (120 hours)
Exhibit Dates: 10/72-Present
Objectives: To train Navy and Marine Corps officers to provide nuclear attack submarines, surface ships, and aircrews with the knowledge and skills necessary to carry out the mission of Anti-Submarine Warfare.
Objectives: To prepare personnel as anti-submarine warfare acoustic operators. Fundamental lectures and practical exercises to include sonobuoys, radio receivers, switch functions, safety, precautions, pre-flight practices, diesel submarines, and foreign submarine identification and operations.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (7/74)

NV-2202-0097
A-364 AI/GUN AND ASSOCIATED SYSTEMS INTERMEDIATE MAINTENANCE
Course Number: C-644-3786
Location: Air Maintenance Training Detachment, Lemoore, CA, Air Maintenance Training Detachment, Cecil Field, FL
Length: 2 weeks (80 hours)
Exhibit Dates: 7/70-Present
Objectives: To train personnel to maintain the M64A1 gun.
Instruction: Lectures and practical exercises to include instruction, inspection, disassembly, repair, reassembly, and testing of the M61A1 gun and control system.
Credit Recommendation: Credit is not recommended because of the limited technical nature of the course (5/74)

NV-2202-0098
NAVAL HUNTING SONAR FAMILIARIZATION (REVIEW)
Course Number: A-130-0081
Location: Mine Warfare School, Charleston, SC
Length: 2 weeks (80 hours)
Exhibit Dates: 11/71-Present
Objectives: To provide personnel with the necessary skills and related knowledge to operate specified sonar sets.
Instruction: Lectures, demonstrations, and practical experience in doctrine, basic sonar principles and procedures for navigation and plotting, and instruction in system capabilities and limitations of the AN/SQQ-14 mine-detecting/classifying sonar.
Credit Recommendation: Credit is not recommended because of the limited, specialized nature of the training (8/77)

NV-2202-0099
FIRE CONTROL SYSTEM (FCS) MK 111 MOD 0 TARGET MOTION ANALYSIS (TMA)
OPERATOR/FAMILIARIZATION
Course Number: A-2F-0036
Location: Guided Missiles School, Dam Neck, VA
Length: 2 weeks (60 hours)
Exhibit Dates: 8/71-Present
Objectives: To instruct personnel in target motion analysis using a specific fire control system.

NV-2202-0100
MARINE NOP: NUCLEAR WEAPONS TRAINING FOR NUCLEAR ORDNANCE PERSONNEL
Course Number: Not available
Location: Nuclear Weapons Training Group, Pacific, North Island, CA
Length: 7 weeks (245 hours)
Exhibit Dates: 6/75-Present
Objectives: To train selected Marine Corps officers and noncommissioned officers for assignment to nuclear operations platoons.
Instruction: Instructors include administration, security, reliability, and safety, and theory of operation, assembly, test, and maintenance of Marine Corps ground-launched weapons.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (6/75)

NV-2202-0101
NAVAL ENLISTED SCIENTIFIC EDUCATION PROGRAM (NESEP)
(NESEP Basic)
Course Number: A-00-4402, A-00-4404, A-00-0109
Location: Officer Candidate School, Newport, RI
Length: 10 weeks (260-350 hours)
Exhibit Dates: 8/70-Present
Objectives: To prepare selected enlisted personnel for commissioning.
Instruction: Classroom and practical instruction in leadership and supervision, naval operations, and general military subjects.
Credit Recommendation: In the lower-division baccalaureate category, 2 semester hours in advanced naval science for completion of ROC II and in advanced naval science for completion of ROC I (see "Instruction" section above) (7/74)

NV-2202-0104
GUN MOUNT 5'/54 MK 42 MOD 10 AND 10
CLASS C
Course Number: A-111-0044
Location: Gunner's Mate School, Great Lakes, IL
Length: 19 weeks (570-592 hours)
Exhibit Dates: 2/70-Present
Objectives: To train personnel in the operation, adjustment, and maintenance of a 5'/54 gun mount.
Instruction: Lectures and practical exercises in gun loaders, hoists, ammunition carriers, and related equipment.
Credit Recommendation: In the vocational certificate category, 2 semester hours in electromechanical hydraulic systems and 2 in electromechanical hydraulics laboratory (9/77)

NV-2202-0105
ADVANCED JEBELI (VP)
Course Number: E-210-44
Location: Fleet Aviation Specialized Operational Training Group, Moffett Field, CA
Length: 2 weeks (70 hours)
Exhibit Dates: 11/72-Present
Objectives: To train personnel in the operation of a specific electronic system.
Instruction: Lectures and practical exercises to include advanced gain analysis, tactical aspects of AQA-7 Jebel intelligence data, and basic sonar theory.
Credit Recommendation: Credit is not recommended because of the military-specific nature of the course (6/75)
Navy Enlisted Ratings Exhibits

NER-AB-001
AVIATION BOATSWAIN'S MATE
ABCS
ABCM
Exhibit Dates: 6/71-Present
Occupational Field: 6 (Aviation Ground Support).

Career Pattern
May progress from ABHC, Chief Aviation Boatswain's Mate, Aircraft Handling; ABFC, Chief Aviation Boatswain's Mate, Fuels; or ABEC, Chief Aviation Boatswain's Mate, Launching and Recovery Equipment; ABEC Master Chief Aviation Boatswain's Mate, Launching and Recovery Equipment; ABCM: Master Chief Aviation Boatswain's Mate, Launching and Recovery Equipment.

Description
ABC, Able to perform the duties required for ABCM (Chief Aviation Boatswain's Mate, Launching and Recovery Equipment). The duties for ABCM include:

- Launching and recovering aircraft
- Hoist and release cables
- Maintaining aircraft safety
- Conducting pre-flight inspections
- Performing post-flight inspections
- Maintaining equipment
- Executing maintenance
- Conducting training
- Providing guidance to junior personnel

ABCS, Able to perform the duties required for ABCS (Chief Aviation Boatswain's Mate, Launching and Recovery Equipment). The duties for ABCS include:

- Launching and recovering aircraft
- Hoist and release cables
- Maintaining aircraft safety
- Conducting pre-flight inspections
- Performing post-flight inspections
- Maintaining equipment
- Executing maintenance
- Conducting training
- Providing guidance to junior personnel

ABCM, Able to perform the duties required for ABCM (Chief Aviation Boatswain's Mate, Launching and Recovery Equipment). The duties for ABCM include:

- Launching and recovering aircraft
- Hoist and release cables
- Maintaining aircraft safety
- Conducting pre-flight inspections
- Performing post-flight inspections
- Maintaining equipment
- Executing maintenance
- Conducting training
- Providing guidance to junior personnel

ABEC, Able to perform the duties required for ABEC (Chief Aviation Boatswain's Mate, Launching and Recovery Equipment). The duties for ABEC include:

- Launching and recovering aircraft
- Hoist and release cables
- Maintaining aircraft safety
- Conducting pre-flight inspections
- Performing post-flight inspections
- Maintaining equipment
- Executing maintenance
- Conducting training
- Providing guidance to junior personnel

NER-AB-001
LAUNCHING AND RECOVERY EQUIPMENT
ABE3
ABE2
ABE1
ABEC
Exhibit Dates: 6/71-Present
Occupational Field: 6 (Aviation Ground Support).

Career Pattern
May progress from ABEC, Chief Aviation Boatswain's Mate, Launching and Recovery Equipment; ABE2, Aviation Boatswain's Mate, Launching and Recovery Equipment, Second Class; ABE1, Aviation Boatswain's Mate, Launching and Recovery Equipment, First Class.

Description
ABE1, Able to perform the duties required for ABE1 (Aviation Boatswain's Mate, Launching and Recovery Equipment, Third Class). The duties for ABE1 include:

- Launching and recovering aircraft
- Hoist and release cables
- Maintaining aircraft safety
- Conducting pre-flight inspections
- Performing post-flight inspections
- Maintaining equipment
- Executing maintenance
- Conducting training
- Providing guidance to junior personnel

ABE2, Able to perform the duties required for ABE2 (Aviation Boatswain's Mate, Launching and Recovery Equipment, Second Class). The duties for ABE2 include:

- Launching and recovering aircraft
- Hoist and release cables
- Maintaining aircraft safety
- Conducting pre-flight inspections
- Performing post-flight inspections
- Maintaining equipment
- Executing maintenance
- Conducting training
- Providing guidance to junior personnel

ABE3, Able to perform the duties required for ABE3 (Aviation Boatswain's Mate, Launching and Recovery Equipment, First Class). The duties for ABE3 include:

- Launching and recovering aircraft
- Hoist and release cables
- Maintaining aircraft safety
- Conducting pre-flight inspections
- Performing post-flight inspections
- Maintaining equipment
- Executing maintenance
- Conducting training
- Providing guidance to junior personnel

NER-AB-001
LAUNCHING AND RECOVERY EQUIPMENT
ABE3
ABE2
ABE1
ABEC
Exhibit Dates: 6/71-Present
Occupational Field: 6 (Aviation Ground Support).

Career Pattern
May progress from ABEC, Chief Aviation Boatswain's Mate, Launching and Recovery Equipment; ABE2, Aviation Boatswain's Mate, Launching and Recovery Equipment, Second Class; ABE1, Aviation Boatswain's Mate, Launching and Recovery Equipment, First Class.

Description
ABE1, Able to perform the duties required for ABE1 (Aviation Boatswain's Mate, Launching and Recovery Equipment, Third Class). The duties for ABE1 include:

- Launching and recovering aircraft
- Hoist and release cables
- Maintaining aircraft safety
- Conducting pre-flight inspections
- Performing post-flight inspections
- Maintaining equipment
- Executing maintenance
- Conducting training
- Providing guidance to junior personnel

ABE2, Able to perform the duties required for ABE2 (Aviation Boatswain's Mate, Launching and Recovery Equipment, Second Class). The duties for ABE2 include:

- Launching and recovering aircraft
- Hoist and release cables
- Maintaining aircraft safety
- Conducting pre-flight inspections
- Performing post-flight inspections
- Maintaining equipment
- Executing maintenance
- Conducting training
- Providing guidance to junior personnel

ABE3, Able to perform the duties required for ABE3 (Aviation Boatswain's Mate, Launching and Recovery Equipment, First Class). The duties for ABE3 include:

- Launching and recovering aircraft
- Hoist and release cables
- Maintaining aircraft safety
- Conducting pre-flight inspections
- Performing post-flight inspections
- Maintaining equipment
- Executing maintenance
- Conducting training
- Providing guidance to junior personnel

NER-AB-001
LAUNCHING AND RECOVERY EQUIPMENT
ABE3
ABE2
ABE1
ABEC
Exhibit Dates: 6/71-Present
Occupational Field: 6 (Aviation Ground Support).

Career Pattern
May progress from ABEC, Chief Aviation Boatswain's Mate, Launching and Recovery Equipment; ABE2, Aviation Boatswain's Mate, Launching and Recovery Equipment, Second Class; ABE1, Aviation Boatswain's Mate, Launching and Recovery Equipment, First Class.
NER-ABF-001

AVIATION BOATSWAIN'S MATE, AIRCRAFT HANDLING

ABH3
ABH2
ABH1
ABHC

Exhibit Dates: 6/71- Present.

Oc-710 Field: 6 (Aviation Ground Support)

Career Pattern

AN: Airman (E-3) ABH3: Aviation Boatswain's Mate, Aircraft Handling, Third Class (E-4) ABH2: Aviation Boatswain's Mate, Aircraft Handling, Second Class (E-5) ABH1: Aviation Boatswain's Mate, Aircraft Handling, First Class (E-6) ABHC: Senior Chief Aviation Boatswain's Mate, Aircraft Handling (E-7) ABCS: Senior, Chief Aviation Boatswain's Mate, Aircraft Handling (E-8) ABCM: Master Chief Aviation Boatswain's Mate (E-9)

Description

Summary: Directs the movement and spotting of aircraft ashore and afloat, operates and maintains ground-handling equipment used for moving and hoisting aircraft, supervises securing of aircraft and equipment, performs crash rescue, firefighting, crash removal, and damage control; performs confiscation, acquisition, and recovering aircraft ABH3: Carries out cockpit emergency entry procedures, knows procedures, for rescuing personnel from crashed aircraft, operates damage-control equipment, life-saving apparatus, and fire and elevator doors, supervises movement and spotting of aircraft ashore and afloat, secures aircraft, performs preventive operator maintenance on aircraft ground-handling equipment, operates and maintains quality control, prepares quarterly maintenance schedules, responsible for materials and supplies for organizational unit, supervises inspection procedures, and to ensure that technical specifications and standards of workmanship are met, inspects and evaluates the operation of repaired or newly installed parts and components of aviation fuel systems and related equipment.

Recommenda- tion

ABH3: In the lower division baccalaureate/associate degree category, 3 semester hours in fire science and 1 in aircraft servicing (2/77).

Recommendation, ABH2: In the lower division baccalaureate/associate degree category, 3 semester hours in fire science and 2 in aircraft servicing (2/77).

Recommendation, ABH1: In the lower division baccalaureate/associate degree category, 3 semester hours in fire science, 3 in aircraft servicing, 3 in personnel supervision, and 1 in record keeping, for a total of 13 semester hours (2/77).

NER-ABH-001

AVIATION BOATSWAIN'S MATE, AIRCRAFT HANDLING

ABH3
ABH2
ABH1
ABHC

Exhibit Dates: 6/71- Present.

Oc-710 Field: 6 (Aviation Ground Support)

Career Pattern

AN: Airman (E-3) ABH3: Aviation Boatswain's Mate, Aircraft Handling, Third Class (E-4) ABH2: Aviation Boatswain's Mate, Aircraft Handling, Second Class (E-5) ABH1: Aviation Boatswain's Mate, Aircraft Handling, First Class (E-6) ABHC: Chief Aviation Boatswain's Mate, Aircraft Handling (E-7) ABCS: Senior Chief Aviation Boatswain's Mate (E-8) ABCM: Master Chief Aviation Boatswain's Mate (E-9)

Description

Summary: Directs the movement and spotting of aircraft ashore and afloat, operates and maintains ground-handling equipment used for moving and hoisting aircraft, supervises securing of aircraft and equipment, performs crash rescue, firefighting, crash removal, and damage control; performs confiscation, acquisition, and recovering aircraft ABH3: Carries out cockpit emergency entry procedures, knows procedures, for rescuing personnel from crashed aircraft, operates damage-control equipment, life-saving apparatus, and fire and elevator doors, supervises movement and spotting of aircraft ashore and afloat, secures aircraft, performs preventive operator maintenance on aircraft ground-handling equipment, operates and maintains quality control, prepares quarterly maintenance schedules, responsible for materials and supplies for organizational unit, supervises inspection procedures, and to ensure that technical specifications and standards of workmanship are met, inspects and evaluates the operation of repaired or newly installed parts and components of aviation fuel systems and related equipment.

Recommenda- tion

ABH3: In the lower division baccalaureate/associate degree category, 3 semester hours in fire science and 1 in aircraft servicing (2/77).

Recommendation, ABH2: In the lower division baccalaureate/associate degree category, 3 semester hours in fire science and 2 in aircraft servicing (2/77).

Recommendation, ABH1: In the lower division baccalaureate/associate degree category, 3 semester hours in fire science, 3 in aircraft servicing, 3 in personnel supervision, and 1 in record keeping, for a total of 13 semester hours (2/77).

Recommendation, ABHC: In the lower division baccalaureate/associate degree category, 3 semester hours in fire science, 3 in aircraft servicing, 3 in personnel supervision, and 1 in record keeping, and additional credit in fire science on the basis of institutional evaluation, for a minimum total of 16 semester hours (2/77).
NAVI ENLISTED RATINGS EXHIBITS 2-3

NER-AC-001
AIR TRAFFIC CONTROLLER (Air Traffic Controller)

AC3
AC2
AC1
ACC
ACCS
ACCM

Exhibit Dates: 6/71-Present.

Occupational Field: 7 (Air Traffic Control).

Career Pattern
ACC (Airman (E-3), ACC (Air Traffic Controller First Class (E-4), ACC (Air Traffic Controller Second Class (E-5), ACC (Air Traffic Controller First Class (E-6), ACCS: Chief Air Traffic Controller (E-7), ACCS: Senior Chief Air Traffic Controller (E-8), ACCM: Master Chief Air Traffic Controller (E-9).

Description

Summary: Performs air traffic control duties at air control towers, radar air traffic control facilities, and, at operations offices, directs aircraft under, VFR and IFR conditions, interprets FAA regulations pertaining to air traffic control, directs aircraft under visual flight rules, records instrument flight rules clearances and relays to aircraft, issues instructions to vehicular traffic on the airfield and to aircraft on the ground relative to taxiing, parking, and related airport information, issues instructions to fire, crash, and rescue equipment for emergency landings, crashes, and accidents, identifies airfield markings and lighting systems, directs on-the-spot field operations, identifies equipment and coordinates instrument electronic aids to air navigation, uses standard aeronautical charts and publications used in air navigation, interprets ATC regulations and applies them to aircraft, directs aircraft under instrument flight rules, obtains control of aircraft experiencing emergencies, directs aircraft experiencing emergencies, identifies personnel, and coordinates traffic facilities; supervises air traffic control activities.

Recommendation, ACC

In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 6 semester hours in air traffic control equipment, 6 in traffic management, and 3 in federal aviation regulations, for a total of 15 semester hours (2/77).

Recommendation, ACCS

In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 9 semester hours in air traffic control, 6 in air traffic management, and 3 in federal aviation regulations, for a total of 18 semester hours (2/77).

Recommendation, ACCM

In the vocational certificate category, the recommendation is the same as that for ACC. In the lower-division baccalaureate/associate degree category, 9 semester hours in air traffic control, 6 in air traffic management, and 3 in federal aviation regulations, for a total of 18 semester hours (2/77).

Recommendation, AC2

In the lower-division baccalaureate/associate degree category, 3 semester hours in safety management and 3 in principles of administration, add the 30 semester hours required for ACC, add the 30 semester hours required for ACCS.

Recommendation, ADCS

In the vocational certificate category, use the recommendation for either ADJC, Chief Aviation Machinist's Mate, Jet Engine Mechanic, Second Class (E-7), or ADRC, Chief Aviation Machinist's Mate, Reciprocating Engine Mechanic, First Class (E-7), for ADCS. In the lower-division baccalaureate/associate degree category, 3 semester hours in safety management and 3 in principles of administration, add the 30 semester hours recommended for either ADJC (Chief Aviation Machinist's Mate, Jet Engine Mechanic) in exhibit NER-AD-001, or ADRC (Chief Aviation Machinist's Mate, Reciprocating Engine Mechanic) in exhibit NER-AD-002, or AD1, and ADCS'.

NER-AD-001
AVIATION MACHINIST'S MATE, SENIOR CHIEF

ADCS

Exhibit Dates: 6/71-12/76.

Occupational Field: 5 (Aviation Maintenance/Weapons).

Career Pattern

May progress from either ADJC, Chief Aviation Machinist's Mate, Jet Engine Mechanic, Second Class (E-7), or ADRC, Chief Aviation Machinist's Mate, Reciprocating Engine Mechanic, First Class (E-7), for ADCS. Senior Chief Aviation Machinist's Mate (E-8), Master Chief Aircraft Maintenanceman (E-9).

Description

Manages, supervises, and administrates powerplant work centers, plans safety programs for aircraft powerplants, related equipment, and work centers, interprets maintenance instructions and directives, ensures that established procedures are followed for conducting ground tests and inspections to maintain desired quality level, applies quality control concepts, evaluates repair requirements and requests technical assistance, and conducts maintenance work, as needed, determines capabilities, limitations, and reliability of aircraft powerplants and related systems; administers long-range planned maintenance program, organizes, schedules, and evaluates training programs; prepares local directives and instructions; prepares correspondence.

Recommendation, ADCS

In the vocational certificate category, use the recommendation for either ADJC, Chief Aviation Machinist's Mate, Jet Engine Mechanic, Second Class (E-7), or ADRC, Chief Aviation Machinist's Mate, Reciprocating Engine Mechanic, First Class (E-7), for ADCS. In the lower-division baccalaureate/associate degree category, 3 semester hours in safety management and 3 in principles of administration, add the 30 semester hours recommended for either ADJC (Chief Aviation Machinist's Mate, Jet Engine Mechanic) in exhibit NER-AD-001, or ADRC (Chief Aviation Machinist's Mate, Reciprocating Engine Mechanic) in exhibit NER-AD-002, or AD1, and ADCS.'
Occupational Field: 5 (Aviation Maintenance/Weapons).

Career Pattern

May progress from either ADC, Chief Aviation Machinist's Mate (E-7), or ADRC, Chief Aviation Machinist's Mate, Reciprocating Engine Mechanic (E-7) ADCS, Senior Chief Aviation Machinist's Mate (E-6) AFCM: Master Chief Aircraft Maintenanceman (E-9)

Description

Manages, supervises, and administers power plant work centers, plans safety program pertaining to aircraft power plants, related equipment, and work centers, interprets maintenance instructions and directives, ensures that established procedures are followed, conducting ground tests and inspections to maintain desired quality level, applies quality control concepts, evaluates repair requirements and requests technical assistance, as needed; determines capabilities, limitations and reliability of aircraft power plants and related systems, administers long-range plans for maintenance program, organizes, schedules, and evaluates training programs, prepares local directives and instructions, prepares correspondence.

Recommendation, ADCS

In the vocational certificate category, use the recommendation for either AD2 (Aviation Machinist's Mate, Second Class) in exhibit NER-AD-003 or ADRI (Aviation Machinist's Mate, First Class) in exhibit NER-ADR-001, as appropriate. In the lower-division baccalaureate/associate degree category, 3 semester hours in the lower-division baccalaureate category, 6 semester hours for field experience in management, 3 in management problems, 3 in quality control, and 3 in human relations, for a total of 15 semester hours (5/79).

NER-AD-003 AVIATION MACHINIST'S MATE

AD3

AD2

AD1

ADC

Exhibit Dates: 1/77-Present

Occupational Field: 5 (Aviation Maintenance/Weapons)

Career Pattern

AN: Airman (E-3) ADJ: Aviation Machinist's Mate, Third Class (E-4). AD2: Aviation Machinist's Mate, Reciprocating Aircraft Mechanic (E-5).

Description

Summary: Maintains aircraft engines and related systems, including the ingest, cooling, fuel, oil, compression, combustion, turbine, airframe gas-turbine compressors, and exhaust systems, conducts engine and related systems inspections AD1. Replaces gaskets, packings, and seals in fuel and oil systems, performs fuel and oil pressure adjustments, replaces power plant mixture and idle speed, cleans helicopter transmitters, gearboxes, rotor heads, drive shafts, and related parts, removes and installs exterior components, removes and installs fuel tanks, removes and installs igniter plugs, spark plugs, starting ignition units, and leads of ignition and starting systems; identifies airframe engines and fuel samples for contamination; removes, cleans, and replaces fuel and oil filters; uses technical publications, serves aircraft on the flight line, performs troubleshooting of new or overhauled engines installed in aircraft, uses and maintains handtools AD2. Able to perform the duties required for AD2; installs, removes, and operates jet calibration test units, diagnoses defects in fuel and oil systems, rigs and adjusts power controls, fuel selectors, and shutoff valve controls, inspects, removes, and installs helicopter tail rotor transmissions and rotary-wing heads and components, inspectors compressors for proper axial and radial clearances, determines feasibility of local repairs to components of aircraft power plants and related systems, performs cylinder changes and valve clearance adjustments, installs and removes magneto heads, installs carburetors, housings, and propeller controls, maintains aircraft in proper working order, compiles and maintains inventory records, supervises the operation of preventive maintenance, maintains shop files of technical publications, directives, and manuals; is a first-line supervisor of a 3- to 7-person group AD1. Able to perform the duties required for AD2; troubleshoots malfunctions in power plant systems, removes and installs bladder and self-sealing fuel cells; inspect, removes, and installs components of jet engines, fuel systems, jet engines, and auxiliary power plant and components, performs technical inspections, prepares technical publications, directs, and performs technical maintenance.

Recommendation, AD3

In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 12 semester hours in aircraft engine maintenance and repair and 3 in aviation maintenance technology (5/79).

Recommendation, ADJ

In the vocational certificate category, 15 semester hours in aircraft engine maintenance and repair and 6 in aviation maintenance technology in the lower-division baccalaureate/associate degree category, 15 semester hours in aircraft engine maintenance and repair, 6 in aviation maintenance technology, 3 in personnel supervision, and 2 in management, for a total of 23 semester hours (5/79).

Recommendation, ADC

In the vocational certificate category, the recommendation is the same as that for AD2. In the lower-division baccalaureate/associate degree category, 15 semester hours in aircraft engine maintenance and repair, 6 in aviation maintenance technology, 3 in personnel supervision, 3 in management, and 3 in shop management, for a total of 30 semester hours In the upper-division baccalaureate category, 3 semester hours for field experience in management (5/79).

NER-ADJ-001 AVIATION MACHINIST'S MATE, JET ENGINE MECHANIC

ADJ3

ADJ2

ADJ1

ADJ

Exhibit Dates: 6/71-12/76 (Effective 1/77, ADJ was discontinued and its functions were consolidated into AD, Aviation Maintenanceman.)

Occupational Field: 5 (Aviation Maintenance/Weapons)

Career Pattern


Description

Supervises, maintains aircraft jet engines and related systems, including the ingest, cooling, fuel, oil, compression, combustion, turbine, airframe gas-turbine compressors, and exhaust systems, conducts engine and related systems inspections AD1. Replaces gaskets, packings, and seals in fuel and oil systems, performs fuel and oil pressure adjustments, replaces power plant mixture and idle speed, cleans helicopter transmitters, gearboxes, rotor heads, drive shafts, and related parts, removes and installs exterior components, removes and install fuel tanks, removes and installs igniter plugs, spark plugs, starting ignition units, and leads of ignition and starting systems; identifies airframe engines and fuel samples for contamination; removes, cleans, and replaces fuel and oil filters; uses technical publications, serves aircraft on the flight line, performs troubleshooting of new or overhauled engines installed in aircraft, uses and maintains handtools AD2. Able to perform the duties required for AD2; installs, removes, and operates jet calibration test units, diagnoses defects in fuel and oil systems, rigs and adjusts power controls, fuel selectors, and shutoff valve controls, inspects, removes, and installs helicopter tail rotor transmissions and rotary-wing heads and components, inspectors compressors for proper axial and radial clearances, determines feasibility of local repairs to components of aircraft power plants and related systems, performs cylinder changes and valve clearance adjustments, installs and removes magneto heads, installs carburetors, housings, and propeller controls, maintains aircraft in proper working order, compiles and maintains inventory records, supervises the operation of preventive maintenance, maintains shop files of technical publications, directives, and manuals; is a first-line supervisor of a 3- to 7-person group AD1. Able to perform the duties required for AD2; troubleshoots malfunctions in power plant systems, removes and installs bladder and self-sealing fuel cells; inspect, removes, and installs components of jet engines, fuel systems, jet engines, and auxiliary power plant and components, performs technical inspections, prepares technical publications, directs, and performs technical maintenance.
uses and maintains Hamiltons. ADJ2. Able to perform the duties required for ADJ3, installs, removes, and operates jet calibration, detect and diagnose defects in fuel and oil systems, rings and adjusts power controls, fuel selectors, and shut-off valve controls, inspects, removes, and installs helicopter tail rotor transmissions, and repairs upper and lower heads and components, inspects compressors for proper axial and radial clearances, preserves and depressures aircraft power plant systems, performs periodic aircraft inspections, orders technical publications, directives, and manuals, is a first-line supervisor of 3-7 person work group. ADJ3. Able to perform the duties required for ADJ2, troubleshoots malfunctions in power plant systems, removes and installs blader and self-sealing fuel cells, inspects, removes, and installs helicopter intermediate gearboxes, tail rotors, washplates and prop link rods, supervises use of ground support equipment peculiar to power plants and related systems, orders power plant parts, equipment, material, and tools and maintains inventory records; supervises training of subordinates maintaining power plant parts, equipment, and tools, and power plant system components. ADR1. Performs engine installation and evaluates operation of repaired or newly installed power plants and power plant system components, prepares weekly schedules of preventive maintenance, maintains shop files of technical publications, directives, and manuals, supervises medium sized (10-30 persons) work centers. ADR2. Able to perform the duties required for ADJ1; supervises use of engine service, maintenance, and test equipment, and prepares type of information to be recorded in each section of the aircraft log book and aeronautical equipment service report; recommends changes in maintenance instructions; analyzes reports of aircraft engine malfunctions and discrepancies and decides corrective action, analyzes inspection procedures to ensure that technical specifications and standards of workmanship are met, supervises scheduling of work at power plant work centers. ADR3. Performs idle mixture, idle speed, fuel and oil pressure adjustments, inspects, removes, and installs spark plugs, leads, and coils, replaces gaskets, packing, and seals. ADR4. Balances power plant and related system components, prepares weekly schedules of preventive maintenance, orders, inventories, and accounts for power plant parts, equipment, material, and supplies from service, estimates power plant spare parts, equipment, material, and manpower requirements. ADR5. In the vocational certificate category, 12 semester hours in aircraft engine (turbine) maintenance and repair and 3 in aviation maintenance technology (2/77). ADR6. In the vocational certificate category. 15 semester hours in aircraft engine (turbine) maintenance and repair and 6 in aviation maintenance technology. In the lower-division baccalaureate/associate degree category, 15 semester hours in aircraft engine (turbine) maintenance and repair, 6 in aviation maintenance technology, and 2 in personnel supervision for a total of 23 semester hours (2/77). ADR7. In the vocational certificate category, the recommendation is the same as that for ADR3. In the lower-division baccalaureate/associate degree category. 15 semester hours in aircraft engine (turbine) maintenance and repair, 6 in aviation maintenance technology, 3 in personnel supervision, and 2 in maintenance management, for a total of 26 semester hours (2/77). ADR8. In the lower-division baccalaureate/associate degree category, 15 semester hours in aircraft engine (turbine) maintenance and repair, 6 in aviation maintenance technology, and 3 in personnel supervision, for a total of 24 semester hours (2/77).
NAVY ENLISTED RATINGS EXHIBITS

son, in maintenance management, and 3 in shop management, for a total of 30 semester hours. In the upper-division baccalaureate category, 3 semester hours for field experience in management (2/77)

NER-AE-001

AVIATION ELECTRICIAN'S MATE

AE3

AE2

AE1

AEC

AECS

Exhibit Dates: 6/71-Present

Occupational Field: 5 (Aviation Maintenance/Warships)

Career Pattern


Description

Summary: Maintains and repairs lighting, control, and power systems on aircraft, including generators, conversion, and distribution systems, aircraft battegrs, interior and exterior lighting; electrical control of aircraft systems, including hydraulic, landing gear, flight control, utility, and power plant and related systems; instrument systems, including aircraft engine, flight, and other indicating and warning systems; automatic (A/C) flight control and stabilization systems; aircraft compass systems; attitude reference systems; and inertial navigation systems. NOTE: Duty assignments have made simplified versions; conducts on-the-job training programs; may have attended short training programs pertaining to aircraft electrical systems and test equipment; prepares quarterly schedules of preventive maintenance; supervises quality control; provides technical assistance in aircraft accident investigations. AECs: Able to perform the duties required for AE3, oversees three shops; serves as liaison with other Navy units; administers quality control programs; prepares directives, instructions, and correspondence; advises on personnel, production, material, and training requirements, administers long-range planned maintenance program and training programs and evaluates their effectiveness; recommends changes in work practices to promote safety and operational readiness.

Recommendation, AE3

In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 3 semester hours in beginning electrical/electronics laboratory and 12 in aircraft electrical maintenance, and additional credit in aircraft electrical maintenance on the basis of institutional evaluation. Qualified to enter an apprentice training program in any electrical trade (2/77).

Recommendation, AE2

In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 3 semester hours in beginning electrical/electronics laboratory, 12 in aircraft electrical maintenance, and 2 in introduction to AC/DC theory, and additional credit in aircraft electrical maintenance on the basis of institutional evaluation, for a minimum total of 17 semester hours. Advanced standing in an electrical meter tester, electrical instrument repairman, or aviation electrical mechanic apprentice training program, or in an apprentice training program for any electrical trade, on the basis of institutional evaluation, for a minimum total of 35 semester hours. In the upper-division baccalaureate category, 3 semester hours for a practicum in management and additional credit in human relations and quality control on the basis of institutional evaluation, for a minimum total of 17 semester hours. Advanced standing in an electrical meter tester, electrical instrument repairman, or aviation electrical mechanic apprentice training program, or in an apprentice training program for any electrical trade, on the basis of institutional evaluation, for a minimum total of 35 semester hours. In the upper-division baccalaureate category, 3 semester hours for a practicum in management and additional credit in human relations and quality control on the basis of institutional evaluation, for a minimum total of 17 semester hours. Advanced standing in an electrical meter tester, electrical instrument repairman, or aviation electrical mechanic apprentice training program, or in an apprentice training program for any electrical trade, on the basis of institutional evaluation, for a minimum total of 35 semester hours.

NER-AF-001

AIRCRAFT MAINTENANCEMAN, MASTER CHIEF

AFCM

Exhibit Dates: 6/71-Present

Occupational Field: 5 (Aviation Maintenance/Weapons)

Career Pattern

May progress to AFCM, Master Chief Aircraft Maintenanceman (E-9), from either ADCS, Senior Chief Aviation Machinist's Mate (E-8), or AMCS (Senior Chief Aviation Structural Mechanic) (E-8).

Description

Able to perform the duties required for either ADCS (Senior Chief Aviation Machinist's Mate) or AMCS (Senior Chief Aviation Structural Mechanic) (E-8) and participates in accident investigations, formulates guidelines for safety inspections and instructions; plans, organizes, implements, and controls activities in compliance with policy statements, operation orders, and directives; forecasts future requirements, plans and initiates actions to satisfy requirements, establishes goals and priorities, reviews and evaluates personnel, equipment, and material requirements; administers personnel, requisition, receipt, and trade procedures; transfers aircraft and component monitors, monitors implementation of preventive maintenance program; serves as liaison with other Navy units; reviews and evalu-
ates inspection records, quality control reports, and flight records to assure that proper maintenance procedures are followed, prepares staff studies and reports, develops operating budgets and monitors expenditures.

**Recommendation**

Use the recommendation for either ADCS (Senior Chief Aviation Machinist's Mate) in exhibit NER-AD-001 or AMCS (Senior Chief Aviation-Structural Mechanic) in exhibit NER-AM-001, as appropriate, and additional credit as follows: In the vocational certificate category, 3 semester hours in technical writing. In the lower-division baccalaureate/associate degree category, 3 semester hours in technical writing and 3 in management electives. In the upper-division baccalaureate category, 6 semester hours for a practicum in management, 3 in management problems, and 3 in human relations, and additional credit in quality control, on the basis of institutional evaluation, for a minimum total of 12 semester hours (2/77).

**NER-AG-001**

**AEROGRAPHER'S MATE**

AG3

AG2

AG1

AGC

AGCS

AGCM

**Exhibit Dates:** 6/71-Present

**Occupational Field:** 23 (Meteorology)

**Career Pattern**


**Description**

**Summary** Observes, collects, records and analyzes meteorological and oceanographic data; makes visual and instrumental observations of weather and sea conditions AG1. Identifies the types and knows the purposes of instruments and equipment used by the weather service; operates and performs routine checks and operator's preventive maintenance for meteorological and oceanographic equipment and instruments; observes, collects, records, and prepares for transmission surface meteorological elements; plots synoptic surface charts, surface charts using aviation observations, constant pressure charts, data from environmental warfare and radar advisors, and a. T, Log P diagrams; determines tracking data from meteorological satellite predict messages; applies grif to meteorological satellite pictures, operates radio receivers, facsimile and teletype equipment, uses publications and directives related to weather communications AG2. Able to perform the duties required for AG3; checks surface observations for accuracy prior to transmission, applies meteorological fundamentals of primary, secondary, and tertiary circulations of the atmosphere and types of weather associated with air masses, frontal systems, and cyclonic and anti-cyclonic systems in drawing weather charts, identifies physical properties of sea water and major current systems and water masses of the ocean, constructs radiological fallout plot from upper wind data, draws synoptic surface charts showing frontal systems, isobars, isallobars, and pressure centers, draws constant-pressure charts showing isobases, isotherms, troughs, ridges, and height centers, interprets oceanographic charts, computes astronomical and tidal data, maintains directives, publications, and climatological records, orders, inventories, and disposition of meteorological and oceanographic equipment, instruments, and supplies AG1. Able to perform the duties required for AG2; prepares short-range (up to 24 hours) environmental forecasts, identifies and classifies weather echoes on radar, computes atmospheric refractive index, analyzes and uses skew T, Log P diagrams in preparing environmental forecasts; prepares and presents weather data for local and extended flights; identifies charts and related products from digital computer; performs calibrations and adjustments to meteorological and oceanographic equipment (excluding electronic components). AGC. Able to perform the duties required for AG1, interprets ocean thermal structure and factors affecting underwater transmission of sound, wind wave, swell generation, and separation in preparing oceanographic forecasts, analyzes and uses constant pressure charts, streamlines charts, surfaces charts, satellite data, and sea condition charts in preparing environmental forecasts; constructs and verifies prognostic surface and constant pressure charts, prepares environmental warnings and advisories; assigns tasks to personnel assigned to weather service units, trains subordinates in correct operating and maintenance procedures for assigned equipment AGCS. Able to perform the duties required for AGC; evaluates recent meteorological and oceanographic developments for integration into local routines, provides climatological, meteorological, and oceanographic data at planning-level meetings, organizes, schedules, and evaluates training programs; administers technical publications library; prepares directives and instructions for attaining organizational objectives and improving operations; prepares correspondences, establishes and implements a program for interviewing, assigning, and evaluating personnel AGCM: Able to perform the duties required for AGCS, prepares statistical analyses of climatological data and provides information on the uses, capabilities, and limitations, reviews personnel, equipment and material requirements and forecasts future requirements, establishes goals and sets priorities; develops operating budgets and monitors expenditures.

**Recommendation, AG3**

In the lower-division baccalaureate/associate degree category, 2 semester hours in meteorology and 2 in meteorology laboratory (2/77).

**Recommendation, AG2**

In the lower-division baccalaureate/associate degree category, 3 semester hours in meteorology, 3 in atmospheric environment, 2 in meteorology laboratory, and 11 in oceanography, for a total of 9 semester hours (2/77).

**Recommendation, AG1**

In the lower-division baccalaureate/associate degree category, 3 semester hours in meteorology, 3 in atmospheric environment, 3 in meteorology laboratory, 2 in climatology, and 1 in oceanography, for a total of 12 semester hours. In the upper-division baccalaureate category, 1 semester hour in atmospheric physics (2/77).

**Recommendation, AGCM**

In the lower-division baccalaureate/associate degree category, 3 semester hours in meteorology, 3 in atmospheric environment, 3 in meteorology laboratory, 3 in climatology, 2 in oceanography, and 1 in personnel supervision, for a total of 13 semester hours. In the upper-division baccalaureate category, 1 semester hour in atmospheric physics (2/77).

**NER-AX-001**

**AVIATION STOREKEEPER**

AK3

AK2

AK1

AKC

AKCS

AKCM

**Exhibit Dates:** 6/71-Present

**Occupational Field:** 16 (Logistics)

**Career Pattern**


**Description**

**Summary** Receives, identifies, stores, and issues aviation supplies, spare parts, and equipment, maintains stock control records; conducts inventories; AK3: Applies automated data processing (ADP) supply procedures, operates various office machines, receives, verifies for quantity and condition, and acknowledges the receipt of materials, issues materials; maintains receipt control records, prepares and submits requisitions, purchase, and transportation documents, types at (20 words per minute), routes, and files correspondence, messages, and forms; operates material-handling equipment and microfiche/microfilm reader equipment. AK2: Able to perform the duties required for AK3; drafts correspondence and messages, monitors daily status of funds and prepares rough periodic financial reports, maintains equippage inventories and records, conducts inventories, carries out procedures for maintaining, expediting, and...
processing components, awaiting parts, applies procedures for control and accounting of classified equipment, maintains files of purchase orders and invoices, performs the duties required for AK2, reviews computer output for accuracy of data content, insures compliance with procedures for records division, prepares maintenance tacker files and a technical library; accounts for damaged, overage, and short shipments and deliveries, develops storage plans, prepares correspondence and messages. AK: Able to perform the duties required for AK1, monitors shipboard uniform automated data processing system procedures appropriate to support, develops layout of offices, storerooms, and issue rooms to facilitate efficient operations; organizes and administers elements of aviation supply activities, prepares lists of material and supplies; organizes and administers elements of aviation supply activities, prepares lists of material and supplies, and controls activities in compliance to policies, statements, operation orders, directives; supervises the administrative, control, material, and fiscal functions of an aviation supply department, forecasts future requirements, plans and initiates actions to satisfy requirements, establishes goals and promotes evaluation of supply procedures and personnel, equipment, and material requirements; develops operating budgets and monitors expenditures.

**Recommendation, AK1**

In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 2 semester hours in record keeping, 1 in office procedures, for a total of 3 semester hours (2/77).

**Recommendation, AK2**

In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 2 semester hours in record keeping, 1 in office procedures, for a total of 3 semester hours (2/77).

**Recommendation, AKC**

In the vocational certificate category, 3 semester hours in record keeping, 2 in office machines, 2 in office management, and 1 in office procedures, for a total of 6 semester hours (2/77).
equipment; trains subordinates on operation, maintenance, and repair of aircraft environmental system and egress system, orders technical publications, directives, and manuals; maintains shop files of technical publications, directives, and manuals; adjusts cockpit canopy mechanisms and linkages, tests cockpit and cabins for pressure tightness, leaks, proper pressure, and temperature control; inspects, tests, and adjusts firing mechanisms in ejection seats, lap belts, canopies, and other cartridge-activated emergency escape systems; analyzes air conditioning, pressurization, and utility systems malfunctions, isolates defective components, and determines corrective action; inspects installation and evaluates operation of repaired or newly installed parts and components, supervises inspections; prepares weekly schedules of preventive maintenance AMEC: Able to perform the duties required for AME1: interprets technical publications and directives, plans, organizes, and lays out work centers, maintains work center inventories, prepares local reports, monitors inspection procedures to ensure that technical specifications and standards of workmanship are met, prepares quarterly schedules of preventive maintenance, maintains work center inventory records, estimates spare parts, supplies, equipment, and manpower requirements.

Recommendation, AMEC

In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 10 semester hours in aircraft safety and warning systems, and 3 in aviation maintenance technology (2/77).

Recommendation, AMEC

In the vocational certificate category, 12 semester hours in aircraft safety and warning systems and 4 in aviation maintenance technology. In the lower-division baccalaureate/associate degree category, 10 semester hours in aircraft safety and warning systems, 4 in aviation maintenance technology, and 2 in personnel supervision, for a total of 18 semester hours (2/77).

Recommendation, AMEC

In the vocational certificate category, 15 semester hours in aircraft safety and warning systems, and 6 in aviation maintenance technology. In the lower-division baccalaureate/associate degree category, 10 semester hours in aircraft safety and warning systems, 6 in aviation maintenance technology, and 2 in maintenance management, for a total of 26 semester hours (2/77).

Recommendation, AMEC

In the vocational certificate category, the recommendation is the same as that for AME1. In the lower-division baccalaureate/associate degree category, 15 semester hours in aircraft safety and warning systems, 6 in aviation maintenance technology, and 2 in maintenance management, for a total of 26 semester hours (2/77).

NER-AMH-001

Aviation Structural Mechanic, Hydraulics

AMH3

AMH2

AMH1

AMHC

Exhibit Dates: 6/71-Present.

Occupational Field: 5 (Aviation Maintenance/Weapons).

Career Pattern

AN: Airman (E-3), AMH3: Aviation Structural Mechanic-Hydraulics, Third Class (E-3); AMH2: Aviation Structural Mechanic, Hydraulics, Second Class (E-5)

AMH1: Aviation Structural Mechanic, Hydraulics, First Class (E-6), AMHC: Chief Aviation Structural Mechanic, Hydraulics (E-7), AMCS: Senior Chief Aviation Structural Mechanic (E-8), AFCM: Master Chief Aircraft Maintenanceman (E-9)

Description

Summary: Maintains hydraulic systems, including main and auxiliary power systems and unit actuating subsystems, lading gear (excluding wheels and tires), brakes, and related pneumatic systems, inspects, removes, and replaces components of hydraulic systems, performs preflight, postflight, and other periodic aircraft inspections. AMH3: Removes and installs check valves, relief valves, sequence valves, restrictors, actuating cylinders, and emergency air bottles, uses schematic diagrams, drawings, and charts to trace systems, fabricates, fits, and tests rigid tubing and flexible hose assemblies; identifies types and designations of fuel, oil, and lubricants, and lubricants used in aircraft, operates ground support equipment; uses and maintains handtools; blends hydraulic systems; adjusts brakes and replaces lining and pads, replaces gaskets, packings, and wipers in hydraulic components; recognizes the effects of high nose levels on the human body. AMH2: Able to perform the duties required for AMH3; is a first-line supervisor of a 4- to 7-person work group; adjusts and replaces hydraulic and pneumatic components of flight control systems; bleed hydraulic power systems and subsystem; removes and instalts pumps, motors, pressure regulators, and recoil struts; checks tests, adjusts, and repairs hydraulic and pneumatic components, replaces master cylinders, power brake valves, and emergency brake system components; troubleshoots malfunctions of landing gear controls, control valves, shock and recoil struts, and shimmery dampers, orders aircraft parts, tools, equipment, and materials; adjusts landing gear controls; locks, doors, wing doors, and actuating linkages. AMH1: Able to perform the duties required for AMH2; supervises 10- to 15-person work groups; trains personnel on aircraft hydraulic/pneumatic systems, supervises landing gear drop checks; maintains shop files of technical publications, directives, and manuals; inspects installation and evaluates operation of newly installed parts and components; supervises aircraft inspections; prepares weekly schedules of preventive maintenance; assists the wheel steering, mechanisms, and actuating linkages and mechanisms. AMHIC: Able to perform the duties required for AMH1, analyzes malfunctions of flight control systems and determining corrective action, determines the need and method for decontamination of a hydraulic system, plans and organizes work centers; provides technical assistance, prepares reports, monitors inspection procedures to ensure that technical specifications and standards of workmanship are met; prepares quarterly preventive maintenance schedules; monitors work center inventory records, estimates spare parts, supplies, equipment, and manpower requirements, diagnoses aircraft irregular flight characteristics and determines corrective action.

Recommendation, AMHC

In the vocational certificate category or in the lower-division baccalaurate/associate degree category, 10 semester hours in hydraulics systems repair and 3 in aviation maintenance technology (2/77).

Recommendation, AMH2

In the vocational certificate category, 15 semester hours in hydraulics systems repair and 6 in aviation maintenance technology. In the lower-division baccalaureate/associate degree category, 15 semester hours in hydraulics systems repair, 6 in aviation maintenance technology, and 2 in personnel supervision, for a total of 27 semester hours (2/77).

Recommendation, AMH1

In the vocational certificate category, the recommendation is the same as that for AMH2. In the lower-division baccalaureate/associate degree category, 15 semester hours in hydraulics systems repair, 6 in aviation maintenance technology, 3 in personnel supervision and 3 in maintenance management, for a total of 27 semester hours (2/77).

NER-AMS-001

Aviation Structural Mechanic, Structures

AMS3

AMS2

AMS1

AMSC

Exhibit Dates: 6/71-Present.

Occupational Field: 5 (Aviation Maintenance/Weapons).

Career Pattern


Description

Summary: Maintains aircraft fuselages, wings, fixed and movable surfaces, airfoils, empennages, seats (except ejection seats), wheels, tires, controls, and mechanisms, installs and rigs flight controls, fabricates and assembles metal parts and makes minor repairs to aircraft skin, installs rivets and
metal fasteners, paints, performs dye penetrant inspections, performs daily preflight, postflight, and other periodic aircraft inspections. AMS2: Uses schematic diagrams, drawings, and charts; prepares layout patterns and templates for metal work; fabricates metal parts and repairs internal structural members, performs periodic aircraft inspections; orders aircraft parts, equipment, materials, and tools; applies corrosion prevention and preservation materials; treats metals chemically after corrosion removal; removes and installs special rivets, metal publications; applies control surface surface treatments and detachable aft fuselage section of aircraft; replaces panels in windshields, canopies, plastic enclosures, and windows, replaces control surfaces; applies transparent paints and cracks; and punctures in reinforced plastics; repairs leaks in integral fuel tanks, is a first-line supervisor of a 3- to 7-person work group. AMS3: Able to perform the duties required for AMS2; troubleshoots and corrects material failures; removes and installs wing panels and stabilizers; corrects balancing of flight control surfaces; performs alignment checks of aircraft; and landing gear; analyzes the extent of corrosion damage; performs repair procedures for aircraft structural damage; inspects aircraft inspections; supervises and evaluates hardness tests and dye penetrant inspections on metals, inspects installation and evaluates operation of repaired, or newly installed parts and components; orders technical publications, directives, and manuals; maintains shop files of technical publications, directives, and manuals; inspects personnel on aircraft structural systems; is a supervisor of a medium-sized (20-30 persons) work center. AMS2: Able to perform the duties required for AMS3; plans, organizes, and lays out work centers; schedules and assigns workloads; maintains work center records, inventory records, and prepares local reports; interprets technical publications, directives, and manuals; analyzes reports of discrepancies and malfunctions and determines corrective actions; monitors inspection procedures to ensure that technical specifications and standards of workmanship are met; prepares quarterly schedules of aircraft maintenance and repair; and 3 in aviation maintenance technology or airframe structures, and 2 in personnel supervision, for a total of 18 semester hours (2/77).

Recommendation, AMS1
In the vocational certificate category, the recommendation is the same as that for AMS1. In the lower-division baccalaureate/associate degree category, 15 semester hours in airframe structures repair, 6 in aviation maintenance technology or airframe structures, and 3 in personnel supervision, and 2 in maintenance management, for a total of 26 semester hours (2/77).

Recommendation, AMS2
In the vocational certificate category, the recommendation is the same as that for AMS1. In the lower-division baccalaureate/associate degree category, 6 semester hours in airframe structures repair, and 3 in aviation maintenance technology or airframe structures, and 2 in personnel supervision, for a total of 18 semester hours (2/77).

Recommendation, AMS3
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 8 semester hours in airframe structures, and 3 in aviation maintenance technology or airframe structures (2/77).

Recommendation, AMS2
In the vocational certificate category, 12 semester hours in airframe structures repair, 6 in aviation maintenance technology or airframe structures, and 4 in aviation maintenance technology or airframe structures, and 2 in personnel supervision, for a total of 18 semester hours (2/77).

Recommendation, AMS2
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 2 semester hours in aviation/aircraft fundamentals (2/77).

NOTE: Credit for airframe (AU) should be granted only after pay grade E-3 has been achieved.
eral squadrons), prepares local directives and instructions, prepares correspondence, interviews, evaluates, and assigns personnel, organizes and schedules training programs, and evaluates their effectiveness. Admists long-range planned maintenance programs, monitors quality control programs, makes degree category, 3 semester hours in applied physics, 3 in applied mathematics, 3 in basic electronics, 3 in record keeping, 3 in industrial safety, 2 in aviation management, personnel management, and 2 in personnel supervision, for a total of 24 semester hours. In the upper division baccalaureate category, 3 semester hours in applied physics, 3 in applied mathematics, 3 in basic mechanical maintenance, 3 in basic electronics, 3 in record keeping, 3 in blueprint reading and schematics, and 3 in technical report writing, for a total of 21 semester hours. In the lower division baccalaureate category, 3 semester hours in applied physics, 3 in applied mathematics, 3 in basic electronics, 3 in record keeping, 3 in industrial safety, 3 in technical writing, 3 in aviation management, 3 in personnel supervision, and 3 in management problems, and additional credit in human relations and personnel management, on the basis of institutional evaluation, for a minimum total of 9 semester hours (2/77). Recommendation, AOCM In the vocational certificate category, the recommendation is the same as that for AOC2. In the lower division baccalaureate/associate degree category, 3 semester hours in applied physics, 3 in applied mathematics, 3 in basic electronics, 3 in record keeping, 3 in basic safety, and 3 in industrial safety, for a total of 15 semester hours. In the upper division baccalaureate category, 3 semester hours in instructional techniques and materials (2/77). Recommendation, AOC3 In the vocational certificate category, the recommendation is the same as that for AOC2. In the lower division baccalaureate/associate degree category, 3 semester hours in applied physics, 3 in applied mathematics, 3 in basic electronics, 3 in record keeping, 3 in industrial safety, 2 in aviation management, personnel management, and 1 in personnel supervision, for a total of 20 semester hours. In the upper division baccalaureate category, 3 semester hours in instructional techniques and materials and additional credit for field experience in management on the basis of institutional evaluation (2/77). Recommendation, AOC5 In the vocational certificate category, the recommendation is the same as that for AOC2. In the lower division baccalaureate/associate degree category, 3 semester hours in applied physics, 3 in applied mathematics, 3 in basic electronics, 3 in record keeping, 3 in industrial safety, 2 in aviation management, personnel management, and 1 in personnel supervision, for a total of 20 semester hours. In the upper division baccalaureate category, 3 semester hours in instructional techniques and materials and additional credit for field experience in management on the basis of institutional evaluation (2/77). Recommendation, AOC5 In the vocational certificate category, the recommendation is the same as that for AOC2. In the lower division baccalaureate/associate degree category, 3 semester hours in applied physics, 3 in applied mathematics, 3 in basic electronics, 3 in record keeping, 3 in industrial safety, 2 in aviation management, personnel management, and 1 in personnel supervision, for a total of 20 semester hours. In the upper division baccalaureate category, 3 semester hours in instructional techniques and materials and additional credit for field experience in management on the basis of institutional evaluation (2/77).
in beginning electrical/electronics laboratory, 3 in applied physics, 3 in introduction to AC/DC theory, 2 in personnel supervision, 2 in maintenance management, and additional credit in aircraft electronics and hydraulics on the basis of institutional evaluation, for a minimum total of 12 semester hours. In an industrial electronics technician apprenticeship training program, 4,000 clock hours of experience and 298 contact hours of related instruction. In a communications electronics technician or industrial instrumentation technician apprenticeship training program, 2,000 clock hours of experience and 144 contact hours of related instruction (2/77).

Recommendation, AQC

In the vocational certificate category, the recommendation is the same as that for AQC. In the lower-division baccalaureate/associate degree category, 3 semester hours in beginning electrical/electronics laboratory, 1 in applied physics, 3 in introduction to AC/DC theory, 3 in personnel supervision, 3 in personnel management, and additional credit in aircraft electronics and hydraulics on the basis of institutional evaluation, for a minimum total of 17 semester hours. The recommendation for advanced standing in an apprenticeship program is the same as that for AQC1 because additional skills are administrative and supervisory in nature (2/77).

Recommendation, AQS

In the vocational certificate category, the recommendation is the same as that for AQS. In the lower-division baccalaureate/associate degree category, 3 semester hours in beginning electrical/electronics laboratory, 1 in applied physics, 3 in introduction to AC/DC theory, 3 in personnel supervision, 3 in personnel management, 3 in shop management, and additional credit in aircraft electronics and hydraulics on the basis of institutional evaluation, for a minimum total of 25 semester hours. In the upper-division baccalaureate category, 3 semester hours for a practicum in management and 1 in technical writing, and additional credit in aircraft electronics and hydraulics on the basis of institutional evaluation, for a minimum total of 18 semester hours. The recommendation for advanced standing in an apprenticeship program is the same as that for AQC2 because additional skills are administrative and supervisory in nature (2/77).

NER-AS-001

Aviation Support Equipment Technician

ASI
ASC
ASCM

Exhibit Dates: 6/71-6/78

Occupational Field: 6 (Aviation Ground Support)

Career Pattern

May progress from ASE2, Aviation Support Equipment Technician, Electrical, Second Class (E-5), or ASH2, Aviation Support Equipment Technician, Hydraulics, Structures, Second Class (E-5), or ASM2, Aviation Support Equipment Technician, Mechanical, Second Class (E-5), to ASC, Aviation Support Equipment Technician, First Class (E-6), or ASC, Chief Aviation Support Equipment Technician (E-7), or ASC, Senior Chief Aviation Support Equipment Technician (E-8). ASC, Master Chief Aviation Support Equipment Technician (E-9).

Description

ASI. Able to perform the duties of ASE2 or ASH2, analyze and diagnose malfunctions of the following systems: hydraulics, pneumatics, electrical power generation, lighting, and control systems, and gas-turbine compressors, determine corrective action, maintain shop files and technical publications, plan shop-work schedule, supervise personnel, perform quality control inspections, prepare schedules of preventive maintenance, requisitions and is responsible for personnel, materials, and equipment. ASC. Able to perform the duties required for ASI, supervises training of personnel who operate, maintain, and repair aviation support equipment, coordinates administration, planning, and workload scheduling, organizes facilities for repair and maintenance of equipment and components, is responsible for all facets of aircraft maintenance, develops operating budget and manpower requirements, and supervises personnel, manages and controls materials and supplies for organizational unit. ASCS. Able to perform the duties required for ASC, in addition to the administrative and supervisory responsibilities, evaluates and monitors maintenance and quality control programs, develops operating budget and monitors expenditures, assists in formulating and implementing the safety program, provides technical information and assistance to subordinate units, prepares maintenance evaluation, and staff support for the organizational unit.

Recommendation, ASI

In the vocational certificate category, use the 15 semester hours for ASE2 (Aviation Support Equipment Technician, Electrical, Second Class) in exhibit NER-ASH-001, or the 12 semester hours for ASH2 (Aviation Support Equipment Technician, Hydraulics, Structures, Second Class) in exhibit NER-ASH-001, or ASH2, 12 semester hours for ASM2 (Aviation Support Equipment Technician, Mechanical, Second Class) in exhibit NER-ASH-001, for a minimum total of 26 semester hours, or the 18 semester hours for ASH2, 18 semester hours for ASM2, 12 semester hours for ASH2, or the 21 semester hours for ASM2, or the 21 semester hours for the lower-division baccalaureate/ associate degree category, 3 semester hours in personnel supervision, 3 in shop management, and additional credit in basic electricity, automotive electricity, electrical test technician, and additional credit in basic electricity, automotive electricity, electrical systems, power generator systems, hydraulics, pneumatic, electrical power generation, lighting, and control systems, and gas-turbine compressors, determine corrective action, maintain shop files and technical publications, plan shop-work schedule, supervise personnel, perform quality control inspections, prepare schedules of preventive maintenance, requisitions and is responsible for personnel, materials, and equipment. ASC. Able to perform the duties required for ASI, supervises training of personnel who operate, maintain, and repair aviation support equipment, coordinates administration, planning, and workload scheduling, organizes facilities for repair and maintenance of equipment and components, is responsible for all facets of aircraft maintenance, develops operating budget and manpower requirements, and supervises personnel, manages and controls materials and supplies for organizational unit. ASCS. Able to perform the duties required for ASC, in addition to the administrative and supervisory responsibilities, evaluates and monitors maintenance and quality control programs, develops operating budget and monitors expenditures, assists in formulating and implementing the safety program, provides technical information and assistance to subordinate units, prepares maintenance evaluation, and staff support for the organizational unit.
NAVY ENLISTED RATINGS EXHIBITS - 2-13

semester hours for ASH2 (Aviation Support Equipment Technician, Hydraulics and Structures, Second Class) in exhibit NER-ASH-001, for a minimum total of 31 semester hours, or the 21 semester hours for ASM2 (Aviation Support Equipment Technician, Mechanical, Second Class) in exhibit NER-ASM-001, for a minimum total of 34 semester hours, as appropriate. In the upper-division baccalaureate category, 3 semester hours for field experience in management and in management problems (2/77).

NER-AS-002
AVIATION SUPPORT EQUIPMENT TECHNICIAN
AS1
ASC
ASCS
ASCM

Exhibit Dates: 7/78-Present. Pending evaluation

NER-ASE-001
AVIATION SUPPORT EQUIPMENT TECHNICIAN, ELECTRICAL
ASE3
ASE2

Exhibit Dates: 6/71-6/78
Occupational Field: 6 (Aviation Ground Support)
Career Pattern

Description
Summary: Services, tests, maintains, and repairs automation and electronic electrical systems in mobile and self-propelled aviation support equipment, electrical components and wiring in auxiliary electrical power units used in servicing aircraft, electrical control systems in gas-turbine compressor units and air-conditioning systems, and electrical and electronic circuitry and components in general aircraft servicing equipment. ASE3 uses precision measuring equipment, electrical test equipment and gasket-combustion-engine analyzers, repairs motors and generators, replaces electrical components of power-generating units, and air-conditioning systems, identifies characteristics of electrical and electronic circuitry and components, maintains maintenance publications, completes maintenance records, tests, services, and maintains hand tools and hoisting and lifting devices. ASE2, able to perform the duties required for ASE3, tests, adjusts, and repairs electrical components of power-generating units, performs electrical load-bank checks and repairs and adjusts transformer rectifier units, repairs malfunctioning electrical components of air-conditioning systems, performs tests, locates malfunctioning, and makes adjustments on gas-turbine compressor, utilizing gas-turbine compressor analyzer.

Recommendation, ASE3
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 4 semester hours in automotive electricity, 4 in basic shop practices, 3 in basic electricity, and 2 in care and use of tools, for a total of 13 semester hours (2/77).

Recommendation, ASE2
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 4 semester hours in automotive electricity, 4 in basic shop practices, 3 in basic electricity, and 3 in care and use of tools, for a total of 15 semester hours (2/77).

NER-ASE-002
AVIATION SUPPORT EQUIPMENT TECHNICIAN, ELECTRICAL
ASE3
ASE2

Exhibit Dates: 7/78-Present. Pending evaluation

NER-ASH-001
AVIATION SUPPORT EQUIPMENT TECHNICIAN, HYDRAULICS AND STRUCTURES
ASH3
ASH2

Exhibit Dates: 6/71-6/78 (Effective 7/78, the ASH rating was discontinued and its duties were incorporated into ASM (Aviation Support Equipment Technician, Mechanical) and SCS (Senior Chief Aviation Support Equipment Technician)).

Occupational Field: 6 (Aviation Ground Support).
Career Pattern

Description
Summary: Services, tests, maintains, and repairs hydraulic and pneumatic systems and structural components of aviation support equipment, maintains hydraulic testers and service equipment, air compressors, test equipment, aircraft, and associated equipment, performs body and fender metal work and painting of aviation support equipment, welds, brazes, and solders, cuts, shapes, and patches metal, adjusts and repairs brake systems. ASH3 uses mechanical precision measuring equipment, electrical test equipment, and internal-combustion-engine analyzers, uses and maintains hand tools, replaces seals, packings, tubing, and flexible hoses of hydraulic systems, removes and flushes hydraulic systems, performs maintenance and repair work, and works on fuel systems, automatic and power transmissions, differentials, and steering systems; maintains gas-turbine compressor units and air-conditioning systems used in servicing aircraft. ASH2 uses mechanical precision measuring equipment, electrical test equipment, and internal-combustion-engine analyzers, uses and maintains hand tools, replaces seals, packings, tubing, and flexible hoses of hydraulic systems, and performs minor engine tune-up. Welds with oxy-acetylene equipment, uses maintenance publications, completes maintenance records, and performs repairs, as required.

Recommendation, ASH3
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 6 semester hours in gas and electric welding, 4 in basic shop practices, 2 in electric welding, and 2 in care and use of tools, for a total of 18 semester hours (2/77).

Recommendation, ASH2
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 6 semester hours in gas and electric welding, 4 in basic shop practices, 2 in electric welding, and 2 in care and use of tools, for a total of 18 semester hours (2/77).

NER-ASM-001
AVIATION SUPPORT EQUIPMENT TECHNICIAN, MECHANICAL
ASM3
ASM2

Exhibit Dates: 6/71-6/78
Occupational Field: 6 (Aviation Ground Support).
Career Pattern

Description
Summary: Services, tests, maintains, and repairs gasoline and diesel engines in mobile and self-propelled aviation support equipment and associated automotive systems, including fuel systems, automatic and power transmissions, differentials, and steering systems; maintains gas-turbine compressor units and air-conditioning systems used in servicing aircraft. ASM3 uses mechanical precision measuring equipment, electrical test equipment, and internal-combustion-engine analyzers, uses and maintains hand tools, replaces seals, packings, tubing, and flexible hoses of hydraulic systems, removes and flushes hydraulic systems, performs maintenance and repair work, and works on fuel systems, automatic and power transmissions, differentials, and steering systems; maintains gas-turbine compressor units and air-conditioning systems used in servicing aircraft. ASM2 uses mechanical precision measuring equipment, electrical test equipment, and internal-combustion-engine analyzers, uses and maintains hand tools, replaces seals, packings, tubing, and flexible hoses of hydraulic systems, removes and flushes hydraulic systems, performs maintenance and repair work, and works on fuel systems, automatic and power transmissions, differentials, and steering systems; maintains gas-turbine compressor units and air-conditioning systems used in servicing aircraft. ASM1 uses mechanical precision measuring equipment, electrical test equipment, and internal-combustion-engine analyzers, uses and maintains hand tools, replaces seals, packings, tubing, and flexible hoses of hydraulic systems, removes and flushes hydraulic systems, performs maintenance and repair work, and works on fuel systems, automatic and power transmissions, differentials, and steering systems; maintains gas-turbine compressor units and air-conditioning systems used in servicing aircraft. ASM0 uses mechanical precision measuring equipment, electrical test equipment, and internal-combustion-engine analyzers, uses and maintains hand tools, replaces seals, packings, tubing, and flexible hoses of hydraulic systems, removes and flushes hydraulic systems, performs maintenance and repair work, and works on fuel systems, automatic and power transmissions, differentials, and steering systems; maintains gas-turbine compressor units and air-conditioning systems used in servicing aircraft.

Recommendation, ASM3
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 6 semester hours in gas and electric welding, 4 hours, 4 in basic shop practices, 2 in electric welding, and 2 in care and use of tools, for a total of 18 semester hours (2/77).

Recommendation, ASM2
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 6 semester hours in gas and electric welding, 4 in basic shop practices, 2 in electric welding, and 2 in care and use of tools, for a total of 18 semester hours (2/77).

Recommendation, ASM1
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 6 semester hours in gas and electric welding, 4 in basic shop practices, 2 in electric welding, and 2 in care and use of tools, for a total of 18 semester hours (2/77).

Recommendation, ASM0
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 6 semester hours in gas and electric welding, 4 in basic shop practices, 2 in electric welding, and 2 in care and use of tools, for a total of 18 semester hours (2/77).
major engine tune-ups, repairs and adjusts transmssions and differentials, performs steering, rear-end alignment, adjusts and maintains air-conditioning systems, inspects compressors and turbneus, makes adjsustments on gas-turbine compressors.

Recommendation, ASM

In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 4 semester hours in base shop practices, 3 in diesel engines, 3 in hydraulic brakes, and 2 in care and use of tools, for a total of 12 semester hours (2/77).

Recommendation, ASM2

In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 6 semester hours in diesel engines, 4 in base shop practices, 3 in hydraulic brakes, 3 in power transmissions, 3 in gas welding, and 2 in care and use of tools, for a total of 21 semester hours (2/77).

NER-ASM-002

Aviation Support Equipment Technician, Mechanical

ASM

ASM2

Exhibit Dates: 7/78-Present Pending evaluation.

NER-AT-001

Aviation Electronics Technician

AT3

AT2

AT1

ATC

ATCS

Exhibit Dates: 6/71-Present

Occupational Field: 5 (Aviation Maintenance/Weapons)

Career Pattern


Description

Summary: Maintains and repairs electronic communications systems and in-flight navigation and detection systems on aircraft. NOTE: Duty assignments are designated at either O-Level (troubleshooting and replacing modular systems on aircraft) or I-Level (disassembling, repairing, and bench-testing modules), persons assigned the AT rating receive equivalent training and must pass the same advancement examinations, regardless of whether duty assignments are between O-Level or I-Level or both.

AT2: Assists in troubleshooting and repairing radar systems, radar and tactical displays; IFV/SIF equipment, radar electronic navigation equipment, analog computing devices, communications systems, CIC and electronics countermeasures equipment, infrared devices, recorder systems, and aircraft digital data systems, follows standard check-out procedures to locate and repair malfunctions, reads schematics and block diagrams, uses oscilloscopes, logic analyzers, frequency counters, and specialized system test equipment, completes maintenance forms and inventories parts and supplies, performs avionics corrosion control. At2 able to perform the duties required for AT3, performs troubleshooting and repair tasks not covered in standard service manuals, knows how to use altimeter, radio, navigation devices, and megger, have attended short training programs in troubleshooting and repairing specialized equipment, serves as crew leader, supervising from two to three persons on a job, maintains technical library and inventory records, tests, and maintains aircraftf radio equipment and antennas AT1: Able to perform the duties required for AT2, serves as shift supervisor, supervising from eight to nine persons, diagnoses routine malfunctions and demonstrates repair techniques, inspects and approves completed work assignments, including the installation of new parts and components; conducts training programs and maintains training records; prepares weekly schedules of preventive maintenance ATC: Able to perform the duties required for ATC; oversees three shops; serves as liaison with other Navy units; administers quality control programs; prepares standard work orders; when required, prepares quarterly schedules of preventive maintenance; supervises quality control programs; provides technical assistance in aircraft acceptance. ATCS: Able to perform the duties required for ATC; oversees three shops; serves as liaison with other Navy units; administers quality control programs; prepares standard work orders; when required, prepares quarterly schedules of preventive maintenance; supervises quality control programs; provides technical assistance in aircraft acceptance.

Recommendation, AT3

In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 3 semester hours in beginning electrical/electronics laboratory, 1 in applied physics, 3 in electronics, 3 in technical writing, 3 in production, and 2 in care and use of tools, for a total of 10 semester hours.

Recommendation, AT2

In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 3 semester hours in beginning electrical/electronics laboratory, 1 in applied physics, 3 in electronics, 3 in technical writing, 3 in production, and 2 in care and use of tools, for a total of 10 semester hours.

Recommendation, AT1

In the vocational certificate category, the recommendation is the same as that for AT2. In the lower-division baccalaureate/associate degree category, 3 semester hours in beginning electrical/electronics laboratory, 1 in applied physics, 3 in in introduction to AC/DC theory, 12 in avionics technology, 3 in personnel supervision, 3 in maintenance management, and 3 in shop management, and additional credit in avionics technology on the basis of institutional evaluation, for a minimum total of 23 semester hours. The recommendation for advanced standing in an apprentice training program is the same as that for AT1 because additional skills are administrative and supervisory in nature.

NER-AV-001

Avionics Technician, Master-Chief

AVCM

Exhibit Dates: 6/71-Present

Occupational Field: 5 (Aviation Maintenance/Weapons)

Career Pattern

May progress to AVCM, Master Chief Avionics Technician (E-9), from AXC, Senior Chief Aviation Avionics Technician (E-8), AEC, Chief Aviation Electrician's Mate (E-8), ATCS, Senior Chief Aviation Electronics Technician (E-8), or AOC, Senior Chief Aviation Fire Control Technician (E-8).

Description

 Able to perform the duties required for AT1 and AT2, AEC, Senior Chief Aviation Avionics Technician (E-8), AEC, Chief Aviation Electrician's Mate (E-8), ATCS, Senior Chief Aviation Electronics Technician (E-8), or AOC, Senior Chief Aviation Fire Control Technician (E-8), plans, organizes, im
pares maintenance plans and staff studies to satisfy requirements, establishes goals and implements, and controls activities in compliance with policy, standards, and quality assurance programs, develops operating budget and monitors expenditures.

Recommendation

In the vocational certificate category, use the recommendation for AE1, (Aviation Electrician's Mate First Class) in exhibits NER-AE-001, or AT2 (Aviation Fire Control Technician Second Class) in exhibit NER-AT-001, or AQ2 (Avionics Fire Control Technician Second Class) in exhibit NER-AQ-001, or AX1 (Aviation Antisubmarine Warfar Technician, First Class) in exhibit NER-AX-001, as appropriate. In the lower-division baccalaureate/associate degree category, add 1 semester hour in technical training to the recommendation for AECS (Senior Chief Aviation Electrician's Mate) in exhibit NER-AE-001 or ATCS (Senior Chief Aviation Fire Control Technician) in exhibit NER-AT-001, or AQC (Senior Chief Aviation Fire Control Technician) in exhibit NER-AQ-001, or AXCS (Senior Chief Aviation Antisubmarine Warfar Technician) in exhibit NER-AX-001, as appropriate. In the upper-division baccalaureate category, 6 semester hours for a practicum in management, 3 in management problems and regulations, and additional credit in quality control on the basis of institutional evaluation, for a minimum total of 12 semester hours (2/77).

NER-AW-001

Aviation Antisubmarine Warfare Operator (Acoustic)

AW1

AW2

AW3

AWC

AWCS

AWCM

Exhibit Dates: 1/75-Present

Occupational Field: 5 (Aviation Maintenance/Airframe)

Career Patterns

AN Airman (E-3), AW3 Aviation Antisubmarine Warfare Technician, Third Class (E-4) AW2 Aviation Antisubmarine Warfare Technician, Second Class (E-5), AW1 Aviation Antisubmarine Warfare Technician, First Class (E-6), AWCS Chief Aviation Antisubmarine Warfare Technician (E-8). Awarded rating and earns the same as that for AWC in the upper-division baccalaureate category. 6 semester hours for field experience in management, 3 in management problems, for a minimum total of 12 semester hours, if served as an instructor. 3 semester hours for a total of 15 semester hours (8/79).

NER-AW-002

Aviation Antisubmarine Warfare Operator (Non-Acoustic)

AW3

AW2

AW1

AWC

AWCS

AWCM

Exhibit Dates: 1/75-Present

Occupational Field: 5 (Aviation Maintenance/Airframe)

Career Patterns

AN Airman (E-3), AW3 Aviation Antisubmarine Warfare Technician, Third Class (E-4), AW2 Aviation Antisubmarine Warfare Technician, Second Class (E-5), AW1 Aviation Antisubmarine Warfare Technician, First Class (E-6), AWCS Chief Aviation Antisubmarine Warfare Technician (E-8). Awarded rating and earns the same as that for AWC in the upper-division baccalaureate category. 6 semester hours for field experience in management, 3 in management problems, for a minimum total of 12 semester hours, if served as an instructor. 3 semester hours for a total of 15 semester hours (8/79).
Recommendation, AW2 (Non-Acoustic)
In the lower-division baccalaureate/associate degree category, 3 semester hours in survey of meteorology. In the upper-division baccalaureate category, if served as an instructor, 3 semester hours for a practicum in teaching (8/79).

Recommendation, AWCM (Non-Acoustic)
In the lower-division baccalaureate/associate degree category, 4 semester hours in survey of meteorology. In the upper-division baccalaureate category, if served as an instructor, 3 semester hours for a practicum in teaching (8/79).

Recommendation, AWS (Non-Acoustic)
In the lower-division baccalaureate/associate degree category, 4 semester hours in survey of meteorology. In the upper-division baccalaureate category, if served as an instructor, 3 semester hours for a practicum in teaching (8/79).

Recommendation, AWCS (Non-Acoustic)
In the lower-division baccalaureate/associate degree category, the recommendation is the same as that for AWC. In the upper-division baccalaureate category, 3 semester hours for field experience in management. In the master degree category, the recommendation is the same as that for AWC. In the upper-division baccalaureate category, if served as an instructor, 3 semester hours for a practicum in teaching, for a total of 12 semester hours (8/79).

Recommendation, AX (Helicopter)
Note. The AX rating is divided into three sections: Acoustic, Non-Acoustic, and Helicopter. For the AC-1 exhibit, NER-AXW-001, the AX (Non-Acoustic) exhibit is NER-AXW-002 Summary. Perform general flight crew duties, operates antisubmarine warfare systems. AW2. Uses both acoustic and non-acoustic devices to detect and track submarines. Analyzes and evaluates operational efficiency for each crewmember. Determines adequate areas of operation and training. Perform the duties of squadron operations department personnel, supervises an antisubmarine warfare division. Preparing correspondence, organizing schedules and training programs. AWCM. Able to perform the duties required for AWCS. Performs as assistant antisubmarine warfare division instrument plan, organizes, implements, and controls activities in compliance with policy statements, reviews personnel, equipment, and material requirements, develops operating budgets and monitors expenditures. AW3 (Helicopter)
In the lower-division baccalaureate/associate degree category, 5 semester hours in emergency medical techniques. In the upper-division baccalaureate category, if served as an instructor, 3 semester hours for a practicum in teaching (8/79).

Recommendation, AX2 (Helicopter)
In the lower-division baccalaureate/associate degree category, 4 semester hours in emergency medical techniques. In the upper-division baccalaureate category, 3 semester hours in emergency medical techniques. In the upper-division baccalaureate category, if served as an instructor, 3 semester hours for a practicum in teaching (8/79).

Recommendation, AX3 (Helicopter)
In the lower-division baccalaureate/associate degree category, 5 semester hours in emergency medical techniques. In the upper-division baccalaureate category, if served as an instructor, 3 semester hours for a practicum in teaching (8/79).

Recommendation, AXC (Helicopter)
In the lower-division baccalaureate/associate degree category, 4 semester hours in emergency medical techniques. In the upper-division baccalaureate category, if served as an instructor, 3 semester hours for a practicum in teaching (8/79).

Recommendation, AXCS (Helicopter)
In the lower-division baccalaureate/associate degree category, 5 semester hours in emergency medical techniques. In the upper-division baccalaureate category, if served as an instructor, 3 semester hours for a practicum in teaching (8/79).

NER-AX-001 AVIATION ANTISUBMARINE WARFARE TECHNICIAN
AX3
AX2
AX1
AXC
AXCS

Exhibit Dates: 1/75-Present
Occupational Field: 5 (Aviation Maintenance/Weapon)

Career Pattern
AX Airman (E-3) AX3. Aviation Anti-submarine Warfare Technician, Third Class (E-4) AX2. Aviation Antisubmarine Warfare Technician, Second Class (E-5) AX1. Aviation Antisubmarine Warfare Technician, Third Class (E-6) AXC. Chief Aviation Antisubmarine Warfare Technician, First Class (E-7) AXCS Senior Chief Aviation Antisubmarine Warfare Technician (E-8).

Description
Summary: Inspects and performs maintenance and in-flight repairs on antisubmarine warfare sensor equipment and associated integrated systems, including those relating to Magnetic Anomaly Detection, underwater detection, acoustic analysis, electronic support measures, computer/data processing, electro-optics, data display, data link, and electromechanical recorders. Operates and maintains associated test equipment. AX3. Performs routine maintenance and replaces defective parts, performs operational ground checks and assists in repair of avionics equipment; assists in maintaining technical library and instrument records. AX2. Able to perform the duties required for AX3, tests and repairs avionics equipment in accordance with technical orders and work procedures. AX1. Tests and repairs avionics equipment, participates in engine maintenance activities, troubleshoots avionics avionics systems, performs operational checks and ground checks of avionics equipment, participates in test flights. AXC. Performs any of the duties performed by AX1, AX2, and AX3.

NER-AW-003 AVIATION ANTISUBMARINE WARFARE OPERATOR (HELICOPTER)
AW3
AW2
AW1
AWC
AWCS
AWCM

Exhibit Dates: 1/75-Present
Occupational Field: 5 (Aviation Maintenance/Weapon)

Career Pattern
AN Airman (E-3) AW3. Aviation Antisubmarine Warfare Technician, Third Class (E-4) AW2. Aviation Antisubmarine Warfare Technician, Second Class (E-5) AW1. Aviation Antisubmarine Warfare Technician, First Class (E-6) AWCS. Senior Chief Aviation Antisubmarine Warfare Technician (E-7) AWCS Master Chief Aviation Antisubmarine Warfare Technician (E-8).

Description
...
pervises maintenance of technical library; prepares weekly schedules of maintenance and inspects quality of work performed to determine effectiveness and take corrective action. AXC: Able to perform the duties required for AX1; prepares and submits periodic reports and evaluates performance of personnel; maintains custody of records and supervises facilities for repair of equipment; prepares maintenance schedules; supervises work center quality assurance programs and provides technical assistance in aircraft accident investigations. AXCS: Able to perform the duties required for AXC; prepares local directives and instructions for attaining organization objectives and improving operations; prepares correspondence; establishes and implements programs for improving operations; evaluates corrective personnel to assure maximum utilization; advises supervisory personnel on production, personnel, material, and training programs; prepares maintenance schedules; evaluates effectiveness and initiates improvements; administers long-range planned maintenance programs; ensures effectiveness of quality assurance programs.

Recommendation, AX3
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 3 semester hours in basic electronics, 2 in troubleshooting techniques, and 2 in introduction to physics, for a minimum total of 7 semester hours (8/79).

Recommendation, AX2
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 3 semester hours in basic electronics, 3 in troubleshooting techniques, 2 in introduction to physics, and 2 in AC/DC circuit theory, for a total of 10 semester hours. In the upper-division baccalaureate category, if served as an instructor, 3 semester hours for a practicum in teaching (8/79).

Recommendation, AX1
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 3 semester hours in basic electronics, 2 in troubleshooting techniques, 2 in introduction to physics, 3 in AC/DC circuit theory, and 3 in personnel supervision, for a total of 15 semester hours. In the baccalaureate category, if served as an instructor, 3 semester hours for a practicum in teaching (8/79).

Recommendation, AX
In the vocational certificate category, the recommendation is the same as that for AX1. In the lower-division baccalaureate/associate degree category, 3 semester hours in basic electronics, 4 in troubleshooting techniques, 2 in AC/DC circuit theory, 3 in personnel supervision, and 3 in human relations, for a total of 18 semester hours. In the upper-division category, if served as an instructor, 3 semester hours for a practicum in teaching (8/79).

Recommendation, AXCS
In the vocational certificate category, the recommendation is the same as that for AX1. In the lower-division baccalaureate/associate degree category, the recommendation is the same as that for AXCS. In the upper-division baccalaureate category, 3 semester hours for field experience in management; 3 in personnel management; and 3 in management, for a total of 9 semester hours; if served as an instructor, 3 semester hours for a practicum in teaching, for a total of 12 semester hours (8/79).

NER-AZ-001
AVIATION MAINTENANCE ADMINISTRATOR
AZ3
AZ2
AZ1
AZC
AZCS
AZCM

Exhibit Dates: 6/71-Present.
Occupational Field: 5 (Aviation Maintenance/Weapons).

Career Pattern

Description
Summary: Performs or supervises clerical duties including typewriting, office machine operations, preparation of correspondence and reports, and records maintenance for the Navy aviation maintenance program. AZ3: Types correspondence and reports (a straight-copy typing rate of at least 20 words per minute is required); uses duplicating or photocopy equipment; maintains files and a technical library; AZ2: Able to perform the duties required for AZ3; prepares, files, and maintains aircraft logs and records; prepares and processes work requests; determines the need for updating aeronautical technical libraries and distributes updates; AZ1: Able to perform the duties required for AZ2; supervises administrative procedures of the office; analyzes data; prepares data in narrative, tabular, chart, and graphic form. AZC: Able to perform the duties required for AZ1; schedules aircraft and equipment for maintenance; coordinates administrative, maintenance actions; screens and interprets messages and instructions; analyzes reports; determines data requirements for aircraft maintenance; able to perform the duties required for AZC; determines personnel and material needs; prepares directives and instructions for improving operations; develops a program for interviewing, evaluating, and assigning personnel for maximum utilization; organizes, schedules, and evaluates training programs; develops objectives for preventive maintenance and quality assurance programs; coordinates the preparation and dissemination of safety instructions applicable to aviation maintenance; overviews information on aviation safety; advises on utilization, capabilities, reliability, and operations. AZCM: Able to perform the duties required for AZCS; formulates guidelines for safety and assists in the analysis of aircraft accident reports; forecasts future requirements; plans and initiates acting to satisfy requirements; establishes goals and priorities; reviews and evaluates space, personnel, equipment, and material requirements; recommends, prepares, and submits aviation maintenance staff studies; plans, organizes, implements, and controls activities in compliance with policy statements, operation orders, and directives; plans and forecasts workload requirements; administers aircraft and component inventories, requisition, receipt, transfer, and survey, develops operating budgets and maintains expenditures.

Recommendation, AZ3
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 3 semester hours in office machines, 2 in filing, and 2 in clerical office procedures, and additional credit in typewriting on the basis of institutional evaluation, for a minimum total of 8 semester hours (2/77).

Recommendation, AZ2
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 3 semester hours in office machines, 2 in filing, 2 in clerical office procedures, and 3 in record keeping, and additional credit in typewriting on the basis of institutional evaluation, for a minimum total of 10 semester hours (2/77).

Recommendation, AZ1
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 3 semester hours in office machines, 2 in filing, 3 in clerical office procedures, 2 in record keeping, 3 in office management, and 3 in business communications, and additional credit in typewriting on the basis of institutional evaluation, for a minimum total of 11 semester hours (2/77).

Recommendation, AZC
In the vocational certificate category, 2 semester hours in office machines, 2 in filing, 3 in clerical office procedures, 3 in record keeping, 3 in office management, and 3 in business communications, and additional credit in typewriting on the basis of institutional evaluation, for a minimum total of 12 semester hours (2/77).

Recommendation, AZCS
In the vocational certificate category, the recommendation is the same as that for AZC. In the lower-division baccalaureate/associate degree category, 2 semester hours in business communications, and 3 in clerical office procedures, 2 in record keeping, 3 in business communications, and 3 in personnel supervision, and additional credit in typewriting on the basis of institutional evaluation, for a minimum total of 15 semester hours. In the lower-division baccalaureate/associate degree category, 2 semester hours in office machines, 2 in filing, 3 in clerical office procedures, 3 in record keeping, 3 in office management, 2 in business communications, and additional credit in typewriting on the basis of institutional evaluation, for a minimum total of 16 semester hours (2/77).

Recommendation, AZCM
In the vocational certificate category, the recommendation is the same as that for AZCM. In the lower-division baccalaureate/associate degree category, 2 semester hours in business communications, and 3 in clerical office procedures, 2 in record keeping, 3 in business communications, and 3 in personnel supervision, and additional credit in typewriting on the basis of institutional evaluation, for a minimum total of 17 semester hours. In the upper-division baccalaureate category, 3 semester hours for field experience in management (3/77).

Recommendation, AZZCM
In the vocational certificate category, 2 semester hours in office machines, 2 in filing, 3 in clerical office procedures, 3 in record keeping, 3 in office management, 2 in business communications, and 3 in technical writing, and additional credit in typewriting on the basis of institutional evaluation, for a minimum total of 18 semester hours. In the lower-division baccalaureate/associate degree category, 2 semester hours in office machines, 2 in filing, 3 in clerical office procedures, 3 in record keeping, 3 in office management, 2 in business communications, and 3 in technical writing, and additional credit in typewriting on the basis of institutional evaluation, for a minimum total of 24 semester hours.
In the upper-division baccalaureate/associate degree career pattern for a minimum total of 16 semester hours, if the duty assignment was boat coxswain, additional credit in small boat handling on the basis of institutional evaluation; if the duty assignment was boat captain of a harbor service craft, 3 additional semester hours in coastline navigation and piloting, for a minimum total of 16 semester hours (12/76).

Recommendation, BMC
In the vocational certificate category, 5 semester hours in seamanship, 4 in rigging, 3 in record keeping, 2 in small boat maintenance, 2 in police science (security), and 1 in small crane signaling, for a minimum total of 17 semester hours, if the duty assignment was boat coxswain, additional credit in small boat handling on the basis of institutional evaluation; if the duty assignment was boat captain of a harbor service craft, 3 additional semester hours in coastline navigation and piloting, for a minimum total of 16 semester hours (12/76).

Recommendation, BMCM
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 5 semester hours for a practicum in management, 3 in personnel supervision, 3 in management development, 3 in human relations on the basis of institutional evaluation; if the duty assignment was boat coxswain, additional credit in small boat handling on the basis of institutional evaluation, for a minimum total of 12 semester hours (12/76).

Recommendation, BMCM
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 4 semester hours for a practicum in management, 3 in personnel supervision, 3 in management development, 3 in human relations on the basis of institutional evaluation; if the duty assignment was boat coxswain, additional credit in small boat handling on the basis of institutional evaluation, for a minimum total of 12 semester hours (12/76).
NER-BT-001

Boiler Technician

BT1

BT2

BTC

BTCs

BTCM

Exhibit Dates: 1/77-Present. NOTE: The Boiler Technician rating has undergone several changes. In 6/71, the title of Boiler Technician (BT) was changed to Boiler Technician (BT). In 6/72, the title of Boiler Technician (BT) was changed to Boiler Technician (BTC). In 6/77, the Boilermaker (BR) rating was discontinued and the duties were incorporated into the Boiler Technician (BT) rating. This evaluation covers the period from 1/77-Present.

Occupational Field: 3 (Marine Engineering)

Career Pattern

FN: Fireman (E-3); BT3: Boiler Technician, Third Class (E-4); BT2: Boiler Technician, Second Class (E-5); BT1: Boiler Technician, First Class (E-6); BTC: Chief Boiler Technician (E-7); BTCs: Senior Chief Boiler Technician (E-8); BTCM: Master Chief Boiler Technician (E-9)

Description

Summary: Operates and performs maintenance on marine boilers, pumps, blowers, and heat exchangers. BT3: Performs tests on boilers, fuel and lubricating oils; operates and performs preventive maintenance on boilers and auxiliary equipment; operates distilling plant; tests and calibrates gauges; exercises environmental control procedures to prevent or minimize air pollution and oil spills; completes maintenance data forms. BT2: Able to perform the duties required for BT3; recognizes and corrects boiler operating malfunctions; may supervise a fireroom watch; completes maintenance reports, inventories installed equipment and orders repair parts and tools; computes and records daily fuel oil and water receipts and expenditures. BT1: Able to perform the duties required for BT2; supervises maintenance and repair work; prepares reports; conducts on-the-job training, monitors maintenance and handling of logs, records, accounts, and reports, prepares quarterly maintenance schedules. BTC: Able to perform the duties required for BT1; supervises maintenance and repair work, prepares reports; conducts on-the-job training, monitors maintenance and handling of logs, records, accounts, and reports, prepares quarterly maintenance schedules. BTCs: Able to perform the duties required for BTC, establishes and implements a program for interviewing, evaluating, and assigning personnel to assure maximum utilization; prepares directives and instructions for attaining organization objectives; prepares correspondence; organizes and schedules training programs; administers a long-range planned maintenance program. BTCM: Able to perform the duties required for BTCs, reviews personnel, equipment, and material requirements, and forecasts future requirements; supervises inspections; develops operating budgets and monitors expenditures.

Recommendation, BT1

In the vocational certificate category, 6 semester hours in basic marine engineering (steam generation), 3 in mechanical maintenance or engine maintenance, 1 in blueprint reading, and 3 in maintenance technology, for a total of 10 semester hours. In the lower-division baccalaureate/associate degree category, 3 semester hours in basic marine engineering (steam generation), 3 in mechanical maintenance or engine maintenance, 1 in blueprint reading, and 3 in maintenance technology, for a total of 9 semester hours (12/78).

Recommendation, BT2

In the vocational certificate category, 10 semester hours in mechanical maintenance or engine maintenance, 1 in blueprint reading, 6 in maintenance technology, and 1 in record keeping, for a total of 18 semester hours. In the lower-division baccalaureate/associate degree category, 4 semester hours in basic marine engineering (steam generation), 4 in mechanical maintenance or engine maintenance, 1 in blueprint reading, 4 in maintenance technology, 1 in record keeping, 2 in personnel supervision, 2 in maintenance management, and 3 in human relations, for a total of 21 semester hours (12/78).

Recommendation, BTC

In the vocational certificate category, the recommendation is the same as that for BT2. In the lower-division baccalaureate/associate degree category, 4 semester-hours in basic marine engineering (steam generation), 4 in mechanical maintenance or engine maintenance, 1 in blueprint reading, and 4 in maintenance technology, 2 in record keeping, 2 in personnel supervision, 2 in maintenance management, and 3 in human relations, for a total of 24 semester hours (12/78).

Recommendation, BTCM

In the vocational certificate category, the recommendation is the same as that for BT2. In the lower-division baccalaureate/associate degree category, 3 semester hours in basic marine engineering (steam generation), 4 in mechanical maintenance or engine maintenance, 1 in blueprint reading, and 4 in maintenance technology, 2 in record keeping, 2 in maintenance management, and 3 in human relations, for a total of 21 semester hours (12/78).

Recommendation, BNCS

In the vocational certificate category, the recommendation is the same as that for BT2. In the lower-division baccalaureate/associate degree category, the recommendation is the same as that for BTC. In the upper-division baccalaureate category, 3 semester hours for field experience in management and 3 in management problems (12/78).

Recommendation, BU3

In the vocational certificate category, the recommendation is the same as that for BT2. In the lower-division baccalaureate/associate degree category, the recommendation is the same as that for BTC. In the upper-division baccalaureate category, 6 semester hours for field experience in management and 3 in management problems (12/78).

NER-BU-001

Builder

BU3

BU2

BU1

BUC

BUCS

Exhibit Dates: 6/72-Present

Occupational Field: (Construction)

Career Pattern

CN: Constructionman (E-3); BU3: Builder Third Class (E-4); BU2: Builder Second Class (E-5); BU1: Builder First Class (E-6); BUC: Chief Builder (E-7); BUCS: Senior Chief Builder (E-8); BUCM: Master Chief Constructionman (E-9)

Description

Summary: Performs tasks required for construction, maintenance, and repair of wood, concrete, and masonry structures, concrete pavement, and underwater structures. BU3: Places reinforcing steel; erects form members and strip forms; installs asphalt, waterproofing, interior wall coverings, door and window trim, moldings and glass; mixes, places, and finishes concrete, constructs masonry, metal, light wood frame, and timber structures; operates and performs operator maintenance on assigned vehicles and on diesel and gas driven engines. BU2: Performs general operations, performs calculations for simple areas and volumes; identifies and interprets grade and site stake. BU1: Able to perform the duties required for BU3; works from construction drawings and specifications, draws simple shop drawings and sketches; prepares standard requisitions; performs shorting of general operations; performs layout for and directs crews in erecting and stripping concrete form, establishes lines and elevations and layout for concrete masonry unit and brick construction; performs layout plan, and directs crews in the construction of light wood frame and timber structures; erects pre-engineered buildings, directs crews in mixing, placing, finishing, and curing concrete, computes quantities of materials for various concrete mixes, mortar, and stucco; applies roofing materials, operates and maintains paint spraying and concrete-pumping equipment, operates and performs operator maintenance on stud guns; performs layout of irregular shaped solids BU1: Able to perform the duties required for BU2; prepares work progress reports, implements training for team and crew members; prepares shop drawings of large excavations, buildings and structures; directs installation of all types of interior walls, tile, and suspended acoustic tile panels; directs crews in erection, teamwork, and teams in the construction of wood, masonry, and metal structures; directs crews in concrete construction, organizes daily work assignments, prepares maintenance directive, and estimates; understands and practices critical path methods (CPM) scheduling; performs construction and maintenance inspections; conducts slump tests on concrete and adjusts mixes. Performs duties of carpenter shop supervisor, shop planner, and maintenance scheduler. BUC: Able to perform the duties required for BU3; performs general operations, prepares reports; supervises and coordinates all unit tasks, provides technical advice and assistance on plans and specifications and on local construction techniques; implements maintenance and cost control programs; prepares and maintains progress charts. BUCS: Able to perform the duties for BUC; provides detailed information and advice on operations in own area of responsibility; prepares local directives and instructions for attaining organizational objectives; supervises and improves processes and procedures; establishes and implements a program to assure maximum utilization of personnel; determines requirements for advanced planning; coordinates equipment, implements and is capable of directing the operation and maintenance of all utilities and the repair, alteration and maintenance of all facilities under the cognizance of a public works depart-
NER-CE-001

**CONSTRUCTION ELECTRICIAN**

CE3
CE2
CE1
CEC
CEGS

**Exhibit Dates:** 6/72–Present

**Occupational Field:** 13 (Construction).

**Career Pattern**


**Description**

**Summary:** Plans, supervises, and performs tasks required to install, operate, service, and repair electric generating and distribution systems, wire communication systems, and associated equipment.

**CE3:**
- Erores and climbs poles; installs storage and dry cell batteries; installs electrical appliances and equipment; operates vehicles and performs pre-start checks and operator maintenance; performs preventive maintenance and repair; performs electrical power tools, appliances, and equipment, and on interior wiring systems, power distribution systems, and tactical field telephone systems.
- CE2:
  - Able to perform the duties required for CE3, draws simple shop drawings and sketches; reads and works from construction drawings and specifications; prepares technical and material requisitions, installs advanced-base type generators and distribution panels, public address equipment, electrical conduits, wiring systems, automatic controls, heating, and air-conditioning and refrigeration equipment, operates and performs pre-start checks and operator maintenance on sugtrucks and bucket trucks, maintains and repairs tactical field telephones, appliances, and equipment, wiring systems, automatic controls for boilers and for air-conditioning and refrigeration equipment, and public address systems.
- CE1:
  - Able to perform the duties required for CE2, prepares a-built drawings, prepares work programs and material usage reports, performs personnel readiness program interviews, maintains standard forms used by the installation and operation of advanced-base type generating equipment, security and air field lighting systems, and fire and electrical systems, and fire, detection and alarm systems; organizes work assignments; prepares estimates from drawings and specifications, and conducts inspections, troubleshoots systems, performs technical maintenance and repair; calibrates automatic controls, computes load requirements.
- CEC:
  - Able to perform the duties required for CE1, prepares letters, instructions, and reports; administers safety programs; assigns personnel, supervises and coordinates activities and resources, maintains assistance programs; provides technical advice and assistance; implements cost control program.
- CECS:
  - Able to perform the duties required for CEC, prepares location drawings, for attaining organizational objectives; establishes and implements a program to assure maximum utilization of personnel and equipment; directs the operation and maintenance of all facilites and equipment used in the public works department; organizes, schedules, and evaluates training programs.

**Recommendation, CE3**

In the vocational certificate category, 3 semester hours in basic electricity and 3 in introduction to construction. In the lower-division baccalaureate/associate degree category, 2 semester hours in basic electricity.

Advanced standing in a construction electrician apprentice training program on the basis of employer or trade association performance examination (1/77).

**Recommendation, CE2**

In the vocational certificate category, 3 semester hours in basic electricity, 3 in intermediate electricity, 2 in advanced electricity, and 2 in introduction to construction, and 2 in blueprint reading, for a total of 14 semester hours. In the lower-division baccalaureate/associate degree category, 2 semester hours in basic electricity, 2 in blueprint reading, and 1 in electrical construction laboratory, for a total of 5 semester hours. Advanced standing in a construction electrician apprentice training program on the basis of employer or trade association performance examination (1/77).

**Recommendation, CE1**

In the vocational certificate category, 2 semester hours in basic electricity, 3 in intermediate electricity, 3 in advanced electricity, 1 in introduction to construction, and 2 in blueprint reading, for a total of 11 semester hours. In the lower-division baccalaureate/associate degree category, 2 semester hours in basic electricity, 2 in blueprint reading, and 1 in electrical construction laboratory, for a total of 6 semester hours. Advanced standing in a construction electrician apprentice training program on the basis of employer or trade association performance examination (1/77).

**Recommendation, CEC**

In the vocational certificate category, the recommendation is the same as that for CE1. In the lower-division baccalaureate/ associate degree category, 3 semester hours in basic electricity, 2 in electrical construction laboratory, 2 in electrical problems (troubleshooting), 2 in blueprint reading, 2 in shop management, 2 in personnel supervision, 1 in records administration, and 1 in personnel supervision, for a total of 15 semester hours. In the upper-division baccalaureate category, 3 semester hours in human relations Advanced standing in a construction electrician apprentice training program on the basis of employer or trade association performance examination (1/77).

**Recommendation, CECS**

In the vocational certificate category, the recommendation is the same as that for CE1. In the lower-division baccalaureate/ associate degree category, 3 semester hours in basic electricity, 3 in personnel supervision, 2 in electrical construction laboratory, 2 in electrical problems (troubleshooting), 2 in blueprint reading, 2 in shop management, 2 in records administration, and 1 in personnel supervision, for a total of 17 semester hours. In the upper-division baccalaureate category, 3 semester hours in human relations Advanced standing in a construction electrician apprentice training program on the basis of employer or trade association performance examination (1/77).
NER-CM-001
CONSTRUCTION MECHANIC
CM3
CM1
CMC
CMCS

Exhibit Dates: 6/71-Present.
Occupational Field: 13 (Construction).

Career Pattern

Description
Summary: Maintains, repairs, and overhauls automotive, construction, and materials-handling equipment; keeps equipment maintenance records; prepares requisitions and reports, trains subordinates in maintenance procedures and techniques; CM3: Works from shop drawings, specifications, and repair and parts manuals; performs preventive maintenance, operates equipment during test procedures, repairs braking systems; tests electrical systems and makes minor repairs. CM2: Able to perform the duties required for CM3; prepares time sheets, material distribution reports, equipment historical files, parts, and material requisitions; performs engine diagnosis and corrects problems through subassembly repair or replacement; repairs and adjusts steering mechanisms, overhauls motor body, and applies minor repairs, and painting; performs gas welding, cutting, and brazing; operates construction, automotive, and material equipment during diagnosis and testing; rebuilds components.

Recommendation, CM3
In the vocational certificate category, 9 semester hours in diesel, truck, or automotive mechanics and 1 in care and use of tools. In the lower-division baccalaureate/associate degree category, 7 semester hours in diesel, truck, or automotive mechanics, 1 in care and use of tools, and 1 in care and use of tools, for a total of 10 semester hours. In an automotive, diesel, or truck mechanic apprenticeship training program, 1,500 clock hours of experience and 240 contact hours of related instruction (1/77).

Recommendation, CM2
In the vocational certificate category, 15 semester hours in diesel, truck, or automotive mechanics and 1 in care and use of tools. In the lower-division baccalaureate/associate degree category, 9 semester hours in diesel, truck, or automotive mechanics, 3 in shop practices, 2 in personnel supervision, 1 in records administration, and 1 in care and use of tools, for a total of 19 semester hours. In an automotive, diesel, or truck mechanic apprenticeship training program, 3,000 clock hours of experience and 468 contact hours of related instruction (1/77).

Recommendation, CM1
In the vocational certificate category, 18 semester hours in diesel, truck, or automotive mechanics and 1 in care and use of tools. In the lower-division baccalaureate/associate degree category, 9 semester hours in diesel, truck, or automotive mechanics, 3 in shop practices, 3 in personnel supervision, 1 in records administration, and 1 in care and use of tools, for a total of 18 semester hours. In an automotive, diesel, or truck mechanic apprenticeship training program, 6,000 clock hours of experience and 932 contact hours of related instruction (1/77).

Recommendation, CMC
In the vocational certificate category, the recommendation is the same as that for CM1. In the lower-division baccalaureate/associate degree category, 9 semester hours in diesel, truck, or automotive mechanics, 3 in shop practices, 3 in personnel supervision, 1 in records administration, and 1 in care and use of tools, for a total of 18 semester hours. Journeyman status (defined as 8,000 clock hours of experience and 576 contact hours of related instruction) as an automotive, diesel, or truck mechanic (1/77).

Recommendation, CMCS
In the vocational certificate category, 18 semester hours in diesel, truck, or automotive mechanics, 3 in leadership, and 1 in care and use of tools, for a total of 22 semester hours. In the lower-division baccalaureate/associate degree category, 9 semester hours in diesel, truck, or automotive mechanics, 3 in shop practices, 3 in personnel supervision, 1 in records administration, 3 in introduction to management, and 1 in care and use of tools, for a total of 22 semester hours. In the upper-division baccalaureate category, 3 semester hours for field experience in management and 1 in human relations. In an automotive, diesel, or truck mechanic apprentice training program, the recommendation is the same as that for CMC (1/77).

NER-CN-001
CONSTRUCTIONMAN
Exhibit Dates: 6/71-Present.

Career Pattern
Constructionman (CN) is a general rating (Naval apprenticeship) for persons at pay grade E-1 (recruit), E-2 (constructionman), and E-3 (constructionman). At pay grade E-4 (petty officer third class), the person may enter any one of the following ratings: Builder (BU), Electrician (CE), Construction Mechanic (CM), Engineering Aide (EA), Equipment Operator (EO), Steelworker (SW), or Utilityman (UT).

Description
Is introduced to all phases of construction work, including construction equipment operation and equipment maintenance, surveying and drafting, site preparation and earthwork, concrete and masonry, steelwork, carpentry and painting, utilities, and tools, understands the mission of the various operating units of the Naval construction force; reads simple sketches used in construction, has basic knowledge of map and compass techniques, knows hand signals for construction equipment operation; uses and maintains common measuring, cutting, line-clearing, manual excavating, and portable power tools; paints with brushes and rollers, knows safety regulations, and implements safety training program.

Recommendation
In the vocational certificate category, 3 semester hours in introduction to construction procedures, 1 in map and compass reading and interpretation, and 1 in first aid, for a total of 5 semester hours. In the lower-division baccalaureate/associate degree category, 1 semester hour in map and compass reading and interpretation and 1 in first aid (1/77). NOTE: Credit for Constructionman (CN) should be granted only after pay grade E-3 has been achieved.

NER-CT-001
CRYPTOLOGIC TECHNICIAN
CT3
CT2
CT1
CCT
CTCS
CTCM

Exhibit Dates: Pending evaluation.

NER-CU-001
CONSTRUCTIONMAN, MASTER CHIEF
CUCM
Exhibit Dates: 6/71-Present.
Occupational Field: 13 (Construction).

Career Pattern
May progress to CUCM, Master Chief Constructionman (E-9), from BUCS, Senior Chief Builder (E-8), or EACS, Chief Electrician (E-7).
NER-DK-001

DISBURSING CLERK

DK3
DK2
DK1
DKC
DKS
DKCM

Exhibit Dates: 6/71-Present

Occupational Field: 16 (Logistics)

Career Pattern

SV: Seaman (E-3) DK1: Disbursing Clerk, Third Class (E-4) DK2: Disbursing Clerk, Second Class (E-5) DK1 Disbursing Clerk, First Class (E-5) DKC Chief Disbursing Clerk, Second Class (E-6) DKCS Senior Chief Disbursing Clerk (E-8) DKCM Master Chief Disbursing Clerk (E-9)

Description

Summary: Maintains military personnel financial records, including payroll, travel allowances, and reimbursements, performs related computations, prepares related reports, checks funds and documents; types at 20 wpm; types forms and memoranda; identifies appropriate Navy Codes for charging and crediting disbursements and receipts, applies Navy regulations in computation of pay, deductions, and reimbursements, applies Navy regulations in the preparation of leave records DK2: Able to perform the duties required for DK3; processes more complex and difficult transactions; may train and supervise subordinate personnel; DKC: Able to perform the duties required for DK2, organizes the flow of work in the disbursing office, prepares correspondence and messages; prepares budgets, cash funds, audit entries on statements and documents; supervises subordinate personnel. DK: Able to perform the duties required for DK1, supervises the operation of a disbursing office, interprets regulations and identifies disbursing procedures; audits reports, records, and vouchers. DKCS: Able to perform the duties required for DKC, supervises a large finance establishment, prepares and implements a program for interviewing, evaluating, and assigning personnel to obtain maximum utilization; evaluates local systems of internal control and submits recommendations concerning plans and procedures; prepares directives for the purpose of attaining organizational goals and objectives. DKCS organizes and schedules training programs and evaluates results. DKCM: Able to perform the duties required for DKCS, plans, organizes, implements, and controls activities, reviews personnel, equipment, and material requirements, and forecasts future requirements; develops operating budgets and monitors expenditures, directs an inspection and audit of the financial transactions of a disbursing office.

Recommendation, DK3

In the vocational certificate category or in the lower division baccalaureate/associate degree category, 1 semester hour in typing, 1 in office procedures, and 1 in business mathematics, for a total of 3 semester hours (3/79).

Recommendation, DK2

In the vocational certificate category or in the lower division baccalaureate/associate degree category, 1 semester hour in typing, 1 in office procedures, 1 in business mathematics, 1 in office machines, 1 in record keeping, and 2 in office management, for a total of 7 semester hours. In the lower division baccalaureate/associate degree category, 1 semester hour in typing, 1 in office procedures, 1 in business mathematics, 1 in office machines, 1 in record keeping, 2 in office management, 1 in personnel supervision, and 1 in human relations, for a total of 9 semester hours (3/79).

Recommendation, DK1

In the vocational certificate category, 1 semester hour in typing, 1 in office procedures, 1 in business mathematics, 1 in office machines, 1 in record keeping, and 3 in office management, for a total of 7 semester hours. In the lower division baccalaureate/associate degree category, 1 semester hour in typing, 1 in office procedures, 1 in business mathematics, 1 in office machines, 1 in record keeping, 3 in office management, 2 in human relations, and 3 in personnel supervision, for a total of 13 semester hours (3/79).

Recommendation, DK

In the vocational certificate category or in the lower division baccalaureate/associate degree category, the recommendation is the same as that for DKC. In the upper division baccalaureate category, 3 semester hours for a practicum in management and 3 in personnel management (3/79).

Recommendation, DKCM

In the vocational certificate category or in the lower division baccalaureate/associate degree category, the recommendation is the same as that for DKC. In the upper division baccalaureate category: 3 semester hours for a practicum in management, 3 in management problems, and 3 in personnel management, for a total of 9 semester hours (3/79).
to perform the duties required for DM1; organizes a training aids and graphics shop; assures compliance with copy and reproduction regulations; evaluates visual aids and maintains quality control; monitors control of produced classified material. DMC: Able to perform the duties required for DMC; provides technical advice concerning illustration and drafting equipment; prepares directives and instructions for achieving organization objectives and improving operations; establishes and implements a program for interviewing, evaluating, and assigning personnel; organizes, schedules, and produces programs; monitors, and controls quality assurance requirements; prepares cost estimates for audio-visual presentations; determines audio-visual equipment requirements; DMC: Able to perform the duties required for DMC; plans, organizes, implements, and controls activities; reviews personnel, equipment, and material requirements, and forecasts future requirements; develops operating budgets and monitors expenditures; evaluates and makes recommendations for new audio-visual equipment and innovations.

Recommendation, DM3
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 3 semester hours in basic drawing, 3 in technical drafting, and 3 in basic techniques of commercial art, for a total of 12 semester hours (3/79).

Recommendation, DM2
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 3 semester hours in basic drawing, 3 in visual design, 3 in technical drafting, and 3 in basic techniques of commercial art, 3 in technical illustrating, 3 in basic photography, and 3 for field experience in graphics, for a total of 21 semester hours (3/79).

Recommendation, DM1
In the vocational certificate category, 3 semester hours in basic drawing, 3 in visual design, 3 in technical drafting, and 3 in basic techniques of commercial art, 3 in technical illustrating, 3 in basic photography, 3 for field experience in graphics, 3 in silk-screen printing, 3 in advertising illustration or airbrush, 3 in audio-visual graphics, and 1 in graphics arts management, for a total of 37 semester hours (3/79).

Recommendation, DMA
In the vocational certificate category, the recommendation is the same as that for DM1. In the lower-division baccalaureate/associate degree category, 3 semester hours in basic drawing, 3 in technical drafting, 3 in technical illustrating, 3 in basic photography, 3 for field experience in graphics, 3 in silk-screen printing, 3 in advertising illustration or airbrush, 3 in audio-visual graphics, 3 in graphic arts management, and 2 in personnel supervision, for a total of 35 semester hours. In the upper-division baccalaureate category, 3 semester hours in industrial arts education (graphics), 3 field experience in management and 3 in management problems, for a total of 9 semester hours (3/79).

Recommendation, DMC
In the vocational certificate category, the recommendation is the same as that for DM1. In the lower-division baccalaureate/associate degree category, 3 semester hours in basic drawing, 3 in technical drafting, 3 in technical illustrating, 3 in basic photography, 3 for field experience in graphics, 3 in silk-screen printing, 3 in advertising illustration or airbrush, 3 in audio-visual graphics, 3 in graphic arts management, and 3 in personnel supervision, for a total of 36 semester hours. In the upper-division baccalaureate, 3 semester hours in industrial arts education (graphics), 3 field experience in management and 3 in management problems, for a total of 9 semester hours (3/79).

Recommendation, DMC
In the upper-division baccalaureate category, 3 semester hours in industrial arts education (graphics), 3 field experience in management and 3 in management problems, for a total of 9 semester hours (3/79).

Recommendation, DMC
In the upper-division baccalaureate category, 3 semester hours in industrial arts education (graphics), 3 field experience in management and 3 in management problems, for a total of 9 semester hours (3/79).

Recommendation, DMC
In the upper-division baccalaureate category, 3 semester hours in industrial arts education (graphics), 3 field experience in management and 3 in management problems, for a total of 9 semester hours (3/79).

Recommendation, DMC
In the upper-division baccalaureate category, 3 semester hours in industrial arts education (graphics), 3 field experience in management and 3 in management problems, for a total of 9 semester hours (3/79).

Recommendation, DMC
In the upper-division baccalaureate category, 3 semester hours in industrial arts education (graphics), 3 field experience in management and 3 in management problems, for a total of 9 semester hours (3/79).

Recommendation, DMC
In the upper-division baccalaureate category, 3 semester hours in industrial arts education (graphics), 3 field experience in management and 3 in management problems, for a total of 9 semester hours (3/79).

Recommendation, DMC
In the upper-division baccalaureate category, 3 semester hours in industrial arts education (graphics), 3 field experience in management and 3 in management problems, for a total of 9 semester hours (3/79).

Recommendation, DMC
In the upper-division baccalaureate category, 3 semester hours in industrial arts education (graphics), 3 field experience in management and 3 in management problems, for a total of 9 semester hours (3/79).

Recommendation, DMC
In the upper-division baccalaureate category, 3 semester hours in industrial arts education (graphics), 3 field experience in management and 3 in management problems, for a total of 9 semester hours (3/79).

Recommendation, DMC
In the upper-division baccalaureate category, 3 semester hours in industrial arts education (graphics), 3 field experience in management and 3 in management problems, for a total of 9 semester hours (3/79).

Recommendation, DMC
In the upper-division baccalaureate category, 3 semester hours in industrial arts education (graphics), 3 field experience in management and 3 in management problems, for a total of 9 semester hours (3/79).

Recommendation, DMC
In the upper-division baccalaureate category, 3 semester hours in industrial arts education (graphics), 3 field experience in management and 3 in management problems, for a total of 9 semester hours (3/79).

Recommendation, DMC
In the upper-division baccalaureate category, 3 semester hours in industrial arts education (graphics), 3 field experience in management and 3 in management problems, for a total of 9 semester hours (3/79).

Recommendation, DMC
In the upper-division baccalaureate category, 3 semester hours in industrial arts education (graphics), 3 field experience in management and 3 in management problems, for a total of 9 semester hours (3/79).

Recommendation, DMC
In the upper-division baccalaureate category, 3 semester hours in industrial arts education (graphics), 3 field experience in management and 3 in management problems, for a total of 9 semester hours (3/79).
Occupational Field: 3 (Marine Engineering).

Career Pattern: F.N. Fireman (E-3) EM3. Electrician's Mate, Third Class (E-4) EM2 Electrician's Mate, Second Class (E-5). EM1 Electrician's Mate, First Class. (E-6). EMC Chief Electrician, First Class. EMCS Chief Electrician, Second Class. EAC Chief Electrician's Mate (E-8) EMCM Master Chief Electrician's Mate (E-9).

Description
Summary
Operates and maintains power and lighting circuits, electrical fixtures, film projectors, motors, generators, controllers, switchboards, voltage and frequency regulators, and other test equipment; tests for short circuits and breaks in electrical equipment. EM3. Operates standard test and metering equipment, including multimeter, voltmeter, ammeter, ohmmeter, oscilloscope, stroboscope, voltage, wattmeter, and vacuum tube voltmeter; makes standard, wire splice; detects and locates grounds, opens circuits, and short circuits in lighting and power circuits; solders electrical connections; examines motors and generators for conditions and needed maintenance; operates AC and DC motors; replaces bearings in generators and motors; repairs portable electrical tools; prepares, activates, and services storage batteries, troubleshoots and repairs electrical systems, tests and maintains signal lights, search lights, and beacons, maintains electrical cooling equipment, computes gauging, current, voltage, phase, capacitive, and inductive impedances; prepares diesel generators for operation; reads and interprets schematic diagrams and electrical blueprints. EM2: Able to perform the duties required for EM3; operates and uses signal generator, generates instrument transformer, conducts bench tests, maintains auxiliary equipment, operates and maintains AC and DC ship propulsion equipment, installs new power and lighting circuits, connects shore power to main distribution board of ship, inspects and maintains battery chargers, cathode protective units, air-conditioning control circuits, air compressor control circuits, and hoist/winch systems; conducts planned maintenance reports, inventories installed equipment and spare part support, may supervise up to four Able Chief Electrician's Mates. EM1: Able to perform the duties required for EM2; conducts bench tests on electrical governors, checks logic on solid state electronic control systems, ships service and emergency switchboard equipment when power is connected; estimates extent of casual damage to equipment, removes, tests, and defective components in automatic deagussing control panels; determines type and value of acceptable substitute components; checks electrical operating logs and maintenance records; may supervise up to nine Electrician's Mates. EMC: Able to perform the duties required for EM1; directs repairs of power and lighting equipment, static magnetic amplifier equipment, valving and speed regulators, and static inverters; maintains files; directs operation and control of electrical distribution and interior communication system and circuits; plans, organizes, and directs the operation and maintenance of electrical systems; estimates time, materials, and labor required for repair of electrical systems and equipment. EMCS: Able to perform the duties required for EMCS; advises on administrative, material, and readiness inspections, the opening and inspection of equipment, and preparation of work requests; provides short-term information, CAPability, reliability, and operation; prepares directives and instructions for attaining organizational objectives, establishes, implements a program for interviewing, evaluating, and assigning personnel, administers a long-range planned maintenance program.

Recommendation, EM3
In the vocational certificate category, 5 semester hours in basic electricity/electronics, 3 in electrical wiring, and 3 in electrical motors, and credit in troubleshooting techniques on the basis of institutional evaluation, for a minimum total of 11 semester hours. In the lower-division baccalaureate/associate degree category, 3 semester hours in basic electricity/electronics, 3 in electrical wiring, 3 in electrical motors, and 2 in electricity/electronics laboratory, and credit in troubleshooting techniques and credit in human relations on the basis of institutional evaluation, for a minimum total of 11 semester hours, if assigned to gas turbine propulsion systems, credit in gas turbine technology on the basis of institutional evaluation (12/78).

Recommendation, EM2
In the vocational certificate category, 5 semester hours in basic electricity/electronics, 3 in electrical wiring, 7 in electrical motors, 4 in electrical and electronic circuits, and 1 in record keeping, and credit in troubleshooting techniques on the basis of institutional evaluation, for a minimum total of 20 semester hours. In the lower-division baccalaureate/associate degree category, 3 semester hours in basic electricity/electronics, 3 in electrical wiring, 3 in electrical motors, 2 in electricity/electronics laboratory, 3 in human relations, 2 in personnel supervision, 2 in management and internal control, 1 in record keeping, and credit in troubleshooting techniques and credit in human relations on the basis of institutional evaluation, for a minimum total of 19 semester hours, if assigned to gas turbine propulsion systems, credit in gas turbine technology on the basis of institutional evaluation (12/78).

Recommendation, EM1
In the vocational certificate category, 5 semester hours in basic electricity/electronics, 3 in electrical wiring, 7 in electrical motors, 4 in electrical and electronic circuits, and 1 in record keeping, and credit in troubleshooting techniques on the basis of institutional evaluation, for a minimum total of 20 semester hours. In the lower-division baccalaureate/associate degree category, 3 semester hours in basic electricity/electronics, 3 in electrical wiring, 3 in electrical motors, 2 in electricity/electronics laboratory, 3 in human relations, 2 in personnel supervision, 2 in maintenance management, and 1 in record keeping, and credit in troubleshooting techniques and credit in human relations on the basis of institutional evaluation, for a minimum total of 19 semester hours, if assigned to gas turbine propulsion systems, credit in gas turbine technology on the basis of institutional evaluation (12/78).

Recommendation, EMC
In the vocational certificate category, the recommendation is the same as that for EM1. In the lower-division baccalaureate/associate degree category, 3 semester hours in basic electricity/electronics, 3 in electrical wiring, 3 in electrical motors, 2 in electricity/electronics laboratory, 3 in human relations, 3 in personnel supervision, 3 in maintenance management, 3 in administrative control, 2 in record keeping, and credit in troubleshooting techniques on the basis of institutional evaluation, for a minimum total of 22 semester hours. In the upper-division baccalaureate category, 3 semester hours in electrical circuits (12/78).
Recommendation, EMCS

In the vocational certificate category the recommendation is the same as that for EMI. In the lower-division baccalaureate/associate degree category the recommendation is the same as that for EMC. In the upper-division baccalaureate category, 3 semester hours in electrical circuits, 3 for field experience in management, and 3 in management problems, for a total of 9 semester hours (12/78).

NER-EM-002

ELECTRICIAN'S MATE, MASTER CHIEF EMCC

Exhibit Dates: 6/73-Present.

Occupational Field: 3 (Marine Engineering)

Career Pattern

May progress to EMCM, Master Chief Electrician's Mate (E-9) from EMCS, Senior Chief Electrician's Mate (E-8), or ICCS, Senior Chief Interior Communications Electrician (E-8).

Description

Able to perform the duties required for either EMCS (Senior Chief Electrician's Mate) or ICCS (Senior Chief Interior Communications Electrician), advises on new developments and new technical information concerning capabilities, limitations, and employment of interior communications and electrical equipment; plans, organizes, and implements activities; plans and initiates action to satisfy personnel, equipment, and material requirements and forecasts future requirements; schedules major maintenance and repair, develops procedures and supervises projects and techniques for correction of equipment and system malfunctions; supervises inspections and surveys of equipment; evaluates defective and worn electrical and mechanical equipment; investigates and maintains auxiliary boilers, determines pistons. ENI: Able to perform the duties required for EN2; inspects, repairs, and maintains engines; determines engine malfunctions and takes appropriate corrective action, cleans main engine bearing and thrust bearing, and limits requirements; inspects propellers and shafts, checks main reduction gears; supervises engine room records, reviews completed maintenance data forms; prepares weekly maintenance schedules. ENC: Able to perform the duties required for EN1; supervises repair of engine room equipment and auxiliary equipment, repairs air-conditioning equipment, inspects propellers and shafts; keeps main reduction gears; supervises engine room watch, prepares reports; maintains time and material requirements; prepares quarterly maintenance schedules; analyzes results of spectrographic, physical, and chemical oil analysis. ENCS: Makes and tests fuel injection equipment, oil injectors, records equipment test results and training data; orders repair parts and tools; uses diesel gauges and depth gauges to take clearances on journals, bearings, liners, and pistons. ENI: Able to perform the duties required for EN2; inspects, repairs, tests, and maintains gas turbine engines; determines engine malfunctions and takes appropriate corrective action, cleans main engine bearing and thrust bearing, and limits requirements; inspects propellers and shafts; checks main reduction gears; supervises engine room records, reviews completed maintenance data forms; prepares weekly maintenance schedules. ENC: Able to perform the duties required for EN1; supervises repair of gas turbine equipment and auxiliary equipment, repairs and maintains gas turbine equipment, inspects propellers and shafts; keeps main reduction gears; supervises engine room records, reviews completed maintenance data forms; prepares weekly maintenance schedules. ENCS: Makes and tests fuel injection equipment, oil injectors, records equipment test results and training data; orders repair parts and tools; uses diesel gauges and depth gauges to take clearances on journals, bearings, liners, and pistons.

Recommendation, EMCM

In the vocational certificate category, use either the 20 semester hours recommended for EM1 in exhibit NER-EM-001, or the 25 semester hours recommended for ICI in exhibit NER-IC-001, as appropriate. In the lower-division baccalaureate/associate degree category, use either the 22 semester hours recommended for EMC in exhibit NER-EM-001, or the 28 semester hours recommended for ICC in exhibit NER-IC-001, as appropriate. In the upper-division baccalaureate category, 3 semester hours in electrical circuits, 6 for field experience in management, and 3 in management problems, for a total of 12 semester hours (12/78).

NER-EN-001

ENGINEER

EN3

NEL

EN2

ENC

ENCS

ENC

Exhibit Dates: 6/71-Present.

Occupational Field: 3 (Marine Engineering)

Career Pattern

First Class (E-3), EN1: Engineman, Second Class (E-5), EN1: Engineman, First Class (E-0), EN1: Chief Engineman (E-7), ENC, Senior Chief Engineman (E-8), ENCM, Master Chief Engineman (E-9).

Description

Summary: Operates, repairs, and performs maintenance on marine propulsion machinery, air-conditioning, and shipboard and auxiliary equipment; stands watch on auxiliary boilers. EN2: Uses firefighting equipment and rescue instruments; performs routine hydraulic maintenance; installs hydraulic pumps and wipers; uses the following test equipment: stroboscopes, microtometers, dial indicators, hydrometers, viscosity gauges, and freon leak detectors, operates electrical charging and regulating systems; uses and files blueprints, microfilm, aperture cards, and ship's drawings for maintaining and servicing equipment; and for locating and repairing piping systems, and machinery; conducts boiler water and feed water tests; operates steam-operated distilled plants, mechanically removes scale; from fireman's mate, and stands watch on refrigeration and air-conditioning systems, operates air compressors; overhauls pumps, valves, tests electro-hydraulic steering system, inspects, lubricates, and tests gauged and laundry equipment; recognizes symptoms in a diesel engine and takes appropriate action to avoid damage to the engine; completes maintenance data forms, exercises environmental control procedures to prevent or minimize air pollution and oil spills. EN3: Tests and recharges refrigeration and air-conditioning systems, overhauls pumps, cleans, inspects, and exchanges exchangers, removes, inspects, repairs, and reinstalls liners, pistons, cylinder heads, wrist pins, piston rings, and bearings; disassembles, cleans, repairs, assembles, and replaces fuel oil injectors, records equipment test results and training data; orders repair parts and tools; uses diesel gauges and depth gauges to take clearances on journals, bearings, liners, and pistons. EN1: Able to perform the duties required for ENCS, tests and recharges refrigeration and air-conditioning systems, overhauls pumps, cleans, inspects, and exchanges exchangers, removes, inspects, repairs, and reinstalls liners, pistons, cylinder heads, wrist pins, piston rings, and bearings; disassembles, cleans, repairs, assembles, and replaces fuel oil injectors, records equipment test results and training data; orders repair parts and tools; uses diesel gauges and depth gauges to take clearances on journals, bearings, liners, and pistons.

Recommendation, EN1

In the lower-division baccalaureate/associate degree category, 15 semester hours in engine maintenance and repair, 3 in manufacturing technology, 1 in blueprint reading, and 1 in record keeping, for a total of 17 semester hours. In the upper-division baccalaureate/associate degree category, 12 semester hours in engine maintenance and repair, 3 in manufacturing technology, 1 in blueprint reading, and 1 in record keeping, for a total of 17 semester hours, if assigned to gas turbine propulsion systems, credit in gas turbine technology on the basis of institutional evaluation (12/78).

Recommendation, ENC

In the vocational certificate category, 15 semester hours in engine maintenance and repair, 3 in manufacturing technology, 1 in blueprint reading, and 2 in record keeping, for a total of 21 semester hours. In the lower-division baccalaureate/associate degree category, 15 semester hours in engine maintenance and repair, 6 in manufacturing technology, 1 in blueprint reading, 2 in record keeping, 2 in manufacturing management, 2 in personnel supervision, and 3 in human relations, for a total of 33 semester hours, if assigned to gas turbine propulsion systems, credit in gas turbine technology on the basis of institutional evaluation (12/78).

Recommendation, ENCS

In the vocational certificate category, the recommendation is the same as that for EN1. In the lower-division baccalaureate/associate degree category, the recommendation is the same as that for ENCS. In the upper-division baccalaureate category, 3 semester hours for field experience in management and 3 in management problems (12/78).

Recommendation, ENCM

In the vocational certificate category, the recommendation is the same as that for EN1. In the lower-division baccalaureate/associate degree category, the recommendation is the same as that for ENCS. In the upper-division baccalaureate/associate degree category, 6 semester hours for field experience in management and 3 in management problems (12/78).
NER-EQ-O01

EQUIPMENT OPERATOR
EO3
EO2
EO1
E0C

Exhibit Dates: 6/71-Present.
Occupational Field: 13 (Construction).

Career Pattern

Description
Operates automotive, material-handling, weight-lifting and construction equipment involved in earth moving, road building, quarrying, asphalt batching and paving, concrete paving, and construction work. EO3: Able to perform the duties of CN (Constructionman); reads shop drawings and sketches; reads grade stake markings; computes working loads for lines and wire rope; uses slings, spreaders, cargo nets, and hoists; determines optimum working distances for construction equipment with the exception of scrapers; change attachments and adapt cable/hydraulic assemblies; operates high-speed (wheel and crawler) cranes, front end loaders, asphalt pavers, roll-compacting equipment, rock drills, self-propelled compaction equipment, wheel and crawler tractors, wheel and crawler front-end loaders, water and oil cooling, rough-terrain forklifts up to 6,000 pound capacity, passenger-carrying vehicles and trucks through 5-ton, including truck-trailer semitrailers. EO2: Able to perform the duties required for EO3; works from construction drawings and specifications; draws simple shop drawings and sketches; manages time sheets, prepares requisitions; changes attachments and adapt cable/hydraulic assemblies on multipurpose excavators and cranes; uses wheel loaders, monitors, and reports for equipment operation, construction equipment, and 3 in mechanical maintenance, for a total of 21 semester hours. In the lower-division baccalaureate/associate degree category, 6 semester hours in construction equipment operation, and 3 in mechanical maintenance (1/77).

Recommendation, EO3
In the vocational certificate category, 10 semester hours in construction equipment operation, 3 in introduction to construction equipment, and 2 in mechanical maintenance, for a total of 15 semester hours. In the lower-division baccalaureate/associate degree category, 6 semester hours in construction equipment operation, and 1 in mechanical maintenance (1/77).

Recommendation, EO2
In the vocational certificate category, 20 semester hours in construction equipment operation, 12 in mechanical maintenance, and 3 in construction equipment operation, and 2 in mechanical maintenance (1/77).

Recommendation, EO1
In the vocational certificate category, 30 semester hours in construction equipment operation, 3 in introduction to construction equipment, and 3 in mechanical maintenance, for a total of 36 semester hours. In the lower-division baccalaureate/associate degree category, 6 semester hours in construction equipment operation, 2 in operations management, and 2 in personnel supervision, and 2 in mechanical maintenance, for a total of 12 semester hours (1/77).

Recommendation, EQC
In the vocational certificate category, the recommendation is the same as that for EO3. In the lower-division baccalaureate/associate degree category, 6 semester hours in construction equipment operation, 3 in operations management, 3 in personnel supervision, and 2 in mechanical maintenance, for a total of 14 semester hours (1/77).

Recommendation, EQCS
In the vocational certificate category, the recommendation is the same as that for EO1. In the lower-division baccalaureate/associate degree category, 6 semester hours in construction equipment operation, 3 in operations management, 3 in personnel supervision, and 2 in mechanical maintenance, for a total of 20 semester hours. In the upper-division baccalaureate category, 3 semester hours in operations/construction management and 3 in human relations (1/77).

NER-EQ-O01

EQUIPMENTMAN, MASTER CHIEF
EQCM

Exhibit Dates: 6/71-Present
Occupational Field: 13 (Construction).

Career Pattern
May progress to EQCM, Master Chief Equipmentman (E-9), from either EOCS, Senior Chief Equipment Operator (E-8), or CMCS, Seaman Chief Construction Mechanic (E-6). EOC, Chief Equipment Operator (E-7). Description
Able to perform the duties required for either EOCS (Senior Chief Equipment Operator) or CMCS (Seaman Chief Construction Mechanic) for the future requirements and plans and take action to satisfy them; establishes goals and priorities; plans, organizes, implements, and controls work activities in compliance with policy statements and directives; reviews personnel, equipment, and material requirements; is responsible for the administration of a department or company; develops procedures for work improvement and simplification through organizational analysis; manages a contracts inspection branch; implements pollution control and energy conservation programs; develops Operating budgets and monitors expenditures; assists in managing a public works department.

Recommendation
In the vocational certificate category, use the recommendation for either EO1 (Equipment Operator First Class) in exhibit NER-EQ-O01 or CMCS (Senior Chief Construction Mechanic) in exhibit NER-CM-O01, as appropriate. In the lower-division baccalaureate/associate degree category, 3 semester hours in principles of administration, 3 in construction contracts and agreements, and 3 in government budgeting procedures, for a total of 9 semester hours; add either the 20 semester hours for EQCS (Senior Chief Construction Mechanic) in exhibit NER-EQ-O01, for a total of 29 semester hours, or the 22 semester hours for CMCS in exhibit NER-CM-O01, for a total of 31 semester hours. In the upper-division baccalaureate category, 3 semester hours in management problems, 3 in forecasting, and 3 for a practical management paper, for a total of 9 semester hours; add either the 6 semester hours for EQCS in exhibit NER-EQ-O01, or the 6 semester hours for CMCS in exhibit NER-CM-O01, as appropriate, for a total of 15 semester hours (1/77).

NER-ET-O01

ELECTRONICS TECHNICIAN
ETI
ETC
ETCS
ETCM

Exhibit Dates: 6/73-6/78
Occupational Field: 8 (Weapons Control).

Career Pattern
May progress from ETN2, Electronics Technician, Communications, Second Class (E-5), or ETR2, Electronics Technician, Radar, Second Class (ET-O2, Electronics Technician, First Class (E-6). ETC.
Chief Electronics Technician (E-7). ETCM. Master Chief Electronics Technician (E-9).

Description

ETI: Able to perform the duties required for ETN2 or ETR2, diagnoses, isolates, and repairs electronic subsystems, uses accounting procedures to maintain control of inventories, workflow, and work accomplished, estimates time and support required for repair of equipment; provides technical and supervisory liaison between work centers, implements and administers a maintenance and repair program; prepares quarterly preventive maintenance schedules. ETC: Able to perform the duties required for ETI: supervises the use of electronic systems and subsystems, uses accounting procedures to maintain control of inventories, workflow, and work accomplished, estimates time and support required for repair of equipment; provides technical and supervisory liaison between work centers, implements and administers a maintenance and repair program; prepares quarterly preventive maintenance schedules. ETCM: Able to perform the duties required for ETC: supervises the use of electronic systems and subsystems, uses accounting procedures to maintain control of inventories, workflow, and work accomplished, estimates time and support required for repair of equipment; provides technical and supervisory liaison between work centers, implements and administers a maintenance and repair program; prepares quarterly preventive maintenance schedules.

Recommendaion, ETI

In the vocational certificate category, the E9, and in the upper-division baccalaureate/associate degree category, the recommendation is the same as that for ETI. In the upper-division baccalaureate category, 6 semester hours in circuit analysis, 3 for field experience in management, and 3 in management problems, for a total of 12 semester hours (12/78)

Recommendaion, ETC

In the vocational certificate category, or the lower-division baccalaureate/associate degree category, the recommendation is the same as that for ETC. In the lower-division baccalaureate/associate degree category, 6 semester hours in circuit analysis, 6 for field experience in management, and 3 in management problems, for a total of 15 semester hours (12/78)

NER-ET-002

ELECTRONICS TECHNICIAN

ET3

ET2

ET1

ETC

ETCS

ETCM

Exhibit Dates: 7/78-Present Pending evaluation.

NER-ETN-001

ELECTRONICS TECHNICIAN, COMMUNICATIONS

ETN3

ETN2

Exhibit Dates: 6/73-6/78 (Effective 7/78, the ETN rating was discontinued.)

Occupational Field: 8 (Weapons Control)

Career Pattern

SN. Seaman (E-3), ETR3. Electronics Technician, Radar, Third Class (E-4), ETR2. Electronics Technician, Radar, Second Class (E-5) ET1: Electronics Technician, First Class (E-6) ETC. Chief Electronics Technician (E-7) ETCM Senior Chief Electronics Technician (E-8) ETCM: Master Chief Electronics Technician (E-9)

Description

Summary: Performs maintenance on electronic equipment and components used for communications, cryptography, and navigation; possesses a general working knowledge of electronics and electronics. ETN. Reads and interprets schematics and block diagrams; uses test equipment and hand tools; repairs electrical/electronic cables and connectors; localizes malfunctions and repairs or replaces faulty parts or subassemblies, aligns, adjusts, calibrates, and performs preventative maintenance on equipment; inventories tools and portable test equipment; orders parts and tools; inspects, cleans, and lubricates equipment; completes maintenance data forms. ETN2: Able to perform the duties required for ETN3, maintains electrical/electronic navigational aids, and communications receiving and transmitting equipment, localizes malfunctions to systems, subsystems, circuits, and parts, inventories installed equipment, completes maintenance reports.

Recommendaion, ETN3

In the vocational certificate category, 2 semester hours in applied mathematics, 3 in basic electronics, 5 in circuit theory, and 6 in systems maintenance, and credit in troubleshooting techniques on the basis of institutional evaluation, for a minimum total of 16 semester hours. In the lower-division baccalaureate/associate degree category, 2 semester hours in applied mathematics, 3 in basic electronics, 5 in circuit theory, 1 in digital electronics, and 2 in systems maintenance, and credit in troubleshooting techniques on the basis of institutional evaluation, for a minimum total of 13 semester hours (12/78)

Recommendaion, ETR2

In the vocational certificate category, 2 semester hours in applied mathematics, 3 in basic electronics, 6 in circuit theory, and 8 in systems maintenance, and credit in troubleshooting techniques on the basis of institutional evaluation, for a minimum total of 19 semester hours. In the upper-division baccalaureate/associate degree category, 2 semester hours in applied mathematics, 3 in basic electronics, 6 in circuit theory, 2 in digital electronics, and 3 in systems maintenance, and credit in troubleshooting techniques on the basis of institutional evaluation, for a minimum total of 16 semester hours (12/78)

NER-ETR-001

ELECTRONICS TECHNICIAN, RADAR

ETR3

ETR2

Exhibit Dates: 6/73-6/78 (Effective 7/78, the ETR rating was discontinued.)

Occupational Field: 8 (Weapons Control)

Career Pattern


Description

Summary: Performs maintenance on electronic surface and air tracking and detection equipment, electronic recognition and identification equipment, and aids to navigation; possesses a general working knowledge of electricity and electronics. ETR3. Reads and interprets schematics and block diagrams; uses test equipment and hand tools; repairs electrical/electronic cables and connectors; localizes malfunctions and repairs or replaces faulty parts or subassemblies, aligns, adjusts, calibrates, and performs preventative maintenance on equipment; inventories tools and portable test equipment; orders parts and tools; inspects, cleans, and lubricates equipment; completes maintenance data forms. ETR2: Able to perform the duties required for ETR3, maintains radar transmitting equipment, radar receiving equipment, radar identification equipment, and equipment; completes maintenance data forms. ETR1: Able to perform the duties required for ETR2, maintains radar transmitting equipment, radar receiving equipment, radar identification equipment, and equipment; completes maintenance data forms. ETR3: Able to perform the duties required for ETR3, maintains radar transmitting equipment, radar receiving equipment, radar identification equipment, and equipment; completes maintenance data forms. ETR2: Able to perform the duties required for ETR3, maintains radar transmitting equipment, radar receiving equipment, radar identification equipment, and equipment; completes maintenance data forms. ETR1: Able to perform the duties required for ETR2, maintains radar transmitting equipment, radar receiving equipment, radar identification equipment, and equipment; completes maintenance data forms.

Recommendaion, ETR3

In the vocational certificate category, 2 semester hours in applied mathematics, 3 in basic electronics, 5 in circuit theory, and 6 in systems maintenance, and credit in troubleshooting techniques on the basis of institutional evaluation, for a minimum total of 16 semester hours. In the lower-division baccalaureate/associate degree category, 2 semester hours in applied mathematics, 3 in basic electronics, 5 in circuit theory, 1 in digital electronics, and 2 in systems maintenance, and credit in troubleshooting techniques on the basis of institutional evaluation, for a minimum total of 13 semester hours (12/78)
NER-EW-001

ELECTRONICS WARFARE TECHNICIAN

EW3  Second Class (E-5).

EW1  First Class (E-6).

EWCS  Senior Chief Electronics Warfare Technician, First Class (E-7).

EWCM  Senior Chief Electronics Warfare Technician, Second Class (E-8).

EW2  Chief Electronics Warfare Technician, First Class (E-9).

EW3  Electronics Warfare Technician, Third Class (E-4).

EW1  Electronics Warfare Technician, Second Class (E-5).

EW2  Electronics Warfare Technician, Third Class (E-6).

EW3  Electronics Warfare Technician, Fourth Class (E-7).

EW1  Electronics Warfare Technician, Fifth Class (E-8).

EWCS  Electronics Warfare Technician, Sixth Class (E-9).

EWCM  Electronics Warfare Technician, Seventh Class (E-10).

NER-FN-001

FIREMAN

FN

Exhibit Dates: 6/71-Present.

Career Pattern


Description

Summary: Operates, repairs, and performs maintenance on electronic warfare equipment; analyzes and evaluates received signals. EW3: Operates electronic signal analyzing equipment; operates electronic direction-finding equipment; maintains radio frequency transmission systems; performs maintenance on electronic warfare equipment; reads and interprets electronic block diagrams. EW2: Able to perform the duties required for EW3, tests analog and digital circuits, servomechanisms, and digital logic and interconnecting circuits; operates general-purpose test equipment, including power meters, oscilloscopes, signal generators, counters, pulse generators, and time/frequency electronics; records and interprets electrical/electronic schematics and blueprints for maintenance and modifications. EW1: Instructs and guides electronic warfare operators in signal analysis and equipment operation, prepares weekly preventive maintenance schedules. EWC: Able to perform the duties required for EW1, tests and evaluates newly installed or repaired electronic warfare equipment, conducts electronic interference surveys and recommends corrective action, supervises an operational training program for electronic warfare personnel, supervises and trains personnel in maintenance procedures. EWCS: Coordinates test equipment calibration requirements and procedures, writes messages and prepares reports for EWCM. EWCM: Able to perform the duties required for EWCS; plans, schedules, and implements electronic warfare equipment; forecasts future requirements; develops operating budgets and monitors expenditures.

Recommendaation, ETR

In the vocational certificate category, 2 semester hours in applied mathematics, 3 in basic electronics, 6 in circuit theory, and 8 in systems maintenance, and credit in troubleshooting techniques on the basis of institutional evaluation, for a minimum total of 19 semester hours. In the lower-division baccalaureate/associate degree category, 2 semester hours in applied mathematics, 3 in basic electronics, 6 in circuit theory, 2 in digital electronics, and 3 in systems maintenance, and credit in troubleshooting techniques on the basis of institutional evaluation, for a minimum total of 16 semester hours (12/78).

NER-EW-001

ELECTRONICS WARFARE TECHNICIAN

EW3  Second Class (E-5).

EW1  First Class (E-6).

EWCS  Senior Chief Electronics Warfare Technician, First Class (E-7).

EWCM  Senior Chief Electronics Warfare Technician, Second Class (E-8).

EW2  Chief Electronics Warfare Technician, First Class (E-9).

EW3  Electronics Warfare Technician, Third Class (E-4).

EW1  Electronics Warfare Technician, Second Class (E-5).

EW2  Electronics Warfare Technician, Third Class (E-6).

EW3  Electronics Warfare Technician, Fourth Class (E-7).

EW1  Electronics Warfare Technician, Fifth Class (E-8).

EWCS  Electronics Warfare Technician, Sixth Class (E-9).

EWCM  Electronics Warfare Technician, Seventh Class (E-10).

NER-FN-001

FIREMAN

FN

Exhibit Dates: 6/71-Present.

Career Pattern


Description

Summary: Operates, repairs, and performs maintenance on electronic warfare equipment; analyzes and evaluates received signals. EW3: Operates electronic signal analyzing equipment; operates electronic direction-finding equipment; maintains radio frequency transmission systems; performs maintenance on electronic warfare equipment; reads and interprets electronic block diagrams. EW2: Able to perform the duties required for EW3, tests analog and digital circuits, servomechanisms, and digital logic and interconnecting circuits; operates general-purpose test equipment, including power meters, oscilloscopes, signal generators, counters, pulse generators, and time/frequency electronics; records and interprets electrical/electronic schematics and blueprints for maintenance and modifications. EW1: Instructs and guides electronic warfare operators in signal analysis and equipment operation, prepares weekly preventive maintenance schedules. EWC: Able to perform the duties required for EW1, tests and evaluates newly installed or repaired electronic warfare equipment, conducts electronic interference surveys and recommends corrective action, supervises an operational training program for electronic warfare personnel, supervises and trains personnel in maintenance procedures. EWCS: Coordinates test equipment calibration requirements and procedures, writes messages and prepares reports for EWCM. EWCM: Able to perform the duties required for EWCS; plans, schedules, and implements electronic warfare equipment; forecasts future requirements; develops operating budgets and monitors expenditures.

Recommendaation, ETR

In the vocational certificate category, 2 semester hours in systems maintenance, 3 in basic electronics, 5 in circuit theory, and 2 in applied mathematics, and credit in troubleshooting techniques on the basis of institutional evaluation, for a minimum total of 16 semester hours. In the lower-division baccalaureate/associate degree category, 2 semester hours in systems maintenance, 3 in basic electronics, 5 in circuit theory, and 2 in applied mathematics, 5 in circuit theory, 2 in digital electronics, and 2 in human relations, and credit in troubleshooting techniques on the basis of institutional evaluation, for a minimum total of 16 semester hours. In the upper-division baccalaureate category, 6 semester hours in circuit theory (12/78).

Recommendation, EWCS

In the vocational certificate category, or in the lower-division baccalaureate/associate degree category, the recommendation is the same as that for EW2. In the lower-division baccalaureate category, 6 semester hours in circuit theory, 3 for field experience in management, and 3 in management problems, for a total of 12 semester hours (12/78).

Recommendation, EWCM

In the vocational certificate category, or in the lower-division baccalaureate/associate degree category, the recommendation is the same as that for EW2. In the lower-division baccalaureate category, 6 semester hours in circuit theory, 6 for field experience in management, and 3 in management problems, for a total of 15 semester hours (12/78).
how to use carbon dioxide, dry chemical, and water-portable fire extinguishers, knows the function of the typical fire main system, fixed carbon dioxide system, water wash-down system, and magazine sprinkling system, knows the difference between flooding and progressive flooding and the dangers involved.

Recommendation

In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 3 semester hours in marine engineering and credit in first aid and firefighting on the basis of institutional evaluation, if the duty assignment was boat engineer, 3 semester hours in diesel engine technology, if qualified as a Swimmer First Class, 1 semester hour in swimming and additional credit in swimming on the basis of institutional evaluation (12/78).

Recommendation, FTCM

In the vocational certificate category or in the lower-division baccalaureate/associate degree category, the recommendation is the same as for FTCM in the upper-division baccalaureate category, 6 semester hours for field experience in management and 3 in management problems (12/78).

NER-FTB-001

FIRE CONTROL TECHNICIAN

FTBC

Exhibit Dates: 6/73-Present
Occasional Field: 8 (Weapons Control)
Career Pattern

May progress from: FTBC, Chief Fire Control Technician, Ballistic Missile Fire Control (E-7), FTGC, Chief Fire Control Technician, Gun Fire Control (E-7), FTM2 (Fire Control Technician, Surface Missile Fire Control (E-7), or MTC, Chief Missile Technician (E-7).

FTCS: Senior Fire Control Technician (E-7), FTS, Fire Control Technician, Surface Missile Fire Control (E-7), FTB2: Fire Control Technician, Surface Missile Fire Control, Third Class (E-4), FTB1: Fire Control Technician, Fire Control Technician, Gun Fire Control, Second Class (E-5), FTB3: Fire Control Technician, Ballistic Missile Fire Control, First Class (E-6).


Description

Summary. Operates, repairs, and performs maintenance on ballistic missile fire control systems, equipment, and associated test equipment. FTB3: Adjusts, aligns, and calibrates basic electronic circuits; checks under supervision, performs troubleshooting, calibration, adjustments, and tests on missile fire control and guidance systems and support subsystems; isolates and replaces faulty parts and components; identifies electrical components and parts from drawings and schematic diagrams; identifies basic digital circuits; orders repair parts, completes maintenance data forms. FTB2: Able to perform the duties required for FTB3, isolates and replaces defective circuit components, performs troubleshooting, calibrations, adjustments, and tests on missile fire control and guidance systems and support subsystems, operates analog/digital computer, maintains and records complete maintenance reports, inventories installed equipment FTB1: Able to perform the duties required for FTB2, inspects maintenance and repair work of weapon systems and auxiliary equipment, reviews completed maintenance data forms, prepares weekly maintenance schedules, administers nuclear weapon systems. FTB: Able to perform the duties required for FTB1, serves as shop supervisor, coordinates and directs maintenance on fire control, guidance, missile, test, and readiness equipment and support subsystems, assures compliance with nuclear weapons safety rules, prepares reports, prepares quarterly maintenance schedules.

Recommendation, FTB3

In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 3 semester hours in basic electricity/electronics, 3 in applied mathematics, and 3 in basic blueprint reading, for a total of 12 semester hours (12/78).

Recommendation, FTB2

In the vocational certificate category, the recommendation is the same as that for FTB2. In the lower-division baccalaureate/associate degree category, 6 semester hours in basic electricity/electronics, 3 in applied mathematics, 3 in basic blueprint reading, 2 in personnel supervision in maintenance management, and 3 in human relations, for a total of 19 semester hours (12/78).

Recommendation, FTB1

In the vocational certificate category, the recommendation is the same as that for FTB1. In the lower-division baccalaureate/associate degree category, 6 semester hours in basic electricity/electronics, 3 in applied mathematics, 3 in basic blueprint reading, 2 in personnel supervision, 3 in maintenance management, 3 in human relations, and 1 in record keeping, for a total of 22 semester hours (12/78).

NER-FTG-001

FIRE CONTROL TECHNICIAN, GUN FIRE CONTROL

FTG1

Exhibit Dates: 6/73-Present
Occasional Field: 8 (Weapons Control)
Career Pattern

May progress from: FTG3, Fire Control Technician, Gun Fire Control, Third Class (E-7), FTG2, Fire Control Technician, Gun Fire Control, Second Class (E-6), FTG1: Fire Control Technician, Gun Fire Control, First Class (E-5).

FTG3: Fire Control Technician, Gun Fire Control, First Class (E-5), FTG2: Fire Control Technician, Gun Fire Control, Second Class (E-6) FTG1: Fire Control Technician, Gun Fire Control, First Class (E-5) FTGC: Fire Control Technician, Gun Fire Control, Chief Fire Control Technician, Gun Fire Control, Second Class (E-5) FTGC: Chief Fire Control Technician, Gun Fire Control, First Class (E-5) FTGC: Chief Fire Control Technician, Gun Fire Control, Second Class (E-5) FTGC: Chief Fire Control Technician, Gun Fire Control, Third Class (E-4) FTGC: Chief Fire Control Technician, Gun Fire Control, Fourth Class (E-3) FTGC: Chief Fire Control Technician, Gun Fire Control, Fifth Class (E-2) FTGC: Chief Fire Control Technician, Gun Fire Control, Sixth Class (E-1) FTGC: Chief Fire Control Technician, Gun Fire Control, Seventh Class (E-0) FTGC: Chief Fire Control Technician, Gun Fire Control, Eighth Class (E-9).

Description

Summary. Operates, repairs, and performs maintenance on shipboard gun fire control systems including submarine weapon control systems and associated test equipment. FTG3: Assists in testing and repairing electrical and electronic gun fire control systems, performs preventative maintenance on weapons, follows standard operating procedure to locate and repair system malfunctions, tests, aligns, and adjusts, radar-indicating circuits and power supplies, uses test equipment, including voltmeters, oscilloscopes, and signal gen-
Exhibit Dates: 6/73-Present

FIRE CONTROL TECHNICIAN, SURFACE
MISSILE FIRE CONTROL

FTM3
FTM2
FTM1
FTMC

Exhibit Dates: 6/73-Present

Occupational Field: Fire Control
Career Pattern
SN Seaman (E-3) FTM3 Fire Control Technician. Surface Missile Fire Control First Class (E-4) FTM2 Fire Control Technician, Surface Missile Fire Control Second Class (E-5) FTM1 Fire Control Technician, Surface Missile Fire Control First Class (E-6) FTMC Chief Fire Control Technician. Surface Missile Fire Control (E-7) FTCS Senior Chief Fire Control Technician (E-8) FTCM Master Chief Fire Control Technician (E-9)

Description
Summary Operates, repairs, and performs maintenance on surface missile fire control systems (including weapon direction systems and search radar), telemetry equipment, missiles, and associated support equipment. FTM1 Assists in troubleshooting and repairing electrical and electronics surface missile fire control systems. FTMC performs preventive maintenance on weapons, follows standard checkout procedures to locate and repair system malfunctions, tests, aligns, and adjusts radar-indicating circuits and power supplies, uses test equipment, including voltmeters, oscilloscopes, and signal generators, performs operational tests and operator adjustments on weapon equipment, operates radar equipment, fire control systems, and weapons direction designation systems in all modes; fabricates, maintains, and installs electrical/electronics cable assemblies; performs electro-mechanical maintenance on mechanical and electrical mechanical assemblies, completes maintenance forms, inventories parts and supplies

Recommendation, FTM1
In the vocational certificate category, the recommendation is the same as that for FTM2. In the lower-division baccalaureate/associate degree category, 6 semester hours in basic electricity/electronics, 3 in applied mathematics, 3 in applied blueprint reading, 2 in personnel supervision, 3 in personnel supervision, 3 in maintenance management, 3 in human relations, and 1 in record keeping, for a total of 19 semester hours (12/78).

Recommendation, FTMC
In the vocational certificate category, the recommendation is the same as that for FTM2. In the lower-division baccalaureate/associate degree category, 6 semester hours in basic electricity/electronics, 3 in applied mathematics, 3 in blueprint reading, 2 in personnel supervision, 2 in maintenance management, and 3 in human relations, for a total of 19 semester hours (12/78).

NFR-GM-001

GUNNER'S MATE
GMCS
GMCM

Exhibit Dates: Pending evaluation

NFR-NGM-001

GUNNER'S MATE, GUNS
GMG3
GMG2
GMG1
GMGC

Exhibit Dates: Pending evaluation

NFR-GMM-001

GUNNER'S MATE, MISSILES
GMN3
GMN2
GMN1
GMNC

Exhibit Dates: Pending evaluation

NFR-GMT-001

GUNNER'S MATE TECHNICIAN
GMT3
GMT2
GMT1
GMTC
GMTCS
GMTC

Exhibit Dates: Pending evaluation

NFR-GST-001

GAS TURBINE SYSTEM TECHNICIAN
GSCS
GSCM

Exhibit Dates: 10/78-Present Pending evaluation
NER-GSE-001
GAS TURBINE SYSTEM TECHNICIAN, ELECTRICAL
GS3
GS2
GS1
GSC
Exhibit Dates: 10/78-Present Pending evaluation.

NER-GSM-001
GAS TURBINE SYSTEM TECHNICIAN, MECHANICAL
GSM3
GSM2
GSM1
GSMC
Exhibit Dates: 10/78-Present Pending evaluation.

NER-HM-001
HOSPITAL CORPSMAN
HM3
HM2
HM1
HMC
HMC5
HMC5
Exhibit Dates: Pending evaluation.

NER-HN-001
HOSPITALMAN
HN
Exhibit Dates: Pending evaluation

NER-HT-001
HULL MAINTENANCE TECHNICIAN
HT3
HT2
HT1
HTC
HTCS
HTCM
Exhibit Dates: 6/71-Present. 
Occupational Field: 4 (Ship Maintenance).

Career Pattern

Description
Summary: Performs repairs to the ship's hull, plumbing, and piping systems, performs maintenance on firefighting equipment and damage control equipment. HT3. Operates, stores, and performs maintenance on firefighting equipment and damage control equipment; inspect and tests installed damages control equipment and systems; performs brazing, electrical, arc welding, oxyacetylene welding and cutting; repairs ship plumbing and piping systems; controls discharging and pumping of waste in restricted water; completes maintenance data forms; orders repair parts. HT2: Able to perform the duties required for HT3; performs gas-free testing of voids and compartments to assure safe entry; inspects fire main, sprinklers, and ventilation systems; performs repairs to ship structure using heavy gauge metal; completes maintenance reports; inventories installed equipment. HT1: Able to perform the duties required for HT2; organizes and supervises damage control and firefighting parties; prepares training records; reviews completed maintenance data forms; prepares weekly maintenance schedules. HTC: Able to perform the duties required for HT2; plans and conducts damage control exercises; maintains shop records and prepares progress reports, supervises training programs; estimates time, personnel, and material requirements; prepares quarterly maintenance schedules, supervises a hull maintenance technician shop. HTCS: Able to perform the duties required for HTC; prepares directives and instructions for attaining organizational objectives, establishes and implements a program for interviewing, evaluating, and assigning personnel to assure maximum utilization; prepares correspondence; organizes and evaluates training programs; administers a long-range planned maintenance program. HTCM: Able to perform the duties required for HTCS; reviews personnel, equipment, and material requirements and forecasts future requirements plans, organizes, implements, and controls activities; develops operating budgets and monitors expenditures.

Recommendation, HT3
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 2 semester hours in arc welding, 2 in oxyacetylene welding, 4 in fire science, 2 in basic plumbing, and 2 in brazing and soldering, for a total of 12 semester hours (12/78).

Recommendation, HT2
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 3 semester hours in arc welding, 3 in oxyacetylene welding, 6 in fire science, 3 in basic plumbing, 3 in brazing and soldering, and 1 in record keeping, for a total of 19 semester hours (12/78).

Recommendation, HT1
In the vocational certificate category, the recommendation is the same as that for HT2. In the lower-division baccalaureate/associate degree category, 3 semester hours in arc welding, 3 in oxyacetylene welding, 6 in fire science, 3 in basic plumbing, 3 in brazing and soldering, and 1 in record keeping for a total of 20 semester hours (12/78).
In the vocational certificate category, 5 semester hours in basic electricity/electronics, 3 in troubleshooting techniques, 3 in electrical/electronic circuits, 2 in electrical/mechanical systems, 2 in applied mathematics, 1 in record keeping, for a total of 20 semester hours. In the lower division baccalaureate/associate degree category, 3 semester hours in basic electronics, 2 in electrical/electronics laboratory, 2 in troubleshooting techniques, 3 in electrical/electronic circuits, 3 in electrical/mechanical systems, 2 in applied mathematics, for a total of 15 semester hours (12/78)

Recommendation, ICC

In the vocational certificate category, 5 semester hours in basic electricity/electronics, 6 in troubleshooting techniques, 5 in electrical/electronic circuits, 4 in electrical/mechanical systems, and 2 in applied mathematics, for a total of 20 semester hours. In the lower division baccalaureate/associate degree category, 3 semester hours in basic electronics, 2 in electrical/electronics laboratory, 2 in troubleshooting techniques, 3 in electrical/electronic circuits, 3 in electrical/mechanical systems, and 2 in applied mathematics, for a total of 15 semester hours (12/78).

Recommendation, ICCS

In the vocational certificate category, 5 semester hours in basic electricity/electronics, 3 in troubleshooting techniques, 5 in electrical/electronic circuits, 4 in electrical/mechanical systems, and 2 in applied mathematics, for a total of 20 semester hours. In the lower division baccalaureate/associate degree category, 3 semester hours in basic electronics, 2 in electrical/electronics laboratory, 2 in troubleshooting techniques, 3 in electrical/electronic circuits, 3 in electrical/mechanical systems, and 2 in applied mathematics, for a total of 15 semester hours (12/78).

Recommendation, ICC

In the vocational certificate category, 5 semester hours in basic electricity/electronics, 6 in troubleshooting techniques, 5 in electrical/electronic circuits, 4 in electrical/mechanical systems, and 2 in applied mathematics, for a total of 20 semester hours. In the lower division baccalaureate/associate degree category, 3 semester hours in basic electronics, 2 in electrical/electronics laboratory, 2 in troubleshooting techniques, 3 in electrical/electronic circuits, 3 in electrical/mechanical systems, and 2 in applied mathematics, for a total of 15 semester hours (12/78).

Recommendation, ICC

In the vocational certificate category, 5 semester hours in basic electricity/electronics, 3 in troubleshooting techniques, 5 in electrical/electronic circuits, 4 in electrical/mechanical systems, and 2 in applied mathematics, for a total of 20 semester hours. In the lower division baccalaureate/associate degree category, 3 semester hours in basic electronics, 2 in electrical/electronics laboratory, 2 in troubleshooting techniques, 3 in electrical/electronic circuits, 3 in electrical/mechanical systems, and 2 in applied mathematics, for a total of 15 semester hours (12/78).

Recommendation, ICCS

In the vocational certificate category, 5 semester hours in basic electricity/electronics, 3 in troubleshooting techniques, 5 in electrical/electronic circuits, 4 in electrical/mechanical systems, and 2 in applied mathematics, for a total of 20 semester hours. In the lower division baccalaureate/associate degree category, 3 semester hours in basic electronics, 2 in electrical/electronics laboratory, 2 in troubleshooting techniques, 3 in electrical/electronic circuits, 3 in electrical/mechanical systems, and 2 in applied mathematics, for a total of 15 semester hours (12/78).

Recommendation, ICC

In the vocational certificate category, 5 semester hours in basic electricity/electronics, 3 in troubleshooting techniques, 5 in electrical/electronic circuits, 4 in electrical/mechanical systems, and 2 in applied mathematics, for a total of 20 semester hours. In the lower division baccalaureate/associate degree category, 3 semester hours in basic electronics, 2 in electrical/electronics laboratory, 2 in troubleshooting techniques, 3 in electrical/electronic circuits, 3 in electrical/mechanical systems, and 2 in applied mathematics, for a total of 15 semester hours (12/78).

Recommendation, ICCS

In the vocational certificate category, 5 semester hours in basic electricity/electronics, 3 in troubleshooting techniques, 5 in electrical/electronic circuits, 4 in electrical/mechanical systems, and 2 in applied mathematics, for a total of 20 semester hours. In the lower division baccalaureate/associate degree category, 3 semester hours in basic electronics, 2 in electrical/electronics laboratory, 2 in troubleshooting techniques, 3 in electrical/electronic circuits, 3 in electrical/mechanical systems, and 2 in applied mathematics, for a total of 15 semester hours (12/78).

Recommendation, ICC

In the vocational certificate category, 5 semester hours in basic electricity/electronics, 3 in troubleshooting techniques, 5 in electrical/electronic circuits, 4 in electrical/mechanical systems, and 2 in applied mathematics, for a total of 20 semester hours. In the lower division baccalaureate/associate degree category, 3 semester hours in basic electronics, 2 in electrical/electronics laboratory, 2 in troubleshooting techniques, 3 in electrical/electronic circuits, 3 in electrical/mechanical systems, and 2 in applied mathematics, for a total of 15 semester hours (12/78).

Recommendation, ICCS

In the vocational certificate category, 5 semester hours in basic electricity/electronics, 3 in troubleshooting techniques, 5 in electrical/electronic circuits, 4 in electrical/mechanical systems, and 2 in applied mathematics, for a total of 20 semester hours. In the lower division baccalaureate/associate degree category, 3 semester hours in basic electronics, 2 in electrical/electronics laboratory, 2 in troubleshooting techniques, 3 in electrical/electronic circuits, 3 in electrical/mechanical systems, and 2 in applied mathematics, for a total of 15 semester hours (12/78).

Recommendation, ICC
and repair of test equipment in instrument repair work center, supervises operation and use of office machine test equipment and special tools, manages the maintenance, calibration, and repair of pest communications equipment, and the maintenance, repair, procurement, and utilization of all parts and machines in stock, informs superiors about new developments and procedures for repair of temperature, fluid, and flow measuring instruments, watches, clocks, and office machines, prepares quarterly maintenance schedules, supervises maintenance and repair of office machines and equipment, navy timepieces, and optical instruments and equipment, supervises maintenance, repair, and calibration of measuring instruments and test equipment, disassembles, cleans, reassembles, adjusts, and repairs rotary and electronic calculators, dual spectrum and electronic reproduction detection equipment, and implements a program for interviewing, evaluating, and assigning personnel to assure adequate quality assurance. In mechanical blueprint reading, 1 in basic machine tools, 6 in basic instrumentation, 1 in test and measurement standards (instrumentation), 1 in office machine repair, 2 in shop supervision, 3 in personnel supervision, and 2 in records administration, for a minimum total of 19 semester hours, if NEC was IM-1821, Precision Physical Measuring Specialist, 3 semester hours in technical mathematics, for a total of 22 semester hours (12/78).

Recommendation, IMC

In the vocational certificate category, the recommendation is the same as that for IM1. In the lower-division baccalaureate/associate degree category, 1 semester hour in mechanical blueprint reading, 1 in basic machine tools, 6 in basic instrumentation, 1 in test and measurement standards (instrumentation), 3 in office machine repair, 2 in shop supervision, 3 in personnel supervision, and 2 in records administration, for a minimum total of 17 semester hours, if NEC was IM-1821, Precision Physical Measuring Specialist, 3 semester hours in technical mathematics for a total of 20 semester hours (12/78).

Recommendation, IMCS

In the vocational certificate category, the recommendation is the same as that for IM1. In the lower-division baccalaureate/associate degree category, 1 semester hour in mechanical blueprint reading, 1 in basic machine tools, 6 in basic instrumentation, 1 in test and measurement standards (instrumentation), 1 in office machine repair, 2 in shop supervision, 3 in personnel supervision, and 2 in records administration, for a minimum total of 19 semester hours, if NEC was IM-1821, Precision Physical Measuring Specialist, 3 semester hours in technical mathematics, for a total of 22 semester hours (12/78).

NER-IS-001

INTELLIGENCE SPECIALIST

IS3
IS2
IS1
ISC
ISCS
ISCM

Exhibit Dates: Pending evaluation

NER-JO-001

JOURNALIST

JO3
JO2
JO1
JOC
JOCs
JQCM

Exhibit Dates: 6/72—Present.

Occupational Field: 17 (Media).

Career Pattern

SV Seaman (E-3); JO3: Journalist, Third Class (E-4); JO2: Journalist, Second Class (E-5); JO1: Journalist, Third Class (E-6); JOC: Chief Journalist (E-7); JOCS: Senior Chief Journalist (E-8); JOCM: Master Chief Journalist (E-9)

Description

Summarizes, supervises, or participates in the administration of public affairs activities. JO3. Researches and writes news releases and feature articles, covers news events, prepares visual material and test equipment, adjusts, and monitors field engineers, serve on the staff of American Forces Radio/TV (AFRT) stations, prepares official correspondence and directives, assists in speech writing and presentations on Naval topics, prepares and lays out Navy publications, including newspapers and information brochures; prepares art work and layouts for various publications, operates audio and videotape equipment, drafts correspondence, prepares news releases, and prepares material for radio and television programs, announces radio programs and conducts interview, rewrite, and process technical news photographs. JO2: Able to perform the duties required for JO3, organizes, edits, and administers a ship or shore station newspaper, researches a wide variety of technical news sources for Naval and commercial use; writes feature material for radio and television, administers a shipboard AFRT station. JO1: Able to perform the duties required for JO2, conducts and arranges news conferences, prepares slide presentations, develops public affairs plans for either a ship or shore station, prepares and conducts audience surveys, trains and supervises personnel. JOE: Able to perform the duties required for JO3, manages a public affairs office, plans, establishes, and implements a program for interviewing, evaluates, and assigns personnel to assure adequate quality assurance. In mechanical blueprint reading, 1 in basic machine tools, 6 in basic instrumentation, 1 in test and measurement standards (instrumentation), 1 in office machine repair, 2 in shop supervision, 3 in personnel supervision, 2 in records administration, for a minimum total of 22 semester hours, if NEC was IM-1821, Precision Physical Measuring Specialist, 3 semester hours in technical mathematics, for a total of 25 semester hours. In the upper division baccalaureate/associate degree category, 1 semester hours for field experience in management (12/78).

NER-JO-002

JOURNALIST

JO3
JO2
JO1
JOC
JQCM


Occupational Field: 17 (Media).

Career Pattern

SV Seaman (E-3); J03: Journalist, Third Class (E-4); JO2: Journalist, Second Class (E-5); JO1: Journalist, Third Class (E-6); JOC: Chief Journalist (E-7); JOCS: Senior Chief Journalist (E-8); JOCM: Master Chief Journalist (E-9)

Description

Summarizes, supervises, or participates in the administration of public affairs activities. JO3. Researches and writes news releases and feature articles, covers news events, prepares visual material and test equipment, adjusts, and monitors field engineers, serve on the staff of American Forces Radio/TV (AFRT) stations, prepares official correspondence and directives, assists in speech writing and presentations on Naval topics, prepares and lays out Navy publications, including newspapers and information brochures; prepares art work and layouts for various publications, operates audio and videotape equipment, drafts correspondence, prepares news releases, and prepares material for radio and television programs, announces radio programs and conducts interview, rewrite, and process technical news photographs. JO2: Able to perform the duties required for JO3, organizes, edits, and administers a ship or shore station newspaper, researches a wide variety of technical news sources for Naval and commercial use; writes feature material for radio and television, administers a shipboard AFRT station. JO1: Able to perform the duties required for JO2, conducts and arranges news conferences, prepares slide presentations, develops public affairs plans for either a ship or shore station, prepares and conducts audience surveys, trains and supervises personnel. JOE: Able to perform the duties required for JO3, manages a public affairs office, plans, establishes, and implements a program for interviewing, evaluates, and assigns personnel to assure adequate quality assurance. In mechanical blueprint reading, 1 in basic machine tools, 6 in basic instrumentation, 1 in test and measurement standards (instrumentation), 1 in office machine repair, 2 in shop supervision, 3 in personnel supervision, 2 in records administration, for a minimum total of 22 semester hours, if NEC was IM-1821, Precision Physical Measuring Specialist, 3 semester hours in technical mathematics, for a total of 25 semester hours. In the upper division baccalaureate/associate degree category, 1 semester hours for field experience in management (12/78).

NER-JO-003

INTELLIGENCE SPECIALIST

IS3
IS2
IS1
ISC
ISCS
ISCM


Occupational Field: 17 (Media).

Career Pattern

SV Seaman (E-3): JO3: Journalist, Third Class (E-4); JO2: Journalist, Second Class (E-5); JO1: Journalist, Third Class (E-6); JOC: Chief Journalist (E-7); JOCS: Senior Chief Journalist (E-8); JOCM: Master Chief Journalist (E-9)

Description

Summarizes, supervises, or participates in the administration of public affairs activities. JO3. Researches and writes news releases and feature articles, covers news events, prepares visual material and test equipment, adjusts, and monitors field engineers, serve on the staff of American Forces Radio/TV (AFRT) stations, prepares official correspondence and directives, assists in speech writing and presentations on Naval topics, prepares and lays out Navy publications, including newspapers and information brochures; prepares art work and layouts for various publications, operates audio and videotape equipment, drafts correspondence, prepares news releases, and prepares material for radio and television programs, announces radio programs and conducts interview, rewrite, and process technical news photographs. JO2: Able to perform the duties required for JO3, organizes, edits, and administers a ship or shore station newspaper, researches a wide variety of technical news sources for Naval and commercial use; writes feature material for radio and television, administers a shipboard AFRT station. JO1: Able to perform the duties required for JO2, conducts and arranges news conferences, prepares slide presentations, develops public affairs plans for either a ship or shore station, prepares and conducts audience surveys, trains and supervises personnel. JOE: Able to perform the duties required for JO3, manages a public affairs office, plans, establishes, and implements a program for interviewing, evaluates, and assigns personnel to assure adequate quality assurance. In mechanical blueprint reading, 1 in basic machine tools, 6 in basic instrumentation, 1 in test and measurement standards (instrumentation), 1 in office machine repair, 2 in shop supervision, 3 in personnel supervision, 2 in records administration, for a minimum total of 22 semester hours, if NEC was IM-1821, Precision Physical Measuring Specialist, 3 semester hours in technical mathematics, for a total of 25 semester hours. In the upper division baccalaureate/associate degree category, 1 semester hours for field experience in management (12/78).

NER-JO-004

JOURNALIST

JO3
JO2
JO1
JOC
JQCM


Occupational Field: 17 (Media).

Career Pattern

SV Seaman (E-3); J03: Journalist, Third Class (E-4); JO2: Journalist, Second Class (E-5); JO1: Journalist, Third Class (E-6); JOC: Chief Journalist (E-7); JOCS: Senior Chief Journalist (E-8); JOCM: Master Chief Journalist (E-9)

Description

Summarizes, supervises, or participates in the administration of public affairs activities. JO3. Researches and writes news releases and feature articles, covers news events, prepares visual material and test equipment, adjusts, and monitors field engineers, serve on the staff of American Forces Radio/TV (AFRT) stations, prepares official correspondence and directives, assists in speech writing and presentations on Naval topics, prepares and lays out Navy publications, including newspapers and information brochures; prepares art work and layouts for various publications, operates audio and videotape equipment, drafts correspondence, prepares news releases, and prepares material for radio and television programs, announces radio programs and conducts interview, rewrite, and process technical news photographs. JO2: Able to perform the duties required for JO3, organizes, edits, and administers a ship or shore station newspaper, researches a wide variety of technical news sources for Naval and commercial use; writes feature material for radio and television, administers a shipboard AFRT station. JO1: Able to perform the duties required for JO2, conducts and arranges news conferences, prepares slide presentations, develops public affairs plans for either a ship or shore station, prepares and conducts audience surveys, trains and supervises personnel. JOE: Able to perform the duties required for JO3, manages a public affairs office, plans, establishes, and implements a program for interviewing, evaluates, and assigns personnel to assure adequate quality assurance. In mechanical blueprint reading, 1 in basic machine tools, 6 in basic instrumentation, 1 in test and measurement standards (instrumentation), 1 in office machine repair, 2 in shop supervision, 3 in personnel supervision, 2 in records administration, for a minimum total of 22 semester hours, if NEC was IM-1821, Precision Physical Measuring Specialist, 3 semester hours in technical mathematics, for a total of 25 semester hours. In the upper division baccalaureate/associate degree category, 1 semester hours for field experience in management (12/78).
techniques, b in radio/television production techniques, and c in broadcasting news and public affairs, if NEC was JO-8148, Photojournalist, an additional 6 semester hours in photography and 3 in layout (3/79).

Recommendation, JOC

In the lower-division baccalaureate/associate degree category, 3 semester hours in news editing, 3 in news reporting, 3 in writing for mass media, 3 in audience analysis, 3 in technical writing, 3 in interviewing techniques, 3 for field experience in public affairs, 2 in speech writing, 3 in human relations, 3 in supervision, and 3 in office management, for a minimum total of 32 semester hours, if NEC was JO-3221, Radio-TV Specialist; an additional 3 semester hours in audio-visual technology, 3 in announcing, 3 in studio techniques, 6 in radio/television production techniques, 3 in broadcasting news and public affairs, 3 in station management, and 3 for field experience in broadcast journalism, from the JOCM, an additional 3 semester hours in photography, 3 in layout, and 3 for field experience in journalism (3/79).

Recommendation, JOCM

In the lower-division baccalaureate/associate degree category, the recommendation is the same as that for JOC in the upper-division baccalaureate category, 3 semester hours for field experience in management and 3 in management problems (3/79).

Recommendation, JCMS

In the lower-division baccalaureate/associate degree category, the recommendation is the same as that for JOC in the upper-division baccalaureate category, 3 semester hours for field experience in management and 3 in management problems (3/79).

NER-LI-001

LITHOGRAPHER

L13

L12

L11

LIC

LICS

LCM

Exhibit Dates: 6/72-Present

Occupational Field: 15 (Media)

Career Pattern

SN: Seaman (E-3) YN3: Yeoman Third Class (E-4), LN2: Legalman Second Class (E-5), LI: Legalman First Class (E-6), LN1: Legalman Chief (E-7), LNC: Chief Legalman (E-8), LNCM: Master Chief Legalman (E-9)

Description

Summary: Performs paralegal duties under the supervision of a judge advocate (legal officer). LN2: Records with stenomask (closed microphone recording device) or stenotypewriter, at least 40 words per minute; performs primarily military-related paralegal duties such as completing legal forms, answering inquiries on basic legal services, and assisting personnel in obtaining legal services, schedules and prepares courtroom for trials and legal proceedings, performs general legal office duties under supervision. LN1: Able to perform the duties required for LN2; types at 50 words per minute; performs paralegal duties pertaining to both civil and military legal matters, including interviewing witnesses, providing security for evidence, providing basic legal information, and counseling on personal legal matters; cooperates with naval authorities concerning Navy personnel. LNC: Able to perform the duties required for LN1; supervises the administrative procedures of a legal office; interprets and enforces policies concerning Navy personnel. LNCM: Able to perform the duties required for LNC; performs basic legal research using standard legal references such as state and federal codes, reporters, citators, legal encyclopedias, and legal digests; organizes and supervises personnel functions in a judge advocate's office, reviews reports and records for accuracy and legal adequacy. LNCS: Able to perform the duties required for LNC; supervises the administrative procedures of a legal office; develops operating budgets and monitors expenditures, prepares plans for manpower, supplies and equipment utilization in a legal office; establishes goals and objectives within own area of responsibility; plans, organizes, and controls activities in compliance with policy statements, occupational orders, and directives.

Recommendation, LN2

In the lower-division baccalaureate/associate degree category, the recommendation is the same as that for LN2. In the lower-division baccalaureate/associate degree category, the recommendation is the same as that for LN1. In the lower-division baccalaureate/associate degree category, the recommendation is the same as that for LNC. In the lower-division baccalaureate/associate degree category, the recommendation is the same as that for LNCM. In the lower-division baccalaureate/associate degree category, the recommendation is the same as that for LNCS. In the lower-division baccalaureate/associate degree category, the recommendation is the same as that for LNCM.
military legal practices and procedures, for a total of 9 semester hours (12/76)

Recommendation, LNI
In the vocational certificate category, 3 semester hours in typing, 3 in office procedures, 3 in military legal practices and procedures, and 6 in machine shorthand, for a total of 15 semester hours. In the lower-division baccalaureate/associate degree category, 2 semester hours in criminal procedure (written), 3 in typing, 3 in office procedures, 3 in military legal practices and procedures, and 6 in social studies, for a total of 17 semester hours (12/76).

Recommendation, LNC
In the vocational certificate category, the recommendation is the same as that for LNI. In the lower-division baccalaureate/associate degree category, 2 semester hours in communication (written), 3 in typing, 3 in office procedures, 3 in military legal practices and procedures, and 6 in social studies, and additional credit for field experience in management on the basis of institutional evaluation, for a minimum total of 20 semester hours (12/76).

Recommendation, MACM
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, the recommendation is the same as that for MACI. In the lower-division baccalaureate/associate degree category, 2 semester hours in communication (written), 2 in personnel supervision, 3 in typing, 3 in office procedures, 3 in military legal practices and procedures, 3 in office management, and 6 in social studies, and credit for field experience in management on the basis of institutional evaluation, for a minimum total of 26 semester hours. In the upper-division baccalaureate/associate degree category, 2 semester hours in individual process administration, 2 in legal bibliography, and additional credit in human relations on the basis of institutional evaluation, for a minimum total of 4 semester hours (12/76).

Recommendation, MACM
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 3 semester hours in criminal investigation, 3 in criminal law (evidence), 3 in criminal procedure (legal), 3 in correctional procedures, 3 in human relations/psychology, 3 in introduction to physical security/safety, 3 in instructor (training) techniques, 3 in police equipment/techniques, and 3 in weapons proficiency/self-defense, for a total of 30 semester hours. In the lower-division baccalaureate/associate degree category, 3 semester hours in criminal investigation, 3 in criminal law (evidence), 3 in criminal procedure (legal), 3 in report writing, 3 in correctional procedures, 3 in human relations/psychology, 3 in introduction to physical security/safety, and 3 in instructor (training) techniques, for a total of 24 semester hours (3/79).

Recommendation, MACI
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, the recommendation is the same as that for MACI. In the upper-division baccalaureate/associate degree category, 3 semester hours in administrative procedures and 3 in supervision techniques (3/79).

NER-ML-001
MOLDER
ML3
ML2
ML1
MLC

Exhibit Dates: 6/71–Present
Occupational Field: 4 (Ship Maintenance)

Career Pattern
May have progressed from Petty Officer Second Class (E-5) of any rating ML1: Master-At-Arms, First Class (E-6). MAC: Chief Master-At-Arms (E-7). MACS: Senior Chief Master-At-Arms (E-8). MACM. Master Chief Master-At-Arms (E-9).

Description
ML1, MAC, MACS: Conducts and supervises investigations, interrogations, and apprehensions. Duties include crime prevention, preservation of crime scene evidence, enforcement of appropriate criminal and traffic laws, shore patrol, physical security responsibilities, crowd control, custodial operations, and other public safety duties, prepares records and reports, and monitors expenditures. Recommended for the duties required for ML1, MAC, and MACS, implements, and controls activities: establishes goals and priorities, reviews personnel, equipment, and material requirements and forecasts future requirements; develops operating budgets and monitors expenditures.

Recommendation, MACI, MAC, MACS
In the vocational certificate category, 3 semester hours in criminal investigation, 3 in criminal law (evidence), 3 in criminal procedure (legal), 3 in correctional procedures, 3 in human relations/psychology, 3 in introduction to physical security/safety, 3 in instructor (training) techniques, 3 in police equipment/techniques, and 3 in weapons proficiency/self-defense, for a total of 30 semester hours. In the lower-division baccalaureate/associate degree category, 2 semester hours in criminal investigation, 3 in criminal law (evidence), 3 in criminal procedure (legal), 3 in report writing, 3 in correctional procedures, 3 in human relations/psychology, 3 in introduction to physical security/safety, and 3 in instructor (training) techniques, for a total of 24 semester hours (3/79).

Recommendation, MACM
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, the recommendation is the same as that for MACI. In the upper-division baccalaureate/associate degree category, 2 semester hours in communication (written), 2 in personnel supervision, 3 in typing, 3 in office procedures, 3 in military legal practices and procedures, 3 in office management, and 6 in social studies, and credit for field experience in management on the basis of institutional evaluation, for a minimum total of 28 semester hours. In the upper-division baccalaureate category, 2 semester hours in judgmental process and administration, 2 in legal bibliography, and 3 in management problems, and additional credit in human relations, in personnel management, for a practicum in management, on the basis of institutional evaluation, for a minimum total of 7 semester hours (12/76).

NER-MA-001
MASTER-AT-ARMS
MA1
MAC
MACS
MACM

Exhibit Dates: 4/73–Present
Occupational Field: 19 (Master-At-Arms)

Career Pattern
May have progressed from Petty Officer Second Class (E-5) of any rating MA1: Master-At-Arms, First Class (E-6). MAC: Chief Master-At-Arms (E-7). MACS: Senior Chief Master-At-Arms (E-8). MACM. Master Chief Master-At-Arms (E-9).

Description
Summary: Operates foundries aboard ship and at shore stations; makes molds and cores, sets up fluxes; prepares heats; operates melting, pouring, and gating equipment and foundry equipment; and cleans castings, cleans a variety of navy equipment components, including bearings, brass and bronze fittings, and cast iron, steel, and aluminum items. Operates miller and controls sand quality, performs maintenance on assigned casting equipment, performs refractory handling and shop drawing (ML1) constructs bench and floor molds; makes and installs cores, rebabbles bearings, prepares and evaluates moldings, arranges metal melting, sequence; identifies naval nabs; charges induction furnaces, selects cast alloys, identifies metals and alloys, selects and applies gas purging methods, repairs refractory linings, cleans furnaces and ladles; uses and maintains pyrometers, electric and pneumatic power tools, and oxyacetylene welding/cutting equipment, makes foundry equipment and foundry process cores; reads and works from shop drawings and sketches, maintains shop files, determines weights of castings, cleans castings (ML2). Able to perform the duties required for ML3. Makes molds directly from castings and analyzes casting quality; allows for shrinkage effects of cast steel and monel; identifies and uses binding materials, designs gating systems, determines proper use of refractories; identifies and effects of gas absorption, selects methods of obtaining proper casting solidification, controls the reaction of sodium silicate binders with CO2 and heat, determines cause and method of detection of casting defects related to foundry practice, gating practice, pouring practice, and molding technique, determines, and obtains proper molding pressure for metals cast, identifies abrasive materials and their uses, operates repair parts and special tools for equipment maintenance, prepares sketches from mechanical drawings and existing parts (ML3). Able to perform the duties required for ML4, interprets materials lists and modifications, maintains manuals, estimates time, material, and cost for foundry work, designs gating systems and special techniques for shrinkage allowance and finish machining, designs and makes internal chills, identifies types and effects of grain formation in cast metal, determines mold buoyancy, melts steel and monel, distinguishes mechanical properties of cast metals and alloys, interprets binary phase diagrams and cooling curves, for common casting compositions, interprets cooling characteristics of metal microstructures, makes special mixture cores, determines gassing and burnout of core and casting alloys, takes molds and checks maintenance work. MAC: Able to perform the duties required for ML1, designs castings with intent and determines pour lines, interprets cooling curves and temperatures, tints and supervises personnel in foundry operations, metal identification, and pyrometry; prepares quarterly preventive maintenance schedules.

Recommendation, ML3
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 4 semester hours in foundry or metal casting and 1 in manufacturing processes (12/76).

Recommendation, ML2
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 6 semester hours in foundry or metal casting and 2 in manufacturing processes (12/78).

Recommendation, ML1
In the vocational certificate category, 8 semester hours in foundry or metal casting and 2 in manufacturing processes (12/78).
NAVY ENLISTED RATINGS EXHIBITS

shop supervision, for a total of 12 semester hours (12/78)

Recommendation, MLC

In the vocational certificate category, 8 semester hours in foundry or metal casting, and 2 in manufacturing processes. In the lower-division baccalaureate/associate degree category, 8 semester hours in foundry or metal casting, 2 in manufacturing processes, 1 in materials science, 2 in personnel supervision, 1 in record keeping, and 1 in safety management, for a total of 17 semester hours (12/78)

NER-ML-002

MOLDER, SENIOR CHIEF AND MASTER CHIEF
MLCS
MLCM

Exhibit Dates: 6/71-Present
Occupational Field: 4 (Ship Maintenance).
Career Pattern
May progress from either MLC, Chief Molder (E-7), or PMC, Chief Patternmaker (E-7): MLCS: Senior Chief Molder (E-8) MLCM: Master Chief Molder (E-9)

Description
MLCS: Able to perform the duties required for MLC (Chief Molder) or PMC (Chief Patternmaker), provides information and advises on utilization, capabilities, reliability, and operations of foundry, prepares local directives and instructions for attaining organization objectives and improving operations, prepares correspondence, establishes and implements a program for interpreting, evaluating, and assigning personnel for maximum utilization, serves as ship's supervisor; supervises operations of foundries and pattern shops, instructs personnel in physical and mechanical properties of metals, alloys, and plastics, coordinates construction and use of master patterns, molds, and castings, organizes and schedules training programs and evaluates their effectiveness, initiates improvements, administers long-range planned and preventive maintenance programs, and instructs personnel. MLCM: Able to perform the duties required for MLCS, assists repair officer in management of repair department, serves as technical advisor to repair officer, plans, organizes, and schedules activities in compliance with policy, operation orders, and directives, forecasts future requirements, plans and initiates actions to satisfy safety requirements, establishes goals, objectives, and priorities, reviews personnel, equipment, and material requirements, develops operating budgets and monitors expenditures.

Recommendation, MLCM

In the vocational certificate category, use the recommendation for either MLC (Chief Molder) in exhibit NER-ML-001 or PMC (Chief Patternmaker) in exhibit NER-PM-001. In the lower-division baccalaureate/associate degree category, 1 additional semester hour in personnel supervision, 1 additional semester hour in record keeping, and 2 in human relations, for a total of 18 semester hours (12/78) or the 16 semester hours for PMC (Chief Patternmaker) in exhibit NER-PM-001, for a total of 20 semester hours, as appropriate. In the upper-division baccalaureate category, 6 semester hours for field experience in management and 3 in management problems (12/78)

NER-MM-001

MACHINIST'S MATE

MM3
MM2
MM1
MMC
MMCS
MMCM

Exhibit Dates: 6/71-Present
Occupational Field: 3 (Marine Engineering)
Career Pattern
FN: Fireman (E-3) MM3: Machinist's Mate Third Class (E-4) MM2: Machinist's Mate Second Class (E-5) MM1: Machinist's Mate First Class (E-6) MMC: Machinist's Mate Chief (E-7) MMCS: Senior Chief Machinist's Mate (E-8) MMCM: Master Chief Machinist's Mate (E-9)

Description
Summary: Operates, repairs, and performs maintenance on ship propulsion machinery, auxiliary equipment, outside machinery (including steering engine, windlasses, hoisting machinery, and elevators), food preparation equipment, laundry equipment, and refrigeration and air-conditioning equipment. Able to perform the duties required for MMC, identifies defects, repairs, and maintains ship propulsion equipment, auxiliary equipment, outside machinery, and auxiliary machinery (including steering engine, windlasses, hoisting machinery, and elevators), food preparation equipment, laundry equipment, and refrigeration and air-conditioning equipment. Able to perform the duties required for MMCS, develops and monitors programs, advises personnel about new technical information, plans, organizes, implements, and controls activities, reviews personnel, equipment, and material requirements, and forecasts future requirements, prepares major maintenance and repair schedules, supervises inspections and surveys of equipment, develops operating budgets and monitors expenditures.

Recommendation, MM3

In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 10 semester hours in machinery maintenance and repair, 3 in maintenance technology, and 1 in blueprint reading, and credit in air-conditioning and refrigeration on the basis of institutional evaluation, for a minimum total of 14 semester hours (12/78)

Recommendation, MM2

In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 10 semester hours in machinery maintenance and repair, 3 in maintenance technology, and 1 in blueprint reading, and credit in air-conditioning and refrigeration for a total of 18 semester hours (12/78)

Recommendation, MM1

In the vocational certificate category, 12 semester hours in machinery maintenance and repair, 3 in maintenance technology, 1 in blueprint reading, 1 in record keeping, and 1 in air-conditioning and refrigeration for a total of 20 semester hours. In the lower-division baccalaureate/associate degree category, 12 semester hours in ma-
chinery maintenance and repair, 3 in maintenance technology, and 1 in blueprint reading.

**Recommendation, MNCM**

In the vocational certificate category, the recommendation is the same as that for MM1. In the lower-division baccalaureate/associate degree category, 12 semester hours in machinery maintenance and repair, 3 in maintenance technology, 1 in blueprint reading, 1 in record keeping, 3 in air-conditioning and refrigeration, 3 in personnel supervision, 3 in maintenance management, and 3 in human relations, for a total of 27 semester hours (12/78).

**Recommendation, MRC**

In the vocational certificate category, the recommendation is the same as that for MM1. In the lower-division baccalaureate/associate degree category, 12 semester hours in machinery maintenance and repair, 3 in maintenance technology, 1 in blueprint reading, 1 in record keeping, 3 in air-conditioning and refrigeration, 3 in personnel supervision, 3 in maintenance management, and 3 in human relations, for a total of 29 semester hours (12/78).

**Recommendation, MRCM**

In the vocational certificate category, the recommendation is the same as that for MM1. In the lower-division baccalaureate/associate degree category, 12 semester hours in machinery maintenance and repair, 3 in maintenance technology, 1 in blueprint reading, 1 in record keeping, 3 in air-conditioning and refrigeration, 3 in personnel supervision, 3 in maintenance management, and 3 in human relations, for a total of 27 semester hours (12/78).

**Recommendation, MRC**

In the vocational certificate category, the recommendation is the same as that for MR1. In the lower-division baccalaureate/associate degree category, 6 semester hours in machine technology, 6 in principles and operations of machine tools, 3 in blueprint reading, 3 in machine shop mathematics, 1 in introduction to the metric system of measurement, and 1 in record keeping. For a total of 20 semester hours. In the lower-division baccalaureate/associate degree category, 6 semester hours in machine technology, 6 in principles and operations of machine tools, 3 in blueprint reading, 3 in machine shop mathematics, 1 in introduction to the metric system of measurement, 1 in record keeping, 2 in personnel supervision, 2 in maintenance management, and 3 in human relations, for a total of 29 semester hours (12/78).

**Recommendation, MRCM**

In the vocational certificate category, the recommendation is the same as that for MR1. In the lower-division baccalaureate/associate degree category, 6 semester hours in machine technology, 6 in principles and operations of machine tools, 3 in blueprint reading, 3 in machine shop mathematics, 1 in introduction to the metric system of measurement, 1 in record keeping, 2 in personnel supervision, 2 in maintenance management, and 3 in human relations, for a total of 29 semester hours (12/78).

**Recommendation, MRC**

In the vocational certificate category, the recommendation is the same as that for MR1. In the lower-division baccalaureate/associate degree category, 6 semester hours for field experience in management, and 3 in management problems (12/78).

**Recommendation, MRCM**

In the vocational certificate category, the recommendation is the same as that for MR1. In the lower-division baccalaureate/associate degree category, 6 semester hours for field experience in management, and 3 in management problems (12/78).

**NER-MN-001**

**MINEMAN**

MN3
MN2
MN1
MNC
MNCs
MNCM

**Exhibit Dates:** Pending evaluation.

**NER-MR-001**

**MACHINERY REPAIRMAN**

MR3
MR2
MR1
MRC
MRCS
MRCM

**Exhibit Dates:** 6/72-Present

**Occupational Field:** 4 (Ship Maintenance)

**Career Pattern,**

_FN_ Fireman (E-3). _MR3_ Machinery Repairman. Third Class (E-4) _MR2_ Machin- er, Propulsion, Second Class (E-5). _MR1_: Machinery Repairman, First Class (E-6) _MRC_ Chief Machinery Repairman (E-7) _MRCS_ Senior Chief Machinery Repairman (E-8) _MRCM_ Master Chief Machinery Repairman (E-9)

**Description**

_Summary._ Performs maintenance on shipboard equipment and machinery using the following machine shop equipment: lathes, milling machines, boring mills, grinders, power hacksaws, drill presses, and other machine tools. Performs and performs maintenance on all machine shop equipment that is required to repair, rebuild, or fabricate parts to maintain shipboard equipment and machinery. Assists in maintaining work center records, reads sketches, diagrams, and blueprints, solves basic algebraic and trigonometric layout problems, computes English and metric system of measurement, operates bench or pedestal drills, pedestal grinders, machine reamers, engine lathes, planers or shapers, milling machines, panographs, disk metal band saws, arbor and hydraulic presses, and oxyacetylene equipment, performs computations to make threads, press fits, tapers, and keyways, compiles maintenance data forms. _MR2_. Able to perform the duties required for _MR1_. Maintains blueprint files for machine shop uses machine shop equipment which includes attachments with special capabilities; performs hardness tests on metals, plastics, and casting, able to select metals and plastics according to specifications, completes maintenance reports, inventories machine tools, orders repair parts, and tools. _MR1_. Able to perform the duties required for _MR2_. Operates equipment that advances ferrous and non-ferrous metals, performs heat-treating operations; repairs fixed machinery and equipment, performs alignment test on all shop equipment, reviews completed maintenance data forms, prepares weekly maintenance schedules. _MR1_. Able to perform the duties required for _MR1_. Supervises maintenance and repair activities, estimates time and material requirements, maintains work center records; prepares quarterly maintenance schedules, directs the replacement, installation, maintenance, and repair of complex repair shop equipment, supervises inventory of tools, equipment, and supplies. _MRCS_. Able to perform the duties required for _MR1_. Provides information and advice on utilization, capabilities, reliability, and operations, prepares directives and instructions for attaining organization objectives, establishes and implements an evaluation program, for reviewing, evaluating, and assigning personnel to assure maximum utilization; prepares correspondence, organizes and schedules training programs; administers a long-range planned maintenance program. _MRCM_. Able to perform the duties required for _MRCS_. Develops and maintains safety programs, plans, organizes, implements, and controls activities; reviews personnel, equipment, and material requirements, and forecasts future requirements; supervises inspections and surveys of equipment; develops operating budgets and monitors expenditures.

**Recommendation, MR3**

In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 3 semester hours in machine technology, 3 in principles and operations of machine tools, 2 in machine shop mathematics, 1 in blueprint reading, and 1 in introduction to the metric system of measurement, for a total of 10 semester hours (12/78).

**Recommendation, MR2**

In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 6 semester hours in machine technology, 4 in principles and operations of machine tools, 3 in blueprint reading, 1 in introduction to the metric system of measurement, 1 in record keeping, and 1 in introduction to the metric system of measurement, for a total of 17 semester hours (12/78).

**Recommendation, MR1**

In the vocational certificate category, 6 semester hours in machine technology, 6 in principles and operations of machine tools, 3 in blueprint reading, 3 in machine shop mathematics, 1 in introduction to the metric system of measurement, and 1 in record keeping. For a total of 20 semester hours. In the lower-division baccalaureate/associate degree category, 6 semester hours in machine technology, 6 in principles and operations of machine tools, 3 in blueprint reading, 3 in machine shop mathematics, 1 in introduction to the metric system of measurement, 1 in record keeping, 2 in personnel supervision, 2 in maintenance management, and 3 in human relations, for a total of 29 semester hours (12/78).

**NER-MS-001**

**MESS MANAGEMENT SPECIALIST**

MS3
MS2
MS1
MSC
MSCS
MSCM

**Exhibit Dates:** 1/75-Present

**Occupational Field:** 16 (Logistics)

**Career Pattern,**

_SN_ Seaman (E-3). _MS3_ Mess Management Specialist, Third Class (E-4). _MS2_ Mess Management Specialist, Second Class (E-5) _MS1_ Mess Management Specialist, First Class (E-6). _MSC_ Chief Mess Management Specialist, Second Class (E-7) _MSCS_ Senior Chief Mess Management Specialist (E-8). _MSCM_ Master Chief Mess Management Specialist (E-9)

**Description**

_Summary._ Operates and manages Navy messes and living quarters established to subsist and accommodate Navy personnel, assists supply officers in ordering, storing,
accounting for and preparing food; maintains housing facilities. MS2: Measures, weights, blends and mixes various foods; prepares fruits, vegetables, meats, and breads by roasting, frying, broiling, and boiling; operates specialized food service equipment, portions and serves prepared food to consumers, maintains and cleans food service preparation and service areas and associated equipment; knows the causes and transmission methods of food-borne diseases and the relationship to safe temperatures, storage, preparation and serving of food; staffs reception facilities and provides housekeeping services in housing facilities. MS2: Able to perform the duties required for MS2; supervises a food service facility; assigns duties and supervises preparation and serving methodology; maintains sales analysis records and ensures that the proper relationships of cost to portion control are maintained. Recommendation, MSC: In the vocational certificate category, 9 semester hours in quantity food preparation, 2 in sanitation, 3 in kitchen operations, and 2 in record keeping, for a total of 14 semester hours. In the lower-division baccalaureate/associate degree category, 2 semester hours in sanitation, 2 for a food service internship, 2 in food service administration, 2 in record keeping, 1 in office management, 3 in food cost control, and 3 in personnel supervision, for a total of 21 semester hours. In the upper-division baccalaureate/associate degree category, 2 semester hours in sanitation, 2 for a food service internship, 3 in personnel management, 1 in food cost control, and 2 in human relations, for a total of 10 semester hours (3/79).

Recommendation, MSC: In the vocational certificate category, or in the lower-division baccalaureate/associate degree category, the recommendation is the same as that for MSC. In the upper-division baccalaureate/associate degree category, 2 semester hours in sanitation, 2 for a food service internship, 3 in personnel management, 1 in food cost control, and 2 in human relations, for a total of 10 semester hours (3/79).

NER-MT-001

MISSILE TECHNICIAN

MT3

MT2

MT1

MTC

Exhibit Dates: 6/73-Present

Occupational Field: 9 (Ordnance Systems)

Career Patterns

SW, Seaman (E-3), MT3: Missile Technician, Third Class (E-4). MT2: Missile Technician, Second Class (E-5). MT1: Missile Technician, First Class (E-6). MTC: Chief Missile Technician (E-7). FTSC: Senior Chief Fire Technician (E-8) FTCM: Master Chief Fire Technician (E-9)

Description

Summary: Operates, tests, and repairs fleet ballistic missile systems and missile launcher equipment: performs maintenance (electrical, electronic, pneumatic, and hydraulic) on ballistic missiles and associated handling and lauching equipment. MT3: Aligns and calibrates basic electronic circuits; under supervision, performs troubleshooting, calibration, adjustments, and tests on missile launcher, and missile support equipment; uses circuit diagrams and mechanical drawings: identifies basic digital circuits, operates weapons systems equipment, completes maintenance data forms. MT2: Able to perform the duties required for MT3: inspects and repairs pneumatic and hydraulic systems; isolates malfunctions; and replaces defective electronic circuit components: performs troubleshooting, calibration, adjustments, and tests on missile, launcher and missile support equipment; maintains logs and records; completes maintenance reports, inventories installed equipment. MT1: Able to perform the duties required for MT2; serves as a nuclear weapons handling supervisor, supervises the maintenance and operation of missile and launcher handling equipment; reviews completed maintenance forms; prepares weekly maintenance schedules. MT1: Able to perform the duties required for MT2; coordinates and directs maintenance program; ensures compliance with nuclear weapons safety rules; prepares reports and reports; prepares quarterly maintenance schedules; serves as shop supervisor.

Recommendation, MT3: In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 3 semester hours in basic electricity/electronics, and 3 in applied mathematics (12/78).

Recommendation, MT2: In the vocational certificate category, 6 semester hours in basic electricity/electronics, 3 in applied mathematics, 3 in basic blueprint reading, 2 in applied physics, and 2 in basic hydraulics, for a total of 16 semester hours. In the lower-division baccalaureate/associate degree category, 6 semester hours in basic electricity/electronics, 3 in applied mathematics, 3 in basic blueprint reading, 2 in basic hydraulics, and 1 in record keeping, for a total of 14 semester hours (12/78).

Recommendation, MT1: In the vocational certificate category, the recommendation is the same as that for MT2. In the lower-division baccalaureate/associate degree category, 6 semester hours in basic electricity/electronics, 3 in applied mathematics, 3 in basic blueprint reading, 2 in basic hydraulics, 2 in personnel supervision, 2 in maintenance management, and 3 in human relations, for a total of 21 semester hours (12/78).

Recommendation, MTC: In the vocational certificate category, 6 semester hours in basic electricity/electronics, 3 in applied mathematics, 3 in basic blueprint reading, 2 in applied physics, 2 in basic hydraulics, and 1 in record keeping, for a total of 17 semester hours. In the lower-division baccalaureate/associate degree category, 6 semester hours in basic electricity/electronics, 3 in applied mathematics, 3 in basic blueprint reading, 2 in basic hydraulics, 3 in personnel supervision, 3 in maintenance management, 3 in human relations, and 1 in record keeping, for a total of 24 semester hours (12/78).

NER-MU-001

MUSICIAN

MU3

MU2

MU1

MUC

MUCS

MUCM

Exhibit Dates: 6/71-Present

Occupational Field: 18 (Musician)

Career Patterns


Description

Summary: Provides music for various functions and ceremonies as members of...
Navy band, performs on one or more designated instruments. NOTE: Musicians are further identified by the following NEC (Navy Enlisted Classification) codes.

**MU-3815 Flute/Piccolo Instrumentalist**
**MU-3802 Oboe Instrumentalist**
**MU-3803 Clarinet Instrumentalist**
**MU-3804 Bassoon Instrumentalist**
**MU-3805 Saxophone Instrumentalist**
**MU-3806 Trumpet/Cornet Instrumentalist**
**MU-3807 French Horn Instrumentalist**
**MU-3808 Baritone/Euphonium Instrumentalist**
**MU-3809 Trombone Instrumentalist**
**MU-3811 Tuba/String Bass Instrumentalist**
**MU-3812 Guitar/Bass Drum Instrumentalist**
**MU-3813 Percussion Instrumentalist**
**MU-3814 Piano/Bass Drum Instrumentalist**
**MU-3825 Vocalist**
**MU-3851 Assistant Band Leader**

**MU3:** Performs as a member of a musical ensemble, performs first parts of elementary music with good intonation and characteristic tone (and with good diction, for vocalists), performs from memory all major and minor chords and harmonic content; transposes, including dynamics, tempo, musical terms, and devices peculiar to dance music, able to perform elementary melodic improvisation; notates melodic, simple triads of characteristic tone (and with good diction, for vocalists); performs from memory all major and minor chords and harmonic content, at sight, one tone higher or lower than written. **MU2:** Able to perform the duties required for MU3; performs first parts of intermediate music, performs intermediate melodic improvisation following the alphabetic chord symbols notated in standard dance and popular music, interprets chord symbols notated in standard dance and popular music, able to identify, by sound, simple chord progressions used in popular music, able to identify, by sight and sound, major, minor, diminished, and augmented triads in root position and inversions, able to notate melodic (single part) dictation of elementary music; able to transcribe, transpose, and copy parts from concert scores, able to transcribe elementary music, at sight, one tone higher or lower than written.

**MU1:** Able to perform the duties required for MU2; performs first parts of intermediate music; performs first parts of advanced music at sight; performs advanced melodic improvisation following the alphabetic chord symbols notated in standard dance and popular music; rehearses and prepares a small combo for public appearances; rehearses and conducts the National Anthem and one prepared march. **MU:** Able to perform the duties required for MU1; performs first parts of advanced music at sight; performs advanced melodic improvisation following the alphabetic chord symbols notated in standard dance and popular music; rehearses and prepares a combo for public appearances; rehearses and conducts the National Anthem and one prepared march. **MUC:** Able to perform the duties required for MU1; performs advanced solos from memory, recognizes and transposes ten marches and three difficult selections or overtures, prepares a musical program for public performance utilizing dance band and/or combo, and featuring solos or entertainment capabilities of band members, identifies, by sound, advanced chord progressions used in popular music; analyzes scores for harmonic content, modulations and nonharmonic tones, and melodic and harmonic content of piano sheet music; corrects mistakes and omissions in previously notated alphabetic chord symbols; arranges 32 or more measures, including introduction and ending of a song or melody for a small concert band, and a popular song of folk song for a seventeen-piece dance band; supervises professional and military instruction, supervises the daily operation of a performing unit of a Navy band; evaluates requests for band performance; initiates and coordinates the preparation of posters, pictures, biographies, radio/TV spots, news releases, programs, and other promotional material required for a Navy band, supervises reports, records maintenance, and other personnel administration requirements, supervises the custody, care, and maintenance of music material; prepares requests for procurement and disposition of music material. **MUCS:** Able to perform the duties required for MUC; conducts a large concert band in performance of advanced literature; prepares a musical program for radio or television, utilizing dance band and/or combo, and features solos or entertainment capabilities of band personnel, analyzes dominant and diatonic seventh chords, in root position and inversions, harmonizes melodies in four parts, includes all types of dance band idioms; notates melodic, single triads with inversions, dominant seventh chords with inversions, and nonharmonic tones, organizes and schedules training programs and evaluates their effectiveness, manages, schedules, and coordinates the rehearsal and performance of all units of a Navy band; manages the preparation and distribution of posters, pictures, biographies, radio/TV spots, news releases, programs, and other promotional material, establishes and implements community relations program, manages non-musical logistic support for a Navy band; prepares correspondence, establishes and implements a program for interviewing and selecting personnel, and assigns personnel to assure maximum utilization; manages procurement, control, maintenance, and disposition of music, musical equipment, and supplies. **MUCM:** Able to perform the duties required for MUCS; plans, organizes, implements, and controls activities; establishes goals, objectives, and priorities; develops procurement, material, and equipment requirements, and forecasts future requirements; evaluates musical background proficiency and potential of applicants for musical performance; develops operating budgets and monitors expenditures.

**Recommendation, MU3**
In the lower-division baccalaureate/associate degree category, 16 semester hours in music theory (including harmony, ear training, and sight singing). **MU2** in the lower-division baccalaureate/associate degree category, 4 semester hours in music theory (including harmony, ear training, and sight singing), 2 in jazz theory/ improvisation, 4-6 in applied performance (individual instruction), 2 in performing ensembles, 1 in elementary conducting, 1 in marching band, and 1 in concert band, for a total of 15 or 17 semester hours (3/79).

**Recommendation, MUC**
In the lower-division baccalaureate/associate degree category, 8 semester hours in music theory (including harmony, ear training, and sight singing). **MU1** in the lower-division baccalaureate/associate degree category, 12 semester hours in music theory, (including harmony, ear training, and sight singing), 2 in jazz theory/ improvisation, 4-6 in applied performance (individual instruction), 1 in applied performance (secondary instrument), 2 in performing ensembles, 1 in elementary conducting, 3 in marching band, and 1 in concert band, for a total of 28 or 30 semester hours. **Recommendation, MUCS**
In the upper-division baccalaureate category, 2 semester hours in arranging, 2 in advanced conducting, 1 in band management; 1 in personnel management, for a total of 10 semester hours (3/79).

**Recommendation, MUCM**
In the lower-division baccalaureate/associate degree category, 16 semester hours in music theory (including harmony, ear training, and sight singing). **MU2** in the lower-division baccalaureate/associate degree category, 4 semester hours in music theory (including harmony, ear training, and sight singing), 2 in jazz theory/ improvisation, 4-6 in applied performance (individual instruction), 2 in performing ensembles, 1 in elementary conducting, 3 in marching band, and 1 in concert band, for a total of 32 or 34 semester hours. **Recommendation, MUCS**
In the upper-division baccalaureate category, 4 semester hours in arranging, 2 in advanced conducting, 1 in band management; 1 in personnel management, for a total of 10 semester hours (3/79).

**Recommendation, MUCM**
In the lower-division baccalaureate/associate degree category, 16 semester hours in music theory (including harmony, ear training, and sight singing). **MU2** in the lower-division baccalaureate/associate degree category, 4 semester hours in music theory (including harmony, ear training, and sight singing), 2 in jazz theory/ improvisation, 4-6 in applied performance (individual instruction), 2 in performing ensembles, 1 in elementary conducting, 3 in marching band, and 1 in concert band, for a total of 32 or 34 semester hours. **Recommendation, MUCS**
In the upper-division baccalaureate category, 4 semester hours in arranging, 2 in advanced conducting, 1 in band management; 1 in personnel management, for a total of 10 semester hours (3/79).

**NER-NC-001**
**NAVY COUNSELOR**

**NCCI**
**NCCS**
**NCCCM**

**Exhibit Dates:** 8/74-Present

**Occupational Field:** 15 (Administration)

**Career Pattern**
May have progressed from Petty Officer Second Class (E-5) of any rating NCI, Navy Counselor First Class (E-6) NCC, Chief Navy Counselor (E-7), NCCS, Chief Navy Counselor (E-8)/NCM, Master Chief Navy Counselor (E-9)

Description

Summary: Interviews, advice, and counseling personnel in the development of personal and career development opportunities, and regulations. Organizes and implements recruiting and retention programs. NCI. Prepares correspondence, develops written materials for recruiting and pre-enhancement brochures and sells enlisted personnel abroad career development programs. NCC First Class (E-6) NCCS: Second Class (E-5) of any rating. NCI: Subordinates may specialize in career counseling concerning broadcasts, trains and supervises the conforming and communicating regulations and Naval policies. NCC. Able to develop the duties required for NCC. Conducts radio and television interviews, applies Federal Communications regulations and Naval policies. NCC. Able to perform the duties required for NCCS; forecasts future personnel requirements; plans and initiates action to satisfy personnel requirements, provides information to the command on regulations, procedures, and practices applicable to recruiting and retention; develops written materials for counseling program; evaluates effectiveness of recruiting and retention programs; monitors, analyzes, and makes recommendations concerning personnel utilization; provides technical assistance to subordinate commands; develops operating budget and mentors expenditures.

Recommendation, NCC

In the vocational certificate category, the recommendation is the same as that for NCI. In the lower-division baccalaureate/associate degree category, 1 semester hour in applied psychology, 1 in community relations, 1 in communication (speech), 3 in communication (written), and 3 in human relations, for a total of 11 semester hours. In the lower-division baccalaureate/associate degree category, 1 semester hour in applied psychology, 1 in community relations, 1 in introduction to mass media techniques, 3 in communication (speech), 3 in communication (written), 3 in communication (written), 3 in career information and counseling, 3 in human relations, and 3 in management personnel, for a minimum total of 22 semester hours, if the duty assignment was career counselor, additional credit in applied psychology and in occupational choice and career analysis on the basis of institutional evaluation; if the duty assignment was drugs and alcohol rehabilitation counselor, additional credit in applied psychology, psychological counseling theory and techniques, behavior crisis intervention, and drugs and alcohol abuse on the basis of institutional evaluation. In the upper-division baccalaureate category, 3 semester hours in problems in human relations (12/76).

Recommendation, NCCS

In the vocational certificate category, the recommendation is the same as that for NCI. In the lower-division baccalaureate/associate degree category, 1 semester hour in applied psychology, 1 in community relations, 2 in interviewing techniques, 3 in communication (speech), 3 in communication (written), 3 in career information and counseling, 3 in human relations, and 3 in introduction to mass media techniques, and 6 in management personnel, for a minimum total of 35 semester hours; if the duty assignment was career counselor, additional credit in applied psychology and in occupational choice and career analysis on the basis of institutional evaluation; if the duty assignment was drugs and alcohol rehabilitation counselor, additional credit in applied psychology, psychological counseling theory and techniques, behavior crisis intervention, and drugs and alcohol abuse on the basis of institutional evaluation. In the upper-division baccalaureate category, 3 semester hours in management problems, 3 for a practicum in vocational counseling, and 6 in problems in human relations, for a total of 12 semester hours (12/76).

NER-OM-001

OPTICALMAN

OM3

OM2

OM1

OMC

OMCS

Exhibit Dates: 6/71-Present.

Occupational Field: 4 (Ship Maintenance)

Career Pattern


8) PIM. Master Chief Precision Instrumentman (E-9).

Description

Summary: Performs maintenance on small navigational instruments, binoculars, gunsights, range finders, submarine and turret periscopes, night vision sights, and other optical instruments. Opticalman, Able to perform the duties required for NCCS; develops written materials for recruiting and pre-enhancement brochures and sells enlisted personnel abroad career development programs; monitors, analyzes, and makes recommendations concerning personnel utilization; provides technical assistance to subordinate commands; develops operating budget and mentors expenditures. 

Recommendation, OM3

In the vocational certificate category, 1 semester hour in machine tool operation, 2 infabrication technology, 3 in physics (optics), and 3 in optical laboratory, for a total of 9 semester hours. In the lower-division baccalaureate/associate degree category, 1 semester hour in machine tool operation, 2 in fabrication technology, 3 in physics (optics), and 3 in optical laboratory, for a total of 9 semester hours (12/78).
NER-OS-001

OPERATIONS SPECIALIST

OS3
OS2
OS1
OSC
OSC5
OSCM

Exhibit Dates: 6/72-Present

NOTE: Until 6/73, the title of this rating was Radioman (RD3).

Occupational Field: 2 (Ship Operations)

Career Pattern


Description

Summary: Operates radar and associated equipment, identifies and maintains a display (plot) of the movement of ships, aircraft, missiles, and natural objects detected by observing a radar, maintains a radar navigation plot of own ship's movement, evaluates information collected by radar and appropriately disseminates it, performs routine preventive maintenance on radar equipment, operates radiotelephones OS3 (RD3). Operates a radar/console screen, observing objects detected by the radar and displayed on the radar screen, identifies the objects detected, determines their movement, and disseminates this information to users by internal communications systems, operates radiotelephones, plots and maintains current display of objects detected; determines own ship's position on nautical charts using ranges, bearing, and standard navigational symbols; changes object positions into grid coordinates; knows the basic functions and materials of the modulator, receiver, antenna, control, and indicator units, reads electronic block diagrams, solves maneuvering board problems for course, speed, closest point of approach, true wind, and desired wind. OS2 (RD2): Able to perform the duties required for OS3 (RD3); tests radar and associated electronic equipment, supervises and trains personnel operating radar and associated electronic equipment, plotting display information, operating radiotelephones and log keeping, solves course and speed problems, using polar coordinate graph paper; performs duties of marine coastal radar navigator, using nautical charts, maintains strategic geographic and surface plots, interprets international and inland Nautical Rules of the Road. OSI (RD1): Able to perform the duties required for OS2 (RD2); assigns duties to operations specialist personnel and supervises their performance, performs as supervisor of a watch section, directing the task performance of plotters, radiotelephone operators, radars, radiotelephone operators, and other members of the watch section, prepares weekly schedules of preventive maintenance. OSC (RD5): oscillator maintenance tasks required, supervises the training program for operation specialists, prepares quarterly preventive maintenance schedules, supervises the performance of preventive maintenance; serves as an assistant to the officer in charge of the Communications Information Center; serves as piloting officer during radar assisted navigation (RAD). OSCS (RDCS): Able to perform the duties required for OSCS (RDCS); performs technical administrative functions; establishes objectives and sets priorities; reviews personnel, equipment, and material requirements; plans, organizes, and implements activities in accordance with policies and procedures; coordinates repair and maintenance programs in accordance with ship's operating schedule, develops budgets and monitors expenditures.

Recommendation, OS3 (RD3)

In the vocational certificate category, 6 semester hours in machine tool operation, 3 in applied mathematics, 3 in electronics, 2 in basic electronics, for a total of 14 semester hours. In the lower-division baccalaureate/associate degree category, 3 semester hours in electronics, 2 in basic electronics, for a total of 11 semester hours (12/76).

Recommendation, OS2 (RD2)

In the vocational certificate category, 6 semester hours in machine tool operation, 3 in applied mathematics, 3 in electronics, 2 in basic electronics, for a total of 11 semester hours. In the lower-division baccalaureate/associate degree category, 3 semester hours in electronics, 2 in basic electronics, for a total of 11 semester hours (12/76).

Recommendation, OSI (RD1)

In the vocational certificate category, 6 semester hours in machine tool operation, 3 in applied mathematics, 3 in electronics, 2 in basic electronics, for a total of 11 semester hours. In the lower-division baccalaureate/associate degree category, 3 semester hours in electronics, 2 in basic electronics, for a total of 11 semester hours (12/76).

Recommendation, OSC (RDC)

In the vocational certificate category, the recommendation is the same as that for OSI (RD1). In the lower-division baccalaureate/associate degree category, 3 semester hours in electronics, 2 in basic electronics, for a total of 11 semester hours. In the lower-division baccalaureate/associate degree category, 3 semester hours in electronics, 2 in basic electronics, for a total of 11 semester hours (12/76).
NAVY ENLISTED RATINGS EXHIBITS

Recommendation, OSCS (RDCS)
In the vocational certificate category, the recommendation is the same as that for OS1 (RD1). In the lower-division baccalaureate/associate degree category, 3 semester hours in seaman ship, 3 in basic electronics, 3 in coastwise navigation and piloting (radar navigation), 3 in personnel supervision. 3 for field experience in management, 3 in management electives, and 2 in record keeping, for a minimum total of 20 semester hours. Additional credit in air traffic control on the basis of institutional evaluation. For a minimum total of 12 semester hours (12/76).

Recommendation, OSCM (RDCM)
In the lower-division baccalaureate/associate degree category, 3 semester hours for a practicum in management, 3 in personnel management, and additional credit in human relations on the basis of institutional evaluation. For a minimum total of 12 semester hours (12/76).

Recommendation, OSCS (RDCS)
In the vocational certificate category, the recommendation is the same as that for OS1 (RD1). In the lower-division baccalaureate/associate degree category, the recommendation is the same as that for OSCS. In the upper-division baccalaureate category, 6 semester hours for a practicum in management, 3 in personnel management, and additional credit in human relations on the basis of institutional evaluation, for a minimum total of 12 semester hours (12/76).

NER-OT-001
OCEAN SYSTEMS TECHNICIAN

OT3
OT2
OT1
OTC
OTCS
OTCM

Exhibit Dates: Pending evaluation.

NER-PC-001
POSTAL CLERK

PC3
PC2
PC1
PCC
PCCS
PCCM

Exhibit Dates: 6/72-Present
Occupational Field: 15 (Administration)

Career Pattern
SN Seaman (E-3) PC3 Postal Clerk Third Class (E-4) PC2. Postal Clerk Second Class (E-5), PC1. Postal Clerk First Class (E-6). PC: Chief Postal Clerk (E-7) PCCS Senior Chief Postal Clerk (E-8) PCCM. Master Chief Postal Clerk (E-9)

Description
Stations require O A. mailing stamps, processing international money orders, and collecting and remitting COD charges. Performs general clerical duties, including mail sorting and distribution, and record maintenance, able to type 20 words per minute. PC2. Able to perform the duties required for PC3, establishes mail transportation schedules and routes, supervises and trains personnel in the organization of a Navy post office, supervises preparation, maintenance, and distribution of local postal records and reports. PC1. Able to perform the duties required for PC2, audits and reviews inspection reports of Navy post offices, prepares parent office reports, able to assume the duties, responsibilities, and functions of a postal officer when necessary, PC. Able to perform the duties required for PC1, supervises postal counter and sorting activities, ensures compliance with customs procedures, supervises postal office procedures, PCCS. Able to perform the duties required for OSCS, PCCM. Conducts inspections of Navy post offices and develops recommendations for the improvement of postal operations, prepares correspondence, develops programs dealing with personnel and management efficiency. PCCM: Able to perform the duties required for PCCS, develops and monitors operating budgets, forecasts future manpower and material requirements, develops basic plans for implementing policy statements and directives, establishes goals, objectives, and priorities in own area of responsibility.

Recommendation, PC3
In the vocational certificate category, the lower-division baccalaureate/associate degree category, 2 semester hours in record keeping, if the student is enrolled in a postal service management program, additional credit as follows: 2 semester hours in postal customer services, 3 in postal delivery and collection, and 4 in mail processing, for a combined total of 17 semester hours (12/76).

Recommendation, PC2
In the vocational certificate category, the lower-division baccalaureate/associate degree category, 2 semester hours in record keeping, if the student is enrolled in a postal service management program, additional credit as follows: 2 semester hours in postal customer services, 3 in postal delivery and collection, and 6 in mail processing, for a combined total of 17 semester hours (12/76).

Recommendation, PC1
In the vocational certificate category, the lower-division baccalaureate/associate degree category, 2 semester hours in record keeping, if the student is enrolled in a postal service management program, additional credit as follows: 2 semester hours in postal customer services, 3 in postal delivery and collection, and 6 in mail processing, for a combined total of 17 semester hours (12/76).

Recommendation, PCC
In the vocational certificate category, 2 semester hours in record keeping and 3 in general clerical procedures, if the student is enrolled in a postal service management program, additional credit as follows: 2 semester hours in postal customer services, 3 in postal delivery and collection, and 6 in mail processing, and 2 in postal problems analysis, for a combined total of 19 semester hours (12/76).

Recommendation, PCCS
In the vocational certificate category, 2 semester hours in record keeping and 3 in general clerical procedures, if the student is enrolled in a postal service management program, additional credit as follows: 2 semester hours in postal customer services, 3 in postal delivery and collection, and 6 in mail processing, for a combined total of 17 semester hours (12/76).

Recommendation, PCCM
In the vocational certificate category, 2 semester hours in record keeping and 3 in general clerical procedures, if the student is enrolled in a postal service management program, additional credit as follows: 2 semester hours in postal customer services, 3 in postal delivery and collection, and 6 in mail processing, for a combined total of 17 semester hours (12/76).

NER-PH-001
PHOTOGRAPHER'S MATE

PH3
PH2
PH1
PHS
PHCS
PHCM

Exhibit Dates: 6/71-Present
Occupational Field: 17 (Media)

Career Pattern
AN: Airman (E-3). PH3: Photographer's Mate Third Class (E-4). PH2: Photographer's Mate Second Class (E-5). PH1: Photographer's Mate First Class (E-6). PHCS: Chief Photographer's Mate (E-7). PHCM. Master Chief Photographer's Mate (E-9)

Description
Summary. Makes pictorial records of historical and newsworthy events, finished prints, strip photographs, and mosaics, maintains photographic equipment and accessories. PH3: Operates 16-mm silent motion picture cameras, 4 x 5" press cameras, copy cameras, view cameras, 35-mm motion picture cameras, 35-mm range-finder-equipped still cameras, 35-mm single-lens reflex cameras, contact printers, black-and-white projection printers, densitometers, dehumidifiers, color projectors, color analyzers, exposure meters, and automatic processing machines, photographs small metal parts, architectural structures.

353
persons (formal and informal portraits), and interior and exterior scenes; processes black-and-white transparencies from black-and-white original negatives, with contrast transparencies from black-and-white line originals, black-and-white transparencies from multicolored originals, high-contrast black-and-white transparencies from color line originals, color transparencies maintaining the density and color balance of the original, sheet and roll film to negative identification information, black-and-white negatives from multicolored originals to show complete separation of the colors as tones, black-and-white contact prints from selected negatives, black-and-white projection prints from negatives with variable-contrast paper and the correct printing filters, and color corrected prints (custom prints) from color negatives; uses painted light techniques, filters, natural lighting, light enhancement techniques, photoflash techniques, stop motion techniques, selective focus techniques, and basic lighting arrangement, produces prints from copy solutions from prepackaged materials; prepares stock/working negatives to show complete separation of the colors as tones; prepares stock/working negatives and large format (16" x 20" miniatures, double), selects negatives, uses photographic equipment and accessories, uses photographic equipment and accessories, performs operator maintenance on photographic equipment and accessories, performs weekly and monthly maintenance on automatic processing machines. PH2: Able to perform the duties required for PH3, operates and maintains portable TV cameras and portable video tape recorders, photographs the interiors of large structures, harbor and port facilities, ships, aircraft, and terrain, processes second-generation black-and-white negatives and large format (16" x 20" miniature) black-and-white negatives, and processes double projection prints, uses motion picture scene-sequencing technique, motion picture editing techniques (silent motion picture film), broad, short, and side-lighting techniques, subject posing techniques, and background selection techniques, selects equipment, scale, and coverage for hand-held aerial photography, prepares master filter packs for printing color negatives; orders standard stock items. PH1: Able to perform the duties required for PH2; prepares storyboards, introduces silent motion picture pictures, prepares slide presentations with taped narration; uses TV spot news motion picture coverage techniques and motion picture editing techniques; photographs cathode ray tube imagery for recording and image retrieval/interpretation; evaluates control charts to determine trends, shifts, and cycles and monitors process control, prepares duplicate negatives and positives from original film for image interpretation; supervises operator maintenance or photographic equipment and accessories; supervises photographic work center. PHC: Able to perform the duties required for PH1; provides silent motion picture film recording services for news shows, plans missions for handheld aerial photography, provides aircrew with photography equipment and accessories, and schedules and evaluates training programs, determines photographic equipment, and supply requirements and coordinates procurement; PHCM: Able to perform the duties required for PHCS; reviews manpower authorizations; reviews personnel, equipment, and material requirements and forecasts future needs, establishes goals and selects priorities, develops operating budgets and monitors expenditures

Recommendation, PH3

In the vocational certificate category, 6 semester hours in advanced technology, 3 semester hours in basic photography, 3 in camera techniques, 3 in darkroom techniques, 2 for an internship in photography/cinema and 1 in color photography, for a total of 15 semester hours (2/27).

Recommendation, PH2

In the vocational certificate category, the recommendation is the same as that for PH3. In the lower-division baccalaureate/associate degree category, 3 semester hours in basic photography, 3 in camera techniques, 3 in darkroom techniques, 2 in film production, 2 for an internship in photography/cinema and 1 in color photography, for a total of 14 semester hours (2/27).

Recommendation, PH1

In the vocational certificate category, the recommendation is the same as that for PH3. In the lower-division baccalaureate/associate degree category, 3 semester hours in basic photography, 3 in camera techniques, 3 in darkroom techniques, 2 in film production, 2 for an internship in photography/cinema and 1 in color photography, for a total of 13 semester hours (2/27).

Recommendation, PHC

In the vocational certificate category, the recommendation is the same as that for PH3. In the lower-division baccalaureate/associate degree category, 3 semester hours in basic photography, 3 in camera techniques, 3 in darkroom techniques, 2 in film production, 2 for an internship in photography/cinema and 1 in color photography, for a total of 12 semester hours (2/27).

Recommendation, PHCM

In the vocational certificate category, the recommendation is the same as that for PH3. In the lower-division baccalaureate/associate degree category, 3 semester hours in basic photography, 3 in camera techniques, 3 in darkroom techniques, 2 in film production, 2 for an internship in photography/cinema and 1 in color photography, for a total of 11 semester hours (2/27).
In the vocational certificate category, the recommendation is the same as that for PM1. In the lower-division baccalaureate/associate degree category, 3 semester hours in blueprint reading and sketching, 5 in introduction to construction, 2 in machine shop, 2 in use and care of tools, 2 in supervision, 1 in record keeping, and 1 in safety, for a total of 16 semester hours (12/78).

RECOMMENDATION, PMC

In the vocational certificate category, the recommendation is the same as that for PM1. In the lower-division baccalaureate/associate degree category, 3 semester hours in blueprint reading and sketching, 5 in introduction to construction, 2 in machine shop, 2 in use and care of tools, 2 in supervision, 1 in personnel supervision, 1 in record keeping, and 1 in safety, for a total of 16 semester hours (12/78).

NER—PN—001 PERSONNELMAN

In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 1 semester hour in filing and records management, 2 in typing, 3 in office procedures, and 3 in communication (written), for a total of 9 semester hours (12/76).

Recommenda.tion, PM1

In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 1 semester hour in filing and records management, 2 in typing, 3 in office procedures, and 3 in communication (written), for a total of 9 semester hours (12/76).

Recommenda.tion, PN1

In the vocational certificate category, the recommendation is the same as that for PN1. In the lower-division baccalaureate/associate degree category, 1 semester hour in filing and records management, 2 in typing, 3 in office procedures, and 3 in communication (written), for a total of 9 semester hours (12/76).

Career Pattern

SN: Personnelman (E-3) PN Personnelman Second Class (E-5) PN Personnelman First Class (E-6) PNC Chief Personnelman (E-7) PN Personnelman Second Class (E-8) PNCM Master Chief Personnelman (E-9).

Description

Summary. Performs enlisted personnel administration duties. PN3. Performs routine office functions, performs receptionist duties, prepares and maintains personnel records, assists personnel in completing forms, interviews, and requests, operates duplicating equipment, able to type reports and correspondence at 30 words per minute, prepares correspondence. PN2. Able to perform the duties required for PN3, organizes and monitors maintenance of files, requisitions, maintains, issues, and accounts for educational materials and materials, advises personnel on the availability of training and educational materials, service school eligibility, availability of duty assignments, and emergency training, able to type 35 words per minute. PN1. Able to perform the duties required for PN2, prepares administrative summaries and reports, applies methods of work simplification, resolves completely job orders and work requests, drafts instructions and notices, supervises the procurement, custody, and handling of publications, conducts briefings and interviews concerning dependency benefits and pre-reirement matters, able to type at 40 words per minute. PNC. Able to perform the duties required for PN1, supervises and trains personnel in classification procedures, reviews applications for special programs leading to higher education and/or commissioned rank, serves as office manager, interprets and analyzes manpower authorizations, supervises the preparation and transmission of reports, establishes, maintains, and administers training programs for personnel, briefs and advises personnel, performs task analysis. PNCS. Able to perform the duties required for PNC, supervises and trains personnel in classification procedures, reviews applications for special programs leading to higher education and/or commissioned rank, serves as office manager, interprets and analyzes manpower authorizations, supervises the preparation and transmission of reports, establishes, maintains, and administers training programs for personnel, briefs and advises personnel, performs task analysis.
Description
Summary. Inspects, maintains, and repairs parachutes, survival equipment, and flight and protective clothing and equipment. PR3: Packs and rigs parachutes, packs and equips life rafts, rafts, sews, stitches, and tacks material, installs, repairs, and replaces fasteners, grommets, and speedy rivets, performs预制, postflight, turn-around, and conditional inspections of aircrew survival equipment; maintains components of oxygen masks; operates, lubricates, and adjusts sewing machines, operates carbon dioxide recharge equipment. PR2. Able to perform the duties required for PR3, is a first-line supervisor of 4-7 persons working in parachute lofts and, survival gear, and service, operates oxygen system components, test stand and liquid oxygen converter system, stands, operates test equipment for cartridge-actuated devices associated with parachute systems, inspect, elaps, tests, fits, adjusts, repairs and/or replaces arcrew protective equipment, inspect, packs, and repairs arcrew in-flight, service, operates oxygen system components, test stand and liquid oxygen converter system, modifies, and repairs arcrew survival and associated equipment, repairs oxygen breathing regulators, emergency oxygen systems, and liquid oxygen converters and components; maintains carbon dioxide recharge equipment, maintains test equipment for cartridge-actuated devices associated with parachute systems, maintains technical publications and directives; supervises inspections; prepares weekly schedules of preventive maintenance, parts, orders, in equipment, spare parts, and materials, troubleshoots and repairs sewing machine malfunctions. PR1. Able to perform the duties required for PR3, monitors compliance with safety program, interprets maintenance directives and instructions, ensures maximum utilization of personnel, equipment, and facilities, estimates material, equipment, and manpower requirements, initiates recommendations concerning work center repair capabilities and facility requirements, prepares quarterly schedules of preventive maintenance, prepares reports concerning material and equipment. PRCS. Able to perform the duties required for PRCS, recommends changes to ground and flight safety programs, assists in aircraft accident investigations, collects, disseminates, and ensures compliance with technical information concerning assigned equipment, prepares local directives and instructions for attaining objectives and improving operations, prepares courses and provides information and advice regarding operations in area of responsibility, implements a program for interviewing, assigning, and evaluating personnel, prepares personnel training programs, administers long-range maintenance programs. PRCM. Able to perform the duties required for PRCS, formulates guidelines for use in safety inspections, plans and estimates workload commitments, monitors implementation of preventive maintenance program, ensures that procedures for requisitioning, receiving, stowing, and transferring equipment are followed, prepares studies concerning maintenance and staff problems and plans, organizes, and coordinates functions between work centers and branches in the maintenance department, reviews and forecasts material, equipment, and personnel requirements; establishes objectives and sets priorities in area of responsibility, reviews and evaluates inspection records and quality control reports, develops training budgets and monitors expenditures. Recommendation, PR3

Recommendation, PR3

In the occupational certificate category or the lower-division baccalaureate/associate degree category, 9 semester hours in aviation safety equipment maintenance and repair and 3 in aviation maintenance technology (2/77).

Recommendation, PR2

In the vocational certificate category, 12 semester hours in aviation safety equipment repair and maintenance and 6 in aviation maintenance technology. In the lower-division baccalaureate/associate degree category, 12 semester hours in aviation safety equipment repair and maintenance, 6 in aviation maintenance technology, and 2 in personnel supervision, for a total of 20 semester hours (2/77).

Recommendation, PR1

In the vocational certificate category, 15 semester hours in aviation safety equipment repair and maintenance and 6 in aviation maintenance technology. In the lower-division baccalaureate/associate degree category, 15 semester hours in aviation safety equipment repair and maintenance, 6 in aviation maintenance technology, and 3 in personnel supervision, for a total of 24 semester hours (2/77).

Recommendation, PRCS

In the vocational certificate category, the recommendation is the same as that for PR1. In the lower-division baccalaureate/ associate degree category, 15 semester hours in aviation safety equipment repair and maintenance, 6 in aviation maintenance technology, 3 in personnel supervision, and 3 in shop management, for a total of 27 semester hours. In the upper-division baccalaureate category, 3 semester hours for field experience in management (2/77).

Recommendation, PRCM

In the vocational certificate category, the recommendation is the same as that for PR1. In the lower-division baccalaureate/associate degree category, 15 semester hours in aviation safety equipment repair and maintenance, 6 in aviation maintenance technology, 3 in personnel supervision, 3 in shop management, 3 in maintenance management, and 3 in safety management, and 3 in principles of administration, for a total of 36 semester hours. In the upper-division baccalaureate category, 3 semester hours for field experience in management, in maintenance problems, in oxygen and planning, and 3 in quality control for a total of 12 semester hours (2/77).

NER-QM-001

QUARTERMASTER
QM3
QM2
QM1
QMC
QMSC: QMCM

Exhibit Dates: 6/71-Present

Occupational Field: 2 (Ship Operations)

Career Pattern
3N Airman (E-3) PR3 Aircrew Survival Equipmentman Second Class (E-5) PR2. Aircraft Survival Equipmentman Second Class (E-5) PR1: Aircrew Survival Equipmentman First Class (E-6) PRC. Chief Aircrew Survival Equipmentman (E-7) QMCS. Senior Chief Aircrew Survival Equipmentman (E-8) QPCM. Master Chief Aircrew Survival Equipmentman (E-9)

Description
Summary.

PR3:

Suitable to work in this occupational field and to receive the recommendation is as follows:

3N Airman (E-3): Able to perform the duties required for PR3, is a first-line supervisor of 4-7 persons working in parachute lofts and, survival gear, and service, operates oxygen system components, test stand and liquid oxygen converter system, stands, operates test equipment for cartridge-actuated devices associated with parachute systems, inspect, elaps, tests, fits, adjusts, repairs and/or replaces arcrew protective equipment, inspect, packs, and repairs arcrew in-flight, service, operates oxygen system components, test stand and liquid oxygen converter system, modifies, and repairs arcrew survival and associated equipment, repairs oxygen breathing regulators, emergency oxygen systems, and liquid oxygen converters and components; maintains carbon dioxide recharge equipment, maintains test equipment for cartridge-actuated devices associated with parachute systems, maintains technical publications and directives; supervises inspections; prepares weekly schedules of preventive maintenance, parts, orders, in equipment, spare parts, and materials, troubleshoots and repairs sewing machine malfunctions. PR2. Able to perform the duties required for PR3, is a first-line supervisor of 4-7 persons working in parachute lofts and, survival gear, and service, operates oxygen system components, test stand and liquid oxygen converter system, stands, operates test equipment for cartridge-actuated devices associated with parachute systems, inspect, elaps, tests, fits, adjusts, repairs and/or replaces arcrew protective equipment, inspect, packs, and maintains seat-contained survival kits, tests oxygen breathing-regulators and liquid oxygen converters and components. PR1. Able to perform the duties required for PR2, constructs, modifies, and repairs arcrew survival and associated equipment, repairs oxygen breathing regulators, emergency oxygen systems, and liquid oxygen converters and components; maintains carbon dioxide recharge equipment, maintains test equipment for cartridge-actuated devices associated with parachute systems, maintains technical publications and directives; supervises inspections; prepares weekly schedules of preventive maintenance, parts, orders, in equipment, spare parts, and materials, troubleshoots and repairs sewing machine malfunctions. PRCS. Able to perform the duties required for PRCS, recommends changes to ground and flight safety programs, assists in aircraft accident investigations, collects, disseminates, and ensures compliance with technical information concerning assigned equipment, prepares local directives and instructions for attaining objectives and improving operations, prepares courses and provides information and advice regarding operations in area of responsibility, implements a program for interviewing, assigning, and evaluating personnel, prepares personnel training programs, administers long-range maintenance programs. PRCM. Able to perform the duties required for PRCS, formulates guidelines for use in safety inspections, plans and estimates workload commitments, monitors implementation of preventive maintenance program, ensures that procedures for requisitioning, receiving, stowing, and transferring equipment are followed, prepares studies concerning maintenance and staff problems and plans, organizes, and coordinates functions between work centers and branches in the maintenance department, reviews and forecasts material, equipment, and personnel requirements; establishes objectives and sets priorities in area of responsibility, reviews and evaluates inspection records and quality control reports, develops training budgets and monitors expenditures. Recommendation, PR3

In the vocational certificate category or the lower-division baccalaureate/associate degree category, 9 semester hours in aviation safety equipment maintenance and repair and 3 in aviation maintenance technology (2/77).

Recommendation, PR2

In the vocational certificate category, 12 semester hours in aviation safety equipment repair and maintenance and 6 in aviation maintenance technology. In the lower-division baccalaureate/associate degree category, 12 semester hours in aviation safety equipment repair and maintenance, 6 in aviation maintenance technology, and 2 in personnel supervision, for a total of 20 semester hours (2/77).

Recommendation, PR1

In the vocational certificate category, 15 semester hours in aviation safety equipment repair and maintenance and 6 in aviation maintenance technology. In the lower-division baccalaureate/associate degree category, 15 semester hours in aviation safety equipment repair and maintenance, 6 in aviation maintenance technology, and 3 in personnel supervision, for a total of 24 semester hours (2/77).

Recommendation, PRCS

In the vocational certificate category, the recommendation is the same as that for PR1. In the lower-division baccalaureate/associate degree category, 15 semester hours in aviation safety equipment repair and maintenance, 6 in aviation maintenance technology, 3 in personnel supervision, 3 in shop management, 3 in maintenance management, and 2 in safety management for a total of 27 semester hours. In the upper-division baccalaureate category, 3 semester hours for field experience in management (2/77).

Recommendation, PRCM

In the vocational certificate category, the recommendation is the same as that for PR1. In the lower-division baccalaureate/associate degree category, 15 semester hours in aviation safety equipment repair and maintenance, 6 in aviation maintenance technology, 3 in personnel supervision, 3 in shop management, 3 in maintenance management, and 3 in safety management, and 3 in principles of administration, for a total of 36 semester hours. In the upper-division baccalaureate category, 3 semester hours for field experience in management, in maintenance problems, in oxygen and planning, and 3 in quality control for a total of 12 semester hours (2/77).
ment personnel, QMCS. Able to perform the duties required for QMCS, prepares local directives and instructions for attaining organization objectives; improves operations, prepares correspondence, establishes and implements a program for interviewing, evaluating, and assigning personnel, organizes and schedules training programs; evaluates their effectiveness, and initiates improvements; monitors expenditures of funds allied to QMCS. Aids in planning, establishes long-range maintenance program QMCM. Able to perform the duties required for QMGS, plans, organizes, implements, evaluates, monitors, and controls maintenance operations and procedures; identifies, and sets priorities for area of responsibility and plans and initiates activities to improve efficiency and effectiveness of personnel; receives, processes, and distributes objectives and sets priorities for area of responsibility, reviews personnel, equipment, and material requirements and makes recommendations concerning them; prepares narrative reports, develops operating budgets and monitors expenditures.

Recommendation, QM3
In the vocational certificate category, or in the lower-division baccalaureate/associate degree category, 3 semester hours in seamanship (12/76).

Recommendation, QM2
In the vocational certificate category, 3 semester hours in seamanship, 3 in coastwise navigation and piloting, 3 in practical mathematics, 3 in record keeping, 1 in applied meteorology, and 1 in practical marine instrumentation, and additional credit in celestial navigation on the basis of institutional evaluation, for a minimum total of 18 semester hours. In the lower-division baccalaureate/associate degree category, 3 semester hours in seamanship, 3 in coastwise navigation and piloting, 3 in celestial navigation, 3 in advanced navigation, 3 for a practicum in management, 3 in personnel management, and 3 in management problems, and additional credit in human relations on the basis of institutional evaluation, for a maximum total of 18 semester hours (12/76).

NER-RD-001
RADARMAN
RDM1
RDM2
RDM3
RDM4
RDC
RDCS
RDCM
Exhibit Dates: 6/71-6/73. Note: Effective 6/73, the title of this rating was changed to Operations Specialist (OS) for occupational field, career pattern, description, and recommendations, refer to the exhibit for Operations Specialist: NER-OS-001.

NER-RM-001
RADIO MAN
RM3
RM2
RM1
RMC
RMCS
RMCM
Exhibit Dates: 6/71-Present
Occupational Field: 21 (Communications)
Career Pattern
SN Seaman (E-3), RM3, Radioman. Third Class (E-4), RM2, Radioman, Second Class (E-5) RM1, Radioman. First Class (E-6) RMCM, Chief Radioman (E-7). RMCS., Senior Chief Radioman (E-8). RMCM, Master Chief Radioman (E-9).

Description
Summary. Transmits, receives, and processes all forms of telecommunication through various transmission media; operates, monitors, and controls telecommunication systems, identifies composition of a teletype transmission, reception, terminal, and processing equipment RM3. Identifies common electrical and electronic terms and symbols; operates general purpose electronic test equipment, operates and interprets readings of radio frequency power meters and voltage standing wave ratio meters, detects interference, jamming, and interference; operates broadcast using multichannel system, encodes, decodes, sends, and receives messages, relates, reflects, reradiates, and operates radio wave propagation, cleans, lubricates, and inspects equipment, prepares maintenance data forms, uses and maintains handtools necessary to perform their duties; general training, classroom instruction, and experience in electronic communication systems. Radioman, First Class (E-5) RM1. Radioman. First Class (E-6) RMCM, Chief Radioman (E-7). RMCS., Senior Chief Radioman (E-8). RMCM, Master Chief Radioman (E-9).

NER-RM-001
RADARMAN
RDM1
RDM2
RDM3
RDM4
RDC
RDCS
RDCM
Exhibit Dates: 6/71-6/73. Note: Effective 6/73, the title of this rating was changed to Operations Specialist (OS) for occupational field, career pattern, description, and recommendations, refer to the exhibit for Operations Specialist: NER-OS-001.

NER-RM-001
RADARMAN
RDM1
RDM2
RDM3
RDM4
RDC
RDCS
RDCM
Exhibit Dates: 6/71-6/73. Note: Effective 6/73, the title of this rating was changed to Operations Specialist (OS) for occupational field, career pattern, description, and recommendations, refer to the exhibit for Operations Specialist: NER-OS-001.

NER-RM-001
RADARMAN
RDM1
RDM2
RDM3
RDM4
RDC
RDCS
RDCM
Exhibit Dates: 6/71-6/73. Note: Effective 6/73, the title of this rating was changed to Operations Specialist (OS) for occupational field, career pattern, description, and recommendations, refer to the exhibit for Operations Specialist: NER-OS-001.

NER-RM-001
RADARMAN
RDM1
RDM2
RDM3
RDM4
RDC
RDCS
RDCM
Exhibit Dates: 6/71-6/73. Note: Effective 6/73, the title of this rating was changed to Operations Specialist (OS) for occupational field, career pattern, description, and recommendations, refer to the exhibit for Operations Specialist: NER-OS-001.

NER-RM-001
RADARMAN
RDM1
RDM2
RDM3
RDM4
RDC
RDCS
RDCM
Exhibit Dates: 6/71-6/73. Note: Effective 6/73, the title of this rating was changed to Operations Specialist (OS) for occupational field, career pattern, description, and recommendations, refer to the exhibit for Operations Specialist: NER-OS-001.

NER-RM-001
RADARMAN
RDM1
RDM2
RDM3
RDM4
RDC
RDCS
RDCM
Exhibit Dates: 6/71-6/73. Note: Effective 6/73, the title of this rating was changed to Operations Specialist (OS) for occupational field, career pattern, description, and recommendations, refer to the exhibit for Operations Specialist: NER-OS-001.
supervision, basic electronics, 8 in operation of communications systems, 3 in human relations, 2 in management, 2 in personnel supervision, and 1 in record keeping, for a total of 23 semester hours (12/78).

Recommendation, RMC
In the vocational certificate category the recommendation is the same as that for RM1. In the lower-division baccalaureate/associate degree category, 4 semester hours in electronic communications systems, 3 in basic electronics, 8 in operation of communications systems, 3 in human relations, 3 in personnel management, and 3 in management problems in management electives, and 3 in management supervision on the basis of in

Recommendation, RMCS
In the vocational certificate category, the recommendation is the same as that for RM1. In the lower-division baccalaureate/associate degree category, the recommendation is the same as that for RMC. In the upper-division baccalaureate category, 3 semester hours for field experience in management, and 3 in management problems (12/78).

Recommendation, RMCN
In the vocational certificate category, the recommendation is the same as that for RM1. In the lower-division baccalaureate/associate degree category, the recommendation is the same as that for RMCS. In the upper-division baccalaureate category, 6 semester hours for field experience in management, and 3 in management problems (12/78).

NER-RP-001

Religious Program Specialist

RP3
RP2
RP1
RPC
RPS
RPCM

Exhibit Dates: 1/79–Present. Pending evaluation

NER-SH-001

Ship's Serviceman

SH3 (SHT3, SHB3, SHL3, SHS3)
SH2
SH1
SHC
SHS
SHCM

Exhibit Dates: 6/72–Present

Occupational Field: 16 (Logistics)

Career Pattern

Description
Summary. Able to operate barber shop, tailor shop, ship's store, laundry, dry-cleaning plant, retail store, soda fountain, and commissary store, able to operate and maintain vending machines and cash register; performs clerical and stock control functions. Notifies Second Class Third Class (SH3) specialize as tailors, barbers, laundrymen/dry cleaners, or store clerks SHT3: Serves as tailor; operates and adjusts sewing machines, sews alterations and minor repair work on garments; presses garments on mechanical steam and electric presses; installs buttonholes, and makes buttonholes,TOPS, and hems garments, types; attends to customer complaints. SHC: Has knowledge of retail clothing, receipts, and expenditures, maintains records, stock control and record keeping, 3 in beginning tailoring, 3 in applied tailoring techniques (alterations, repairs, buttonholing, braiding), 3 in small business management for tailors, and 3 in home economics in tailoring techniques, for a total of 14 semester, hours (12/76).

Recommendation, SHB3 (Barber)
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 2 semester hours in record keeping, 2 in small business management for barbers, 3 in barber science (equipment and nomenclature), 3 in barber science II (barber equipment, derivation of hair), and 7 in applied barber shop techniques (haircuts, trims), for a total of 17 semester hours (12/76).

Recommendation, SHL3 (Laundryman)
In the vocational certificate category, 2 semester hours in record keeping, 2 in treatment of fabrics (stain removing, spotting, solutions), 3 in laundry equipment operational techniques and repair, 3 in laundry management, and 3 in dry cleaning and pressing, for a total of 13 semester hours In the lower-division baccalaureate/associate degree category, 3 semester hours in record keeping and 1 in environmental control (water) (12/76).

Recommendation, SHS3 (Clerk)
In the vocational certificate category or in the lower-division baccalaureate/associate degree category, 2 semester hours in record keeping and 3 in inventory control (12/76).

Recommendation, SH1
In the vocational certificate category, use the appropriate recommendation for SH3 (tailor, barber, laundryman, or clerk). In the lower-division baccalaureate/associate degree category, use the appropriate recommendation for SH3 (tailor, barber, laundryman, or clerk), plus up to 2 semester hours in personnel supervision on the basis of institutional evaluation (12/76).

Recommendation, SHC
In the vocational certificate category, use the appropriate recommendation for SH3 (tailor, barber, laundryman, or clerk). In the lower-division baccalaureate/associate degree category, use the appropriate recommendation for SH3 (tailor, barber, laundryman, or clerk), plus 1 additional semester hour in record keeping and 3 in retail sales management. In the lower-division baccalaureate/associate degree category, use the appropriate recommendation for SH3 (tailor, barber, laundryman, or clerk), plus 1 additional semester hour in record keeping, 3 in retail sales management, 3 in personnel supervision, 3 for field experience in management (12/76).

Recommendation, SHCS
In the vocational certificate category, use the appropriate recommendation for SH3 (tailor, barber, laundryman, or clerk), plus 1 additional semester hour in record keeping and 3 in retail sales management. In the lower-division baccalaureate/associate degree category, use the appropriate recommendation for SH3 (tailor, barber, laundryman, or clerk), plus 1 additional semester hour in record keeping, 3 in retail sales management, 3 in personnel supervision, 3 for field experience in management (12/76).

Recommendation, SHCM
In the vocational certificate category, use the appropriate recommendation for SH3 (tailor, barber, laundryman, or clerk), plus 1 additional semester hour in record keeping and 3 in retail sales management. In the lower-division baccalaureate/associate degree category, use the appropriate recommendation for SH3 (tailor, barber, laundryman, or clerk), plus 1 additional semester hour in record keeping, 3 in retail sales management, 3 in personnel supervision, 3 for field experience in management (12/76).
additional credit in human relations on the basis of institutional evaluation (12/76)

Recommendation, SKCM

In the vocational certificate category, the recommendation is the same as that for SK1. In the lower-division baccalaureate/associate degree category, 3 semester hours in inventory control, 3 in communication skills (written), 3 in general clerical procedures, 3 in management electives, 2 in office machines, 2 in personnel supervision, 1 in record keeping, and 1 in automated record keeping, and additional credit for field experience in management on the basis of institutional evaluation, for a total of 19 semester hours. In the upper-division, baccalaureate category, credit for a practicum in management and in human relations on the basis of institutional evaluation (12/76)

NER-SK-001

STOREKEEPER

SK3

SK2

SK1

SKC

SKCM

Exhibit Dates: 6/72-Present

Occupational Field: 16 (Logistics)

Career Pattern

SV: Seaman (E-3) SK3: Storekeeper Third Class (E-4) SK2: Storekeeper Second Class (E-5) SK1: Storekeeper First Class (E-6) SKC: Chief Storekeeper (E-7) SKCM: Master Chief Storekeeper (E-9)

Description

Orders, receives, inspects, stores, preserves, packages, ships, and issues materials and cargo; prepares and maintains forms, records, correspondence, reports, and files. SK1. Knows the basic organization and functions of supply departments, is familiar with the purpose and use of major components of automated data processing (ADP) equipment, and knows common terms used in ADP. SK2. Operates office machines, types (at 20 words per minute), routes, and files forms and messages, maintains files, prepares requisitions, records, and prepares automated record keeping, and additional credit for field experience in management on the basis of institutional evaluation, for a minimum total of 15 semester hours (12/76)

Recommendation, SKCM

In the vocational certificate category, the recommendation is the same as that for SK1. In the lower-division baccalaureate/associate degree category, 3 semester hours in inventory control, 3 in communication skills (written), 3 in general clerical procedures, 3 in management electives, 2 in office machines, 2 in record keeping, and 1 in automated record keeping, and additional credit for field experience in management on the basis of institutional evaluation, for a minimum total of 19 semester hours. In the upper-division, baccalaureate category, credit for a practicum in management and in human relations on the basis of institutional evaluation (12/76)

NER-SM-001

SIGNALMAN

SM3

SM2

SM1

SMC

SMCS

SMCM

Exhibit Dates: 6/71-Present

Occupational Field: 1 (General Seamanship)

Career Pattern

SV: Seaman (E-3) SM3: Signalman Third Class (E-4) SM2: Signalman Second Class (E-5) SM1: Signalman First Class (E-6) SMCM: Chief Signalman (E-7) SMCS: Senior Chief Signalman (E-8) SMCM: Master Chief Signalman (E-9)

Description

Sends and receives messages by flashing light, semaphore, and flaghoist; stands watch on the signal bridge; performs lookout duties, encodes and decodes messages, maintains visual signal equipment, recognizes visual aids to navigation, such as beacons and buoys; takes bearings; serves as navigator's assistant. SM2. Performs basic seamanship duties, stands watch as a signal operator over water and in port; maintains visual signaling equipment, performs routine maintenance on, optical equipment, uses and recognizes flag lights, international distress, emergency, and storm warning signals, transmits and receives code groups by flashing lights at 8 words per minute (WPM) and semaphore at 10 WPM, selects and displays flags and pennants, receives, sends, and handles routine messages according to precedence. SM3. Performs duties of a signalman as member of a boatcrew, operates infrared and flashing light equipment, performs routine maintenance of visual signaling equipment. SM2, SK1. Additional credit for automated record keeping, and additional credit for field experience in management on the basis of institutional evaluation, for a total of 19 semester hours. In the upper-division, baccalaureate category, credit for a practicum in management and in human relations on the basis of institutional evaluation (12/76)
in the area of security, additional credit in law enforcement or police science on the basis of institutional evaluation. In the lower-division baccalaureate/associate degree category, 3 semester hours in seamanship, 3 for field experience in management, 3 in management electives. 2 in record keeping, and 2 in personnel supervision, for a minimum total of 10 semester hours; if shore duty assignment was in the area of security, additional credit in law enforcement or police science on the basis of institutional evaluation. NOTE Because of the shortage of signalmen, they are assigned to duty positions that are normally assigned to persons in a higher pay grade. Therefore, it is recommended that the duty assignment be considered when decisions regarding the award of credit are made. (12/76).

Recommendation, SMC
In the vocational certificate category, the recommendation is the same as that for SM2. In the lower-division baccalaureate/associate degree category, 3 semester hours in seamanship, 3 for field experience in management, 3 in management electives. 2 in record keeping, and 2 in personnel supervision, for a minimum total of 13 semester hours; if shore duty assignment was in the area of security, additional credit in law enforcement or police science on the basis of institutional evaluation. In the upper-division baccalaureate category, 3 semester hours for a practicum in management, and additional credit in human relations on the basis of institutional evaluation (12/76).

Recommendation, SMCM
In the vocational certificate category, the recommendation is the same as that for SMC. In the lower-division baccalaureate/associate degree category, the recommendation is the same as that for SMC. In the upper-division baccalaureate category, 3 semester hours in management, 3 in management problems, 2 in personnel management, and additional credit in human relations on the basis of institutional evaluation. (12/76).

Ner-Sn-001
Seaman
SN
Exhibit Dates: 6/71-Present.

Career Pattern
Seaman (SN) is a general rate (Naval appren- ticeship) for persons at pay grades E-1 (retrain), E-2 (seaman apprentice), and E-3 (seaman). At pay grade E-4 ( petty officer third class), the person may enter any one of the following ratings. Boatswain's Mate (BM), Cryptologic Technician (CT), Data Processing Technician (DP), Data Systems Technician (DS), Disbursing Clerk (DK), Electronics Technician (ETN or ETR), Electronics Warfare Technician (EW), Fire Control Technician (FTC or FTCM), Gunner's Mate (GMG or GMM), Gunner's Mate Technician (GMT), Illustrator Draftsman (DM), Instrumentman (IM), Intelligence Specialist (IS), Journalist (JO), Lithographer (LJ), Mess Management Specialist (MMS), Mineman (MN), Musician (MUS), Nautical Ocean System Technician (OT), Operations Specialist (OS), Optician (OM), Personnelman (PN), Postal Clerk (PC), Quartermaster (QM), Radio Technician (RT), Signalman (SM), Sonar Technician (STG or STS), Storekeeper (SK), Torpedoman's Mate (TM), or Yeoman (YM).

Description
Performs all basic seamanship functions aboard ship that involve line or wire, including knot tying,whipping and seizing, and rigging used to secure the ship to a pier, moor, or anchor, is able to identify functions of navigation and shipboard equipment, including fixed or portable items and power or non-powered items, lowers, raises, and launches life saving equipment, handles small boats, navigates by using several different types of compasses, keeps records by degrees or points, knows naviga- tional aids, Nautical Rules of the Road, and the buoys of inland waters of the U.S., knows the nomenclature of decks, super- structures, and parts of the ship, understands the purpose and limitations of first aid and the first aid treatments for electrical shock, simple and compound fractures, heat ex- haustion, heat stroke, drowning, and other emergency situations. Must be qualified as a Swimmer Fourth Class, re- quiring floating for a minimum of five minutes, preparing and using clothing and buoyant objects for the swimmer in the water, and swimming through oil, flames, and debris, knows how to determine the classes of fire and how to extinguish them, knows how to couple, uncouple, and stow fire hoses and fire extinguishers; knows the function of the typical fire main system, fixed carbon dioxide system, water washdown system, and magazine sprinkling system, knows the difference between flooding and progressive flooding and the dangers involved.

Recommendation
In the vocational certificate category, of the lower-division baccalaureate/associate degree category, 3 semester hours in seamanship, and additional credit in first aid and fire science on the basis of institutional evaluation, if the duty assignment was boat operation. 3 additional semester hours in small boat operation, if qualified as Swimmer First Class. 1 semester hour in swimming and additional credit in swimming on the basis of institutional evaluation. (12/76).

NOTE: Credit for Seaman (SN) should be granted only after pay grade E-3 has been achieved.

Ner-St-001
Sonar Technician, Master Chief
STCM
Exhibit Dates: 7/76-Present.

Occupational Field: 10 (Sensor Operations).

Career Pattern
May progress to STCM, Master Chief Sonar Technician (E-9), from STGCS, Senior Chief Sonar Technician, Surface (E-8), or STSCS, Senior Chief Sonar Technician, Submarine (E-8).

Description
 Able to perform the duties required for STGCS (Senior Chief Sonar Technician,
In the vocational certificate category, use the recommendation for STG2 (Sonar Technician, Surface, Second Class) in exhibit NER-STG-001, or STS2 (Sonar Technician, Submarine, Second Class) in exhibit NER-STG-001, as appropriate. In the lower-division baccalaureate/associate degree category, use the recommendation for STGCS (Senior Chief Sonar Technician, Surface) in exhibit NER-STG-001, or STSCS (Senior Chief Sonar Technician, Submarine) in exhibit NER-STG-001, as appropriate. In the upper-division baccalaureate category, 6 semester hours for field experience in management and 3 in management problems (12/78).

NER-STG-001
Sonar Technician, Surface

STG3
STG2
STG1
STGC
STGCS

Exhibit Dates: 7/76-Present.

Occupational Field: 10 (Sensor Operations).

Career Pattern

STG3 (Sonar Technician, Surface, Third Class) (E-3) STG2 Sonar Technician, Surface, Second Class (E-4) STG2 Sonar Technician, Surface, Second Class (E-5) STG1 Sonar Technician, Surface, First Class (E-6) STGC Chief Sonar Technician, Surface (E-7) STGCS: Senior Chief Sonar Technician, Surface (E-8) STCM: Master Chief Sonar Technician (E-9).

Description

Operates, troubleshoots, repairs, and performs maintenance on shipboard sonar, oceanographic, and underwater equipment, including control systems, sensors, and electronic components and parts, maintains and calibrates equipment malfunction systems and subsystems, repairs computer equipment and systems, troubleshoots and diagnoses electrical/electronic systems, subsystems, circuits, or parts, installs minor modifications to electronic equipment, operates and interprets sonar messages; checks and maintains all maintenance data for STG2. In the lower-division baccalaureate/associate degree category, 6 semester hours in basic electricity/electronics, 3 in applied mathematics, in applied mathematics, 3 in basic blueprint reading, 2 in maintenance management, 2 in personnel supervision, 3 in human relations, for a total of 15 semester hours (12/78).

Recommendation

In the vocational certificate category, the recommendation is the same as that for STG2. In the lower-division baccalaureate/associate degree category, 6 semester hours in basic electricity/electronics, 3 in applied mathematics, 3 in basic blueprint reading, 2 in maintenance management, 2 in personnel supervision, 3 in human relations, for a total of 19 semester hours (12/78).

Recommendation, STG3
In the vocational certificate category, the recommendation is the same as that for STG2. In the lower-division baccalaureate/associate degree category, 6 semester hours in basic electricity/electronics, 3 in applied mathematics, 3 in basic blueprint reading, 2 in maintenance management, 2 in personnel supervision, 3 in human relations, for a total of 17 semester hours (12/78).

Recommendation, STGCS
In the vocational certificate category, the recommendation is the same as that for STG2. In the lower-division baccalaureate/associate degree category, 6 semester hours in basic electricity/electronics, 3 in applied mathematics, 3 in basic blueprint reading, 2 in maintenance management, 2 in personnel supervision, 3 in human relations, for a total of 20 semester hours (12/78).

NER-STS-001
Sonar Technician, Submarine

STS3
STS2
STS1
STS
STSC
STSCS

Exhibit Dates: 7/76-Present.

Occupational Field: 10 (Sensor Operations).

Career Pattern

SN, Seaman (E-3) STS3 Sonar Technician, Submarine Third Class (E-4) STS2 Sonar Technician, Submarine, Second Class (E-5) STS1 Sonar Technician, Submarine, First Class (E-6) STSC Chief Sonar Technician, Submarine (E-7) STSCS Senior Chief Sonar Technician, Submarine (E-8).

Description

Operates, troubleshoots, repairs, and performs maintenance on subma-
Recommendation, STSCS
In the vocational certificate category, the recommendation is the same as that for STS2. In the lower-division baccalaureate/associate degree category, the recommendation is the same as that for STSC.

NER-SW-001 STEELWORKER

SHOWER
SW3
SW2
SW1
SWC
SWCS

Exhibit Dates: 6/71-Present
Occupational Field: 13 (Construction)

Career Pattern
CV Constructionman (E-3) SW3, Steelworker Second Class (E-4) SW2, Steelworker Second Class (E-5) SW1, Senior Chief Steelworker (E-6) SWC, Chief Steelworker (E-7) SWCS

Description
Summary: Fabricates, assembles, erects, positions, and joins structural metal to steel buildings, bridges, and buildings, using hand and power-driven fabrication equipment. SW3: Read steel drawings and sketches, uses simple hoisting devices, cuts, forms, places, and ties reinforcing steel, works with erection crew as a connector of rebar, performs gas cutting, gas welding, and electric arc welding in all positions, identifies types and uses of electrodes, gas rods, and fluxes for welding, soldering, and brazing, identifies types of welded joints, identifies compressed gas cylinders, splices line and wire rope, computes safe working load of lines, wire rope, and block, and tackle arrangements, erects common types of metal and swinging scaffolds, identifies types and shapes of structural and reinforcing steel, identifies types of pre-engineered buildings and structures, computes areas of polygons, circles, and cylinders, computes volume of prisms, pyramids, spheres, and cylinders, fabricates elementary designs and shapes in sheet metal by using soldering, brazing and riveting SW2. Able to perform the duties required for SW3, draws simple shop drawings and sketches, prepares requisitions, welds ferrous/nonferrous metals in all positions, uses gas metal arc and gas tungsten arc welding procedures, applies methods of controlling metal expansion during welding operations, applies field straightening techniques to damage structural shapes, applies principles and methods of cutting, chamfering, and scarfing metal, using carbon-arc chamfer-type rod and air-arc processes, performs gas-welding and electric arc welding to build up and wearmetall parts, determines mechanical advantage of block and tackle arrangements, determines types and uses of drive pins, studs, and powder chargers for powder-assisted or powder-actuated tools, performs layout and fabrication of simple steel structures for teams and crews, ties wire rope, uses spliced sockets, chocks, and related attachments, performs operator maintenance on powder-actuated (low and high velocity) stud guns and on diesel or gasoline driven air compressors. SW1. Able to perform the duties required for SW2, prepares as-built drawings; prepares work progress reports; manages material usage data, conducts training for teams and crews, designs and erects simple hoisting devices, such as "A" frames, ginpoles, tripods, and derricks; conducts and directs the movement of crane and other hoisting devices in moving and positioning objects, directs crews involved in cutting and welding operations, directs crews engaged in layout, cutting, bending, and placing reinforcing steel; directs teams and crews in erecting rigid frame and other pre-engineered buildings and airfield matting; directs teams and crews engaged in metal work and fabrication, knows the principles and assembly methods of the various pocotom systems; assigns daily work to teams and crews; prepares equipment, manpower, and material estimates from drawings and specifications; uses principles and techniques of Critical Path Method (CPM) scheduling; performs duties of shop planner or maintenance scheduler, performs construction and maintenance inspections, performs non-destructive tests. SWC. Able to perform the duties required for SW1; drafts letters and instructions, prepares reports, administers accident prevention programs and occupational assignments, provides technical advice on plans and specifications and on construction and maintenance techniques, implements maintenance and personnel programs, prepares and uses network analysis, prepares and maintains project progress charts, organizes and controls the site development of materials and equipment SWCS. Able to perform the duties required for SW1, prepares correspondence and local directives and instructions for attaining organizational objectives and assignments, provides information and advice on utilization, capabilities, reliability, and operations in own area of responsibility, implements a program for assigning and evaluation personnel, coordinates' equipment assignment among various projects; administers construction trade tool inventory and inspection program; prepares and maintains visual status boards; is capable of directing the operation and maintenance of all utilities in the Carpenter's Department; directs transportation and equipment services; establishes a maintenance and cost control program, coordinates and evaluates labor proficiency, training usage, and maintains data and coordinates the preparation and submission of related reports, organizes, schedules, and evaluates training programs.

Recommendation, SW3
In the vocational certificate category, 9 semester hours in welding. 1 in rigging, and 1 in steel layout and fabrication, for a total of 11 semester hours. In the lower-division baccalaureate/associate degree category, 3 semester-hours in welding and additional credit in welding on the basis of institutional evaluation, for a minimum total of 11 semester hours (1/77).

Recommendation, SW2
In the vocational certificate category, 15 semester hours in welding, 2 in rigging, and 2 in steel layout and fabrication, for a total of 19 semester hours. In the lower-division baccalaureate/associate degree category, 5 semester hours in welding and 1 in steel layout and fabrication, and additional credit in welding on the basis of institutional evaluation (1/77).

Recommendation, SW1
In the vocational certificate category, 15 semester hours in welding, 6 in advanced welding, 3 in rigging, 3 in technical math, and 3 in steel layout and fabrication, for a total of 30 semester hours. In the lower-division baccalaureate/associate degree category, 7 semester hours in welding, 2 in steel layout and fabrication, and 2 in personal supervision, and additional credit in welding on the basis of institutional evaluation, for a minimum total of 11 semester hours (1/77).

Recommendation, SWC
In the vocational certificate category, the recommendation is the same as that for SW1. In the lower-division baccalaureate/associate degree category, 7 semester hours in welding, 3 in personal supervision, 3 in technical writing, 3 in industrial technology, and 2 in steel layout and fabrication, and additional credit in welding on the basis of institutional evaluation, for a minimum total of 16 semester hours (1/77).

Recommendation, SWCS
In the vocational certificate category, the recommendation is the same as that for SW1. In the lower-division baccalaureate/associate degree category, 7 semester hours in welding, 3 in personal supervision, 3 in technical writing, 3 in industrial technology, and 2 in steel layout and fabrication, and additional credit in welding on the basis of institutional evaluation, for a minimum total of 16 semester hours (1/77).

NER-TD-001 TRADEVMAN

TD3
TD2
TD1
TDC
TDCS
TDCM

Exhibit Dates: 6/71-Present
Occupational Field: 11 (Weapons System Support)

Career Pattern

Description
Summary: Operates, maintains, and installs training equipment, supervises maintenance; uses equipment in training programs; plans and develops training programs and training aids TD1. Performs maintenance on electronic, hydraulic, and electrical training equipment; prepares computers for operation, records information on training devices, performs electromechanical maintenance, operates and repairs audio-visual training equipment and other training devices. TD2. Able to perform the duties required for TD3, analyzes and repairs electronic and hydraulic systems of training devices, operates and maintains sensor equipment, repairs computers, programs computer program tapes and interprets print-outs, organizes and maintains technical files, troubleshoots and maintains servosystems used in training devices, locates and corrects defects in mechanical computing elements. TD1. Able to perform the duties
in record keeping, 3 in personnel supervision, 3 for management electives, 3 in basic electricity, 3 in basic electronics, 3 in basic mathematics, and 6 in applied physics for a total of 23 semester hours. In the upper-division baccalaureate category, 3 semester hours in audio-visual education, 3 in instructional techniques and materials, and 3 for field experience in management, for a minimum total of 12 semester hours (2/77).

Recommendation, TDC

In the vocational certificate category, the recommendation is the same as that for TDI. In the lower-division baccalaureate/associate degree category, the recommendation is the same as that for TDCS. In the upper-division baccalaureate category, 3 semester hours in audio-visual education, 3 in instructional techniques and materials, and 3 for field experience in management, for a minimum total of 12 semester hours (2/77).

Recommendation, TDC

In the vocational certificate category, the recommendation is the same as that for TDI. In the lower-division baccalaureate/associate degree category, 2 semester hours in blueprint reading and schematics, 2 in basic electricity, 3 in basic electronics, 3 in technical mathematics, and 6 in applied physics, for a total of 17 semester hours. In the lower-division baccalaureate/associate degree category, 3 semester hours in basic electricity, 3 in basic electronics, 3 in basic mathematics, and 6 in applied physics, for a total of 15 semester hours (2/77).

Recommendation, TDI

In the vocational certificate category, 2 semester hours in blueprint reading and schematics, 2 in record keeping, 3 in basic electricity, 3 in basic electronics, 3 in technical mathematics, and 6 in applied physics, for a total of 17 semester hours. In the lower-division baccalaureate/associate degree category, 2 semester hours in record keeping, 3 in personnel supervision, 3 in basic electricity, 3 in basic electronics, 3 in basic mathematics, and 6 in applied physics, for a total of 20 semester hours. In the upper-division baccalaureate category, 3 semester hours in audio-visual education and 3 in instructional techniques and materials (2/77).

Recommendation, TDC

In the vocational certificate category, the recommendation is the same as that for TDI. In the lower-division baccalaureate/associate degree category, 2 semester hours in record keeping, 3 in personnel supervision, 3 in basic electricity, 3 in basic electronics, 3 in basic mathematics, and 6 in applied physics, for a total of 20 semester hours. In the upper-division baccalaureate category, 3 semester hours in audio-visual education and 3 in instructional techniques and materials (2/77).
In the vocational certificate category, 3 semester hours in introduction to construction, 3 in utilities construction and maintenance, 3 in applied science, and 2 in general plans and specifications, for a total of 8 semester hours (1/77).

Recommendation, UT1

In the vocational certificate category, 6 semester hours in utilities installation, 3 in introduction to construction, 3 in utilities construction and maintenance, 3 in plumbing, and 2 for blueprint reading and sketching, for a total of 14 semester hours. In the lower-division baccalaureate/associate degree category, 4 semester hours in utilities construction and maintenance, 3 in applied science, 3 in utility construction estimating, 3 in water and sewage treatment systems, 2 in general plans and specifications, and 2 in general supervision, for a total of 17 semester hours (1/77).

Recommendation, UTC

In the vocational certificate category, the recommendation is the same as that for UT1. In the lower-division baccalaureate/associate degree category, 4 semester hours in utilities construction and maintenance, 3 in applied science, 3 in utilities construction estimating, 3 in water and sewage treatment systems, 3 in personnel supervision, 2 in general plans and specifications, 2 in shop management, and 1 in safety management, for a total of 21 semester hours (1/77).

Recommendation, UTCS

In the vocational certificate category, the recommendation is the same as that for UT1. In the lower-division baccalaureate/associate degree category, 4 semester hours in utilities construction and maintenance, 3 in applied science, 3 in utilities construction estimating, 3 in water and sewage treatment systems, 3 in personnel supervision, 2 in general plans and specifications, 2 in shop management, and 1 in safety management, for a total of 23 semester hours. In the upper-division baccalaureate category, 3 semester hours in office management, and 3 in human relations (1/77).

Recommendation, UTCM

In the vocational certificate category, use the recommendation for either UT1 or CE1 (Construction Electrician First Class) as appropriate. In the lower-division baccalaureate/associate degree category, 6 semester hours in utilities construction and maintenance, 3 in introduction to construction, 3 in utilities construction and maintenance, 3 in applied science, and 2 for blueprint reading and sketching, for a total of 5 semester hours (1/77).

NER-YN-001

YN1

MN

YNCS

YNM

Exhibit Dates: 6/72-Present

Occupational Field: 15 (Administration)

Career Pattern

SN: Seaman (E-3) YN2: Yeoman Third Class (E-5) YN1: Yeoman First Class (E-6) YN: Yeoman Second Class (E-7) YNC: Senior Chief Yeoman (E-8) YNCS: Master Chief Yeoman (E-9)

Description

Summary: Performs general office clerical duties, including typing, filing, office machine operations, office communications, and filing and record management. In the lower-division baccalaureate/associate degree category, the recommendation is the same as that for UT1. In the lower-division baccalaureate/associate degree category, 4 semester hours in utilities construction and maintenance, 3 in applied science, 3 in utility construction estimating, 3 in water and sewage treatment systems, 2 in general plans and specifications, and 2 in general supervision, for a total of 17 semester hours (1/77).
DANTES Subject Standardized Tests (DSSTs)

The Defense Activity for Non-Traditional Education Support (DANTES) provides support to the voluntary education programs of all military services. DANTES was created in May 1974 after disestablishment of the United States Armed Forces Institute (USAFI). Policy control of DANTES rests with the Director of Defense Education in the Office of the Secretary of Defense; DANTES policy is administered by a Department of Defense policy council on which all military services are represented.

DANTES began offering Subject Standardized Tests when it was established in July 1974. Many of the tests were identical with those sponsored by the United States Armed Forces Institute (USAFI) prior to its disestablishment. Each test in this series is intended to reflect the knowledge and understanding normally associated with a term of study in a university, college, or technical school (i.e., postsecondary programs leading to a degree or certificate). The DSSTs are administered through military education and testing centers worldwide and are available to active military personnel only. Participation in the program is optional.

The DSSTs are a series of multiple-choice subject-matter examinations in college and technical subjects. DSSTs are essentially end-of-course achievement tests. Each DSST is based on several textbooks commonly used for a course of the same or similar title. Examinee scores are reported as percentiles (PR) for early DSST forms designed as SA or SB, scores are reported as standard scores (SS) (mean 50, standard deviation 10) for recent DSST forms designated SC and SD. Both score scales are based on test results for large standardization samples of students completing relevant courses.

DANTES regularly contracts with test development organizations to revise and update DSSTs and to produce additional new tests. Prior to their distribution, the tests are evaluated by panels of subject matter and technical experts assembled by the ACE Office on Educational Credit and Credentials (OECC) staff. As a matter of policy, the recommended amount and type of credit, minimum test score for which credit should be awarded and the length of initial Commission recommendation are based primarily on the suggestions of each faculty subject matter review panel. The recommended minimum test score for credit awards is established for each DSST at the level judged by faculty reviewers to represent the knowledge and understanding that would be clearly deserving of credit at most institutions offering comparable courses. (No actual data on grades are provided by the DSST test developer, so these score levels are based on the faculty reviewers' subjective judgments and on their inspection of the normative data provided.)

The ACE credit recommendations for DSSTs, as of the publication date of the Guide, are indicated below. Since recommendations for many new tests are anticipated and those for others will soon expire, readers are urged to contact OECC for supplementary recommendations on revised or newly developed DSSTs.

<table>
<thead>
<tr>
<th>TEST</th>
<th>TITLE</th>
<th>CREDIT AMOUNT</th>
<th>MINIMUM</th>
<th>TAKEN ON OR BEFORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SB404</td>
<td>Survey of English Literature</td>
<td>SEM. 3B</td>
<td>PR 20</td>
<td>12-31-79</td>
</tr>
<tr>
<td>SA408</td>
<td>Survey of American Literature I</td>
<td>SEM. 3B</td>
<td>PR 20</td>
<td>12-31-79</td>
</tr>
<tr>
<td>SA409</td>
<td>Survey of American Literature II</td>
<td>SEM. 3B</td>
<td>PR 20</td>
<td>12-31-79</td>
</tr>
<tr>
<td>SA424</td>
<td>Intermediate College Algebra</td>
<td>SEM. 3B</td>
<td>SS 50</td>
<td>12-31-84</td>
</tr>
<tr>
<td>SC424</td>
<td>Intermediate College Algebra</td>
<td>SEM. 3B</td>
<td>SS 50</td>
<td>12-31-84</td>
</tr>
<tr>
<td>SB425</td>
<td>College Algebra</td>
<td>SEM. 3B</td>
<td>PR 20</td>
<td>3-31-79</td>
</tr>
<tr>
<td>SB433</td>
<td>Basic Statistics</td>
<td>SEM. 3B</td>
<td>SS 54</td>
<td>12-31-84</td>
</tr>
<tr>
<td>SC433</td>
<td>Basic Statistics</td>
<td>SEM. 3B</td>
<td>SS 54</td>
<td>12-31-84</td>
</tr>
<tr>
<td>SA435</td>
<td>Plane Trigonometry</td>
<td>SEM. 3B</td>
<td>PR 20</td>
<td>12-31-79</td>
</tr>
<tr>
<td>SC435</td>
<td>Plane Trigonometry</td>
<td>SEM. 3B</td>
<td>SS 50</td>
<td>12-31-84</td>
</tr>
<tr>
<td>SA440</td>
<td>Calculus I</td>
<td>SEM. 4B</td>
<td>PR 20</td>
<td>12-31-79</td>
</tr>
<tr>
<td>SC440</td>
<td>Calculus I</td>
<td>SEM. 4B</td>
<td>SS 50</td>
<td>12-31-84</td>
</tr>
<tr>
<td>SA441</td>
<td>Calculus II</td>
<td>SEM. 4B</td>
<td>PR 20</td>
<td>12-31-80</td>
</tr>
<tr>
<td>SC441</td>
<td>Calculus II</td>
<td>SEM. 4B</td>
<td>SS 52</td>
<td>12-31-82</td>
</tr>
<tr>
<td>Code</td>
<td>Course Title</td>
<td>Semester</td>
<td>Year</td>
<td>Date</td>
</tr>
<tr>
<td>-------</td>
<td>--------------------------------------------------</td>
<td>----------</td>
<td>--------</td>
<td>----------</td>
</tr>
<tr>
<td>SA445</td>
<td>Differential Equations</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-79</td>
</tr>
<tr>
<td>SC445</td>
<td>Differential Equations</td>
<td>3B</td>
<td>54SS</td>
<td>12-31-81</td>
</tr>
<tr>
<td>SA446</td>
<td>Linear Algebra</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-80</td>
</tr>
<tr>
<td>SC446</td>
<td>Linear Algebra</td>
<td>3B</td>
<td>20PR</td>
<td>5-31-80</td>
</tr>
<tr>
<td>SB453</td>
<td>Principles of Economics I</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-79</td>
</tr>
<tr>
<td>SC453</td>
<td>Principles of Economics I</td>
<td>3B</td>
<td>48SS</td>
<td>12-31-83</td>
</tr>
<tr>
<td>SB454</td>
<td>Principles of Economics II</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-78</td>
</tr>
<tr>
<td>SB457</td>
<td>History of Western Civilization to 1500</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-78</td>
</tr>
<tr>
<td>SB458</td>
<td>History of Western Civilization since 1500</td>
<td>3B</td>
<td>20PR</td>
<td>6-30-79</td>
</tr>
<tr>
<td>SA462</td>
<td>History of the American Negro</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-80</td>
</tr>
<tr>
<td>SA467</td>
<td>History of Modern East Asia</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-79</td>
</tr>
<tr>
<td>SA468</td>
<td>History of Southeast Asia</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-79</td>
</tr>
<tr>
<td>SA471</td>
<td>History of Africa</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-79</td>
</tr>
<tr>
<td>SA472</td>
<td>Problems of Contemporary Latin America</td>
<td>3B</td>
<td>20PR</td>
<td>2-28-77</td>
</tr>
<tr>
<td>SA481</td>
<td>Modern European Governments</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-79</td>
</tr>
<tr>
<td>SA482</td>
<td>Modern Asian Governments</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-79</td>
</tr>
<tr>
<td>SB488</td>
<td>Psychology of Adjustment</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-80</td>
</tr>
<tr>
<td>SC488</td>
<td>Psychology of Adjustment</td>
<td>3B</td>
<td>53SS</td>
<td>12-31-84</td>
</tr>
<tr>
<td>SA491</td>
<td>Educational Psychology</td>
<td>3B</td>
<td>20PR</td>
<td>7-31-79</td>
</tr>
<tr>
<td>SC491</td>
<td>Educational Psychology</td>
<td>3B</td>
<td>56SS</td>
<td>12-31-82</td>
</tr>
<tr>
<td>SA494</td>
<td>General Anthropology</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-78</td>
</tr>
<tr>
<td>SA497</td>
<td>Introduction to Law Enforcement</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-78</td>
</tr>
<tr>
<td>SB498</td>
<td>Criminology</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-80</td>
</tr>
<tr>
<td>SB500</td>
<td>Astronomy I</td>
<td>2B</td>
<td>20PR</td>
<td>12-31-80</td>
</tr>
<tr>
<td>SC500</td>
<td>Astronomy I</td>
<td>3B</td>
<td>48SS</td>
<td>12-31-83</td>
</tr>
<tr>
<td>SA505</td>
<td>General Geophysics</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-80</td>
</tr>
<tr>
<td>SC505</td>
<td>General Geophysics</td>
<td>3B</td>
<td>51SS</td>
<td>12-31-83</td>
</tr>
<tr>
<td>SA510</td>
<td>Oceanography</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-80</td>
</tr>
<tr>
<td>SB512</td>
<td>Principles of Physical Science I</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-80</td>
</tr>
<tr>
<td>SC512</td>
<td>Principles of Physical Science I</td>
<td>3B</td>
<td>51SS</td>
<td>12-31-83</td>
</tr>
<tr>
<td>SA514</td>
<td>College Chemistry I</td>
<td>3T</td>
<td>20PR</td>
<td>3-31-79</td>
</tr>
<tr>
<td>SA515</td>
<td>College Chemistry II</td>
<td>3T</td>
<td>20PR</td>
<td>3-31-79</td>
</tr>
<tr>
<td>SB517</td>
<td>College Physics I</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-80</td>
</tr>
<tr>
<td>SB518</td>
<td>College Physics II</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-80</td>
</tr>
<tr>
<td>SA519</td>
<td>Geology I</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-79</td>
</tr>
<tr>
<td>SC519</td>
<td>Geology I</td>
<td>3B'</td>
<td>54SS</td>
<td>12-31-82</td>
</tr>
<tr>
<td>SA520</td>
<td>Geology II</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-79</td>
</tr>
<tr>
<td>SA525</td>
<td>Principles of Accounting I</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-80</td>
</tr>
<tr>
<td>SC525</td>
<td>Principles of Financial Accounting I</td>
<td>3B</td>
<td>50SS</td>
<td>12-31-84</td>
</tr>
<tr>
<td>SB533</td>
<td>Business Law I</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-80</td>
</tr>
<tr>
<td>SC533</td>
<td>Business Law I</td>
<td>3B</td>
<td>53SS</td>
<td>12-31-86</td>
</tr>
<tr>
<td>SB534</td>
<td>Business Law II</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-79</td>
</tr>
<tr>
<td>SA535</td>
<td>Introduction to Data Processing</td>
<td>2B</td>
<td>20PR</td>
<td>2-28-77</td>
</tr>
<tr>
<td>SC539</td>
<td>Principles of Management</td>
<td>3B</td>
<td>20PR</td>
<td>7-31-79</td>
</tr>
<tr>
<td>SC539</td>
<td>Introduction to Management</td>
<td>3B</td>
<td>54SS</td>
<td>12-31-83</td>
</tr>
<tr>
<td>SB543</td>
<td>Introduction to Business</td>
<td>3B</td>
<td>20PR</td>
<td>11-30-79</td>
</tr>
<tr>
<td>SC543</td>
<td>Introduction to Business</td>
<td>3B</td>
<td>48SS</td>
<td>12-31-84</td>
</tr>
<tr>
<td>SB544</td>
<td>Personnel Management</td>
<td>3B</td>
<td>20PR</td>
<td>3-31-79</td>
</tr>
<tr>
<td>SA546</td>
<td>Risk and Insurance</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-80</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Code</td>
<td>Type</td>
<td>Date</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
<td>------</td>
<td>-------</td>
<td>----------</td>
</tr>
<tr>
<td>SB547</td>
<td>Introduction to Real Estate</td>
<td></td>
<td></td>
<td>3B</td>
</tr>
<tr>
<td>SA548</td>
<td>Money and Banking</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-79</td>
</tr>
<tr>
<td>SA549</td>
<td>Marketing</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-79</td>
</tr>
<tr>
<td>SC549</td>
<td>Basic Marketing</td>
<td>3B</td>
<td>50SS</td>
<td>12-31-83</td>
</tr>
<tr>
<td>SA550</td>
<td>Climatology/Meteorology</td>
<td>3T/3B</td>
<td>20PR</td>
<td>12-31-80</td>
</tr>
<tr>
<td>SC550</td>
<td>Meteorology and Climatology</td>
<td>3B</td>
<td>55SS</td>
<td>12-31-89</td>
</tr>
<tr>
<td>SA560</td>
<td>Introduction to Education</td>
<td>3B</td>
<td>20PR</td>
<td>3-31-79</td>
</tr>
<tr>
<td>SA561</td>
<td>History and Philosophy of Education</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-79</td>
</tr>
<tr>
<td>SA562</td>
<td>Principles of Guidance</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-78</td>
</tr>
<tr>
<td>SA568</td>
<td>Introduction to Forestry</td>
<td>3B</td>
<td>20PR</td>
<td>12-31-80</td>
</tr>
<tr>
<td>SA577</td>
<td>Beginning French I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA578</td>
<td>Beginning French II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA579</td>
<td>Beginning German I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC579</td>
<td>Beginning German I</td>
<td>4B</td>
<td>50SS</td>
<td>12-31-81</td>
</tr>
<tr>
<td>SA580</td>
<td>Beginning German II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA583</td>
<td>Beginning Spanish I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA584</td>
<td>Beginning Spanish II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC584</td>
<td>Beginning Spanish II</td>
<td>3B</td>
<td>50SS</td>
<td>12-31-84</td>
</tr>
<tr>
<td>SA585</td>
<td>Beginning Italian I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA586</td>
<td>Beginning Italian II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA740</td>
<td>Auto Mechanics I</td>
<td>3T</td>
<td>20PR</td>
<td>12-31-78</td>
</tr>
<tr>
<td>SA741</td>
<td>Auto Mechanics II</td>
<td>3T</td>
<td>20PR</td>
<td>12-31-78</td>
</tr>
<tr>
<td>SA756</td>
<td>Introduction to Carpentry</td>
<td>3T</td>
<td>20PR</td>
<td>12-31-78</td>
</tr>
<tr>
<td>SB770</td>
<td>Basic Technical Drawing and Graphics</td>
<td>3T</td>
<td>20PR</td>
<td>12-31-79</td>
</tr>
<tr>
<td>SA781</td>
<td>Fundamentals of Electricity</td>
<td>2T</td>
<td>20PR</td>
<td>12-31-78</td>
</tr>
<tr>
<td>SA785</td>
<td>Electrical Measuring Instruments</td>
<td>3T</td>
<td>20PR</td>
<td>12-31-80</td>
</tr>
<tr>
<td>SC785</td>
<td>Electrical Measuring Instruments</td>
<td>2T</td>
<td>57SS</td>
<td>12-31-86</td>
</tr>
<tr>
<td>SA788</td>
<td>Introduction to Electronics I</td>
<td>3T</td>
<td>20PR</td>
<td>12-31-80</td>
</tr>
<tr>
<td>SA789</td>
<td>Introduction to Electronics II</td>
<td>3T</td>
<td>52SS</td>
<td>12-31-83</td>
</tr>
<tr>
<td>SC789</td>
<td>Introduction to Electronics II</td>
<td>3T</td>
<td>20PR</td>
<td>12-31-80</td>
</tr>
<tr>
<td>SB794</td>
<td>Introduction to Diesel Engines I</td>
<td>3T</td>
<td>20PR</td>
<td>3-31-79</td>
</tr>
<tr>
<td>SB795</td>
<td>Introduction to Diesel Engines II</td>
<td>3T</td>
<td>20PR</td>
<td>3-31-79</td>
</tr>
<tr>
<td>SA810</td>
<td>Technical Mathematics I</td>
<td>5T/3B</td>
<td>20PR</td>
<td>12-31-78</td>
</tr>
<tr>
<td>SA811</td>
<td>Technical Mathematics II</td>
<td>5T/3B</td>
<td>20PR</td>
<td>12-31-79</td>
</tr>
<tr>
<td>SA820</td>
<td>Technical Writing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SB885</td>
<td>Fundamentals of Radio</td>
<td>3T</td>
<td>20PR</td>
<td>12-31-79</td>
</tr>
<tr>
<td>SA890</td>
<td>Radio Servicing</td>
<td>4T/2B</td>
<td>20PR</td>
<td>12-31-78</td>
</tr>
<tr>
<td>SA891</td>
<td>Television Servicing</td>
<td>4T/2B</td>
<td>20PR</td>
<td>12-31-79</td>
</tr>
<tr>
<td>SA936</td>
<td>Introduction to Refrigeration</td>
<td>4T</td>
<td>20PR</td>
<td>12-31-79</td>
</tr>
<tr>
<td>SA960</td>
<td>Introduction to Quality Control</td>
<td>3B</td>
<td>20PR</td>
<td>2-28-77</td>
</tr>
</tbody>
</table>

**NOTES**

1. Recommendations for forms designated "SC" also apply to those designated "SD".
2. Scores on forms "SA" and "SB" are percentiles (PR); those on forms "SC" and "SD" are standard scores (SS) with mean 50 and standard deviation 10. All scores based on results for large samples of college students completing courses comparable to the tests.
3-4 DANTES SUBJECT STANDARDIZED TESTS,

3. "+" and "++" represent, respectively, the amounts of credit normally awarded for one- and two-semester introductory courses at the institution.

4. Abbreviations used for credit categories are:
   "T": Technical Certificate Level. This category describes tests corresponding to course work normally found in certificate or diploma (nondegree) programs that are usually a year or less in length and designed to provide students with occupational skills.
   "B": Baccalaureate/Associate Level. This category describes tests corresponding to course work normally found in the first two years of a baccalaureate program and in programs leading to the Associate in Arts, Associate in Science, or Associate in Applied Science degrees.

USING THESE RECOMMENDATIONS

The American Council on Education recommends that credit for USAFI/DANTES courses and tests be granted only after successful completion is verified from official records.

Official records for service personnel and veterans completing USAFI (United States Armed Forces Institute) courses and tests prior to its disestablishment on June 30, 1974, can be obtained at no cost from DANTES Contractor Representative (Transcripts), Educational Testing Service, Box 2879, Princeton, New Jersey 08541. Credit recommendations for USAFI courses and tests may be obtained from OECC.

Official records for individuals who completed DANTES Subject Standardized Tests after July 1, 1974, can be obtained for a nominal fee from DANTES Contractor Representative (CLEP), Educational Testing Service, Box 2819, Princeton, New Jersey 08541.

Assistance in interpreting or applying these recommendations is available from the staff, Office on Education Credit and Credentials, Suite 20, One Dupont Circle, Washington, D.C. 20036. (Phone: 202-833-4770)
Appendix A

The Evaluation Systems

During the period, 1945-80, the American Council on Education developed and refined comprehensive procedures and criteria for the evaluation of military learning experiences. This appendix outlines the historical development of the Guide; defines which courses can be found in the Guide; provides background information on Navy general rates and ratings; describes the evaluation systems used to prepare the recommendations for military formal courses and Navy ratings; and includes definitions and guidelines pertaining to categories of educational credit, the semester hour standard, categories of apprentice training, and clock hours and contact hours.

BACKGROUND

Early editions of the Guide to the Evaluation of Educational Experiences in the Armed Services were prepared in response to specific needs. Immediately after World War II, the consensus in the educational community was that the practice of granting blanket credit to World War I veterans as a reward for length of service was educationally unsound. Educators concluded that military learning experiences applicable to civilian curricula should be assessed by civilian education specialists for potential credit. Therefore, in December 1945, at the request of civilian educational institutions and the regional accrediting associations, the American Council on Education established the Commission on Accreditation of Service Experiences—renamed the Commission on Educational Credit and Credentials in 1979—to evaluate military educational programs and to assist institutions in granting credit for such experiences. Accordingly, the first edition of the Guide was published to assist educational institutions in evaluating service courses completed by returning veterans.

The extension of the World War II G.I. Bill to include veterans of the Korean conflict, and the subsequent enrollment of many veterans in colleges and universities, created a need for the second edition, published in 1954.

The 1968 edition was prepared in anticipation of the increased enrollment of veterans resulting from the educational assistance provided under the Veterans Readjustment Benefits Act of 1966, and with the expectation that many would apply for educational credit for their learning experiences in the armed services. In addition, technological advances had necessitated major changes in service training, with a resulting need for new or revised educational credit recommendations.

The 1974 edition was prepared primarily to respond to three emerging considerations. First, because of the growth in vocational and technical programs and the emergence of the concept of postsecondary education, there was a need to evaluate courses for possible credit in the vocational and technical categories in addition to the baccalaureate and graduate categories of previous editions. Second, active-duty service men and women were enrolling in increasing numbers in civilian educational programs and were seeking credit for related formal military courses soon after completing their service school training. Third, credit recommendations were needed for the many courses initiated or revised by the military since 1968.

The 1974 edition marked the beginning of a new approach to reporting evaluations of formal military training. At its fall 1973 meeting, the Commission approved the concept of an ongoing Guide system. Elements of that system include the publication of biennial editions of the Guide through computerized composition, continuous staff review of courses, and the computerized storage of course information for a more rapid updating of credit recommendations and for an improved ability to respond to inquiries related to course identification and credit recommendations.

Over the years the recommendations contained in the Guide have assisted education institutions in granting credit to hundreds of thousands of service men and women. Surveys conducted by the Office showed that most of the nation's colleges and universities use the formal course recommendations in awarding credit to veterans and active-duty service personnel. The recommendations have been widely accepted because military formal courses share certain key elements with traditional postsecondary programs: they are formally approved and administered, are designed for the express purpose of achieving learning outcomes, are conducted by qualified persons with specific subject-matter expertise, and are structured to provide for the evaluation of learning outcomes.

Until 1975, however, no mechanism existed for providing recognition for the learning a service man or woman attained through such learning experiences as self-instruction, on-the-job training, and work experi-
A-2 APPENDIX A

ence. As a first step in providing recognition for such learning experiences, the Commission in 1975 implemented a program for the evaluation of learning represented by demonstrated proficiency in Army enlisted military, occupational specialties (MOS's). The MOS evaluation procedures were developed, tested, and refined during a feasibility study conducted by the Council and sponsored by the U.S. Department of the Army. Evaluators made recommendations for educational credit and advanced standing in apprentice training programs. Subsequently, the occupational assessment program of the Commission was expanded to include the general rates and ratings of the Navy Enlisted Manpower and Personnel Classification System and Army warrant officer MOS's.

The recommendations for advanced standing in apprentice training programs are the result of the cooperative efforts of the American Council on Education and labor and industry. The recommendations reflect the Commission's belief that it is sound educational practice to give recognition for learning, no matter how or where that learning has been attained, provided that the learning is at the appropriate level, is in the appropriate area, and is applicable to an individual's postsecondary program of study or apprenticeship program.

THE COURSES

Courses listed in the Guide are normally service school courses conducted on a formal basis, i.e., approved by a central authority within each service and listed by the service in its catalogue. These courses are conducted for a specified period of time with a prescribed course of instruction, in a structured learning situation, and with qualified instructors.

Most courses are given on a full-time basis (a minimum of thirty contact hours of instruction a week) for not less than two weeks' duration; or, if less than two weeks in length, the course must include a minimum of sixty contact hours of instruction. (Prior to 1973 the minimum length requirement was three weeks or 90 hours.) The American Council on Education also evaluates courses conducted for National Guard and Reserve personnel (not on extended active-duty status) when these courses meet the same requirements.

Recommendations for formal courses offered between World War II and 1954 are available in the 1954 edition of the Guide or from the Office on Educational Credit and Credentials upon written request by education officials. Courses in this Guide have a start date no earlier than 1954. In addition, military Subject Standardized Tests (SSTs) are evaluated by the American Council on Education, but are not included in the Guide; recommendations are available from the Office on Educational Credit and Credentials upon written request by education officials.

THE COURSE EVALUATION SYSTEM

In the fall of 1973, the Commission on Educational Credit and Credentials of the American Council on Education approved the following procedures and guidelines for the evaluation of military formal courses.

The Evaluation Process

Courses are evaluated by teams of at least three subject-matter specialists (college and university professors, deans, and other academicians). Through discussion and the application of evaluation procedures and guidelines, team members reach a consensus on the amount and category of credit to be recommended.

Evaluation materials include the course syllabus, training materials, tests, textbooks, technical manuals, and examinations. Additional information is obtained from interviews with instructors and program administrators, classroom observations, and examination of instructional equipment and laboratory facilities.

Each team of evaluators has two major tasks for each course: the formulation of a credit recommendation and the preparation of the course's description. The credit recommendation consists of the category of credit, the number of semester hours recommended, and the appropriate subject area. Using the information provided in the military syllabus, evaluators phrase the course description (which appears in the Guide) under the headings "Objectives" and "Instruction" in terms meaningful to civilian educators. The course description supplements the credit recommendations by summarizing the nature of a given course.

Throughout the evaluation process, evaluators exercise professional judgment in applying the evaluative criteria and procedures. This position reflects the Commission's belief that sound educational evaluation is more dependent on professional judgment and expertise than on rigid application of criteria.

The Commission on Educational Credit and Credentials continually reviews its criteria and procedures. Evaluators are encouraged to provide feedback and recommendations for consideration by the Commission.

Selection of Evaluators

Nominations for course evaluators are requested from regional accrediting associations, professional and disciplinary societies, educational associations, and postsecondary institutions.
The criteria for the selection of formal course evaluators are as follows:

1. Area of an evaluator's competence, as evidenced by formal training and experiences, will closely approximate area of student training to be evaluated.

2. Preference will be given to candidates who are subject-matter specialists with five or more years of postsecondary teaching or administrative experience, including curriculum development.

3. Preference will be given to candidates who are generally receptive to the recognition of learning that occurs in a variety of settings.

THE NAVY ENLISTED RATING STRUCTURE

The Navy Enlisted Rating Structure is used for classifying enlisted personnel, identifying personnel qualifications, and reporting personnel requirements and resources. It also provides the framework for enlisted career development through paths of advancement from paygrades E-1 (recruit) through E-9 (master chief petty officer). For ACE purposes, there are two main types of occupational classifications in the Enlisted Rating Structure:

1. General Rates (Apprenticeships)—Identifications assigned to personnel at paygrades E-1, E-2, and E-3. There are six general rates: Airman, Constructionman, Dentalman, Fireman, Hospitalman, and Seaman. Each general rate involves the performance of entry-level tasks and leads to one or more ratings.

2. Ratings—Broad enlisted occupations that encompass similar duties and functions and often, in most instances, provide paths of advancement and career development for personnel from paygrades E-4 (petty officer third class) to E-9 (master chief petty officer). Figure 1 shows the relationship between petty officer designations and paygrades. A complete list of ratings and the occupational fields to which they belong are included as Appendix B. Ratings require performance of routine tasks at the lower paygrades and more difficult tasks at progressively higher paygrades.

To supplement occupational information contained in the Navy Enlisted Rating Structure and to provide the necessary requirements for general rates and ratings, the Navy has developed two sets of standards: naval standards and occupational standards. Naval standards are tasks that are essential to the overall effectiveness of enlisted personnel in the performance of their duties. They include standards pertaining to military requirements, professional development and naval tradition. Occupational standards identify the minimum tasks required for proficiency in general rates and ratings and provide the basis for the development of training and advancement requirements and personnel policies and procedures. For both naval standards and occupational standards each higher paygrade represents more complex duties, increased skills, and greater responsibility. Proficiency in a higher paygrade includes the ability to perform the tasks and meet the standards required for the preceding paygrades, as well as those required for the higher paygrade. The naval standards for all paygrades are included in Appendix B. A complete set of occupational standards for one rating, Airman, is included in Appendix C.

In addition to the Enlisted Rating Structure, the Navy Enlisted Occupational Classification System includes two other subsystems: The Navy Enlisted Classification (NEC) Structure and Special Qualifications. The NEC Structure supplements the Enlisted Rating Structure by identifying skills requiring more specific identification than that provided by general rates and ratings and which are not rating-wide requirements. Special Qualifications identify highly specialized occupational entities which cross several occupational areas and define the requirements of these areas. Because of the specialized nature and limited
APPENDIX A

The Navy Enlisted Evaluation and Advancement System

The Navy, regularly evaluates the occupational proficiency of its men and women. In fact, the demonstration of occupational proficiency is directly linked to the advancement system. Only those individuals who have (1) demonstrated that they can perform the tasks required for the next higher paygrade, (2) completed the appropriate correspondence and/or residence courses for the next higher paygrade, (3) served a minimum length of time in their paygrade and in the service, and (4) been recommended by their commanding officer are allowed to take the advancement examination.

The primary evaluation technique is the Navy-wide written examination for each paygrade of each rating. It is a 150-item multiple choice test that is based on the occupational standards and tasks for each paygrade of a given rating. It is given more weight than any other factor in the evaluation process. Persons are not advanced in their rating until they have demonstrated that they are proficient in the next higher paygrade of the rating.

Before being considered for advancement, an individual must pass the written examination. Demonstrating proficiency in the next higher paygrade is a requirement for advancement. In addition, for advancement to petty officer third class (PO3) and petty officer second class (PO2)—paygrades E-4 and E-5—the applicable military/leadership examination must also be passed.

Examinations for petty officer third class, petty officer second class, and petty officer first class (paygrades E-4, E-5, and E-6) are administered semiannually. Those for chief petty officers, senior chief petty officers, and master chief petty officers are administered annually. Examinations for paygrade E-3 are administered by unit commanding officers when the individual has demonstrated readiness to take it. Written examinations are not used for paygrade E-2. Make-up tests are made available for Navy men and women who cannot take the test on the specified date because of extenuating circumstances.

A final multiple score is computed for each individual who takes the Navy-wide advancement examination. The final multiple score is composed of the following factors:

<table>
<thead>
<tr>
<th>Factor</th>
<th>Maximum Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Examination Score</td>
<td>30</td>
</tr>
<tr>
<td>Performance Examination Score</td>
<td>50</td>
</tr>
<tr>
<td>Number of Years in Service</td>
<td>20</td>
</tr>
</tbody>
</table>
3. Preference will be given to candidates who are subject-matter specialists with five or more years of postsecondary teaching or administrative experience, including curriculum development.

4. Preference will be given to candidates who are generally receptive to the recognition of learning that occurs in a variety of settings.

An evaluator candidate is interviewed by an OECC staff member to determine whether the individual meets the selection criteria.

Evaluations are conducted by teams of at least three specialists (five when the general rate or rating is apprenticeship related). The teams are formed by OECC staff members, using the following guidelines:

1. Subject-matter specialists on an evaluation team should represent a variety of postsecondary institutional types: 1-year/2-year/4-year; public/private; vocational/technical.

2. In the evaluation of a general rate or rating that is related to an apprenticeable trade, two evaluators on the team—one representing labor and one representing management—should have experience in the administration of that apprentice training program.

3. Each team of evaluators should represent a variety of persons from within education, labor, government, industry, and business who have had teaching, supervisory, and administrative experiences.

An effort is also made to attain a diverse geographic representation among evaluators. Teams are formed based on the general rates or ratings to be evaluated. Because skills required for proficiency in a general rate or rating do not always fall neatly into civilian educational and occupational fields and often encompass two or more fields, most evaluation teams include a curriculum generalist. Provision is also made for an evaluation team, when it finds it cannot thoroughly evaluate a general rate or rating, to refer it or a particular paygrade of it to another team or other specialists for further evaluation.

Materials Required for Evaluation

In order to make a recommendation, evaluators first identify the skills, competencies, and knowledge associated with a given general rate or rating. The materials relevant for each evaluation are made available to OECC staff members and evaluators by the Navy. Materials include the official Navy manuals that describe the duties and qualifications for each general rate and rating; the Bibliography for Advancement Study, rate training manuals and other publications used by Navy enlisted men and women in the day-to-day performance of their duties and to prepare for their advancement examinations; and the advancement examination. Additional information is obtained by observing and interviewing Navy men and women during visits to Navy bases and units.

**Evaluation Procedures and Guidelines**

Evaluators identify the skills, competencies, and knowledge required of Navy men and women who are qualified in a given general rate or paygrade of a rating and relate that demonstrated learning to the same attributes acquired by students who have completed a comparable postsecondary course or curriculum and by tradesmen and apprentices who have completed a related apprentice training program. Because the evaluations are based on a comparison of learning outcomes, the amount of time a given Navy enlisted man or woman may have spent acquiring occupational proficiency is not taken into consideration. The emphasis is on translating the learning demonstrated through occupational proficiency into terms used in formal postsecondary civilian education systems to recognize the same learning. This reflects the belief of the Commission on Educational Credit and Credentials that the value of learning is not dependent on where or how the learning occurs.

Evaluation teams are assigned four tasks in the evaluation of each general rate and rating: (1) to identify the learning represented by occupational proficiency by reviewing the pertinent written materials and by observing Navy men and women performing their occupations and interviewing them and their supervisors; (2) to prepare a description of the duties, skills, competencies, and knowledge required for each general rate and paygrade of a rating; (3) to make recommendations for each general rate and paygrade of a rating based on discussion and consensus; and (4) to make specific comments and suggestions about general rates and ratings (especially in those instances when neither educational credit nor advanced standing in an apprentice training program is recommended), which are forwarded by OECC to the Chief of Naval Education and Training.

**The Recommendations**

In order to interpret exhibits correctly, readers should become thoroughly familiar with the definitions and guidelines utilized by evaluators in formulating the recommendations. The following paragraphs include definitions and guidelines pertaining to categories of educational credit, the semester hour, categories of apprentice training, and clock hours and contact hours.
Categories of Credit

Educational credit is a concept used by postsecondary institutions to quantify and record a student's successful completion of a unit of study. Postsecondary education consists of courses and programs of instruction for persons who are high school graduates or the equivalent, or who are beyond compulsory school age. ACE evaluators utilize the following categories of educational credit when formulating credit recommendations.

Vocational Certificate. This category describes course work of the type normally found in certificate or diploma (nondegree) programs that are usually a year or less in length and designed to provide students with occupational skills. This course work can also be found in curricula leading to associate degrees in applied science. Course content is specialized and the accompanying shop, laboratory, or similar practical components emphasize procedural more than analytical skills.

Lower-Division Baccalaureate/Associate Degree. This category describes course work of the type normally found in the first two years of a baccalaureate program and in programs leading to the Associate in Arts, the Associate in Science, or the Associate in Applied Science degree, the traditional transfer associate degrees. The instruction stresses development of analytical abilities at the introductory level. Verbal, mathematical, and scientific concepts associated with an academic discipline are introduced, as are basic principles. Occupationally oriented courses in this category are normally designed to prepare a student to function as a technician in a particular field.

Upper-Division Baccalaureate. This category describes courses of the type found in the last two years of a baccalaureate program. The courses involve specialization of a theoretical or analytical nature beyond the introductory level. Successful performance by students normally requires prior study in the area.

Graduate Degree. This category describes courses with content of the type found in graduate programs. These courses often require independent study, original research, critical analysis, and the scholarly and professional application of the specialized knowledge or discipline. Students enrolled in such courses normally have completed a baccalaureate program.

Semester Hours

Credit recommendations for courses are not derived by simple arithmetic conversion. Evaluators exercise professional judgment and consider only those portions of a course that can be equated with civilian postsecondary curricula. Intensive courses offered by the military do not necessarily require as much outside preparation as many regular college courses.

Evaluators consider the factors of pre- and postcourse assignments, prior work-related experience, the concentrated nature of the learning experience, and the reinforcement of the course material gained in the subsequent work setting.

The recommendations for Navy ratings are based on the skills, competencies, and knowledge learned, as demonstrated through proficiency in the rating, without reference to how much time elapsed during the learning process. The semester hour is used as a standard to express how many semester hours of appropriate course work a student would normally complete to attain the same learning outcomes or attest to the same level of competency.

Credit recommendations are expressed in semester credit hours. In determining semester hour recommendations, evaluators will be guided by, but not restricted to, the following standard definitions:

1. One semester credit hour for the equivalent of 15 hours of classroom contact plus 30 hours of outside preparation; or
2. One semester credit hour for the equivalent of 30 hours of laboratory work plus necessary outside preparation, normally expected to be 15 hours; or
3. One semester credit hour for the equivalent of not less than 45 hours of shop instruction (contact hours).

Apprentice Training

Apprentice training is the composite series of progressively more difficult learning experiences in the technology and skills of a tradesman. Apprentice training may be identified in clock hours or years of reasonably continuous on-the-job training and in contact hours of related instruction. On-the-job training and work experience focus on the performance of basic skills under the direct supervision of a journeyman. Related and supplemental instruction is normally closely correlated with on-the-job training, and the subject matter stresses practical application of technology. An apprentice is a person who is engaged in learning a trade by working with, and under the direct supervision of, a qualified journeyman in all phases of the trade for a specified period of time. A journeyman is a tradesman who has satisfactorily completed an apprentice training program or achieved proficiency in a given industry and who works without direct job supervision.

Clock Hours and Contact Hours

A recommendation for advanced standing in an apprentice training program is stated in clock hours of occupational experience and contact hours of related
instruction. Clock hours are based on hours worked at a trade, contact hours are based on hours spent in the presence of a qualified instructor.

The Navy ratings recommendations are based on the skills, competencies, and knowledge learned, as demonstrated through proficiency in the rating, without reference to how much time elapsed during the learning process. Clock hours and contact hours are used to express how much of an apprentice training program an apprentice would normally complete to attain the same learning outcomes or attest to the same level of competency.

Other Recommendations

The Defense Activity for Non-Traditional Education Support (DANTES) maintains the educational records of the service men and women who have completed SSTs, CLEP examinations, and GED Tests.

The results of courses and tests taken under the auspices of USAFI (United States Armed Forces Institute, disestablished 1974) which carry academic credit and which were submitted prior to June 30, 1974, are available at no cost from: DANTES Contractor Representative (transcripts), Box 2879, Princeton, New Jersey 08540.

Results of Subject Standardized Tests and CLEP examinations taken under the auspices of DANTES after July 1, 1974, are available at a nominal charge from: DANTES Contractor Representative (CLEP), Educational Testing Service, P.O. Box 2819, Princeton, New Jersey 08540.

Test reports for GED Tests taken after July 1, 1974, can be obtained from: DANTES Contractor Representative (GED), GED Testing Service, American Council on Education, One Dupont Circle, Washington, D.C. 20036.

In addition, credit recommendations for USAFI courses and tests and for DANTES Subject Standardized Tests are available from the Office of Educational Credit and Credentials upon written request by education officials.
## Appendix B

### Navy Enlisted Occupational Fields and Ratings

Navy enlisted ratings are grouped into 24 occupational fields. Each field provides opportunities for advancement and career progression among closely related ratings. The 24 occupational fields and the ratings which each field encompasses are as follows:

<table>
<thead>
<tr>
<th>Field</th>
<th>Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. General Seamanship</td>
<td>Boatswain's Mate (BM), Signalman (SM)</td>
</tr>
<tr>
<td>2. Ship Operations</td>
<td>Operations Specialist (OS), Quartermaster (QM)</td>
</tr>
<tr>
<td>3. Marine Engineering</td>
<td>Boiler Technician (BT), Electrician's Mate (EM), Engineering (EN), Gas Turbine System Technician (GS), Interior Communications Electrician (IC), Machinist's Mate (MM)</td>
</tr>
<tr>
<td>4. Ship Maintenance</td>
<td>Hull Maintenance Technician (HT), Instrumentman (IM), Machinery Repairman (MR), Molder (ML), Optician (OM), Patternmaker (PM)</td>
</tr>
<tr>
<td>5. Aviation Maintenance/Weapons</td>
<td>Aircrew Survival Equipmentman (PR), Aviation Antisubmarine Warfare Technician (AX), Aviation Electrician's Mate (AE), Aviation Electronics Technician (AT), Aviation Fire Control Technician (AQ), Aviation Machinist's Mate (AD), Aviation Maintenance Administrationman (AZ), Aviation Ordnanceman (AO), Aviation Structural Mechanic (AM)</td>
</tr>
<tr>
<td>6. Aviation Ground Support</td>
<td>Aviation Boatswain's Mate (AB), Aviation Support Equipment Technician (AS)</td>
</tr>
<tr>
<td>7. Air Traffic Control</td>
<td>Air Controlman (AC)</td>
</tr>
<tr>
<td>8. Weapons Control</td>
<td>Electronics Technician (ET), Fire Control Technician (FT)</td>
</tr>
<tr>
<td>9. Ordnance Systems</td>
<td>Gunner's Mate (GM), Mineman (MN), Missile Technician (MT), Torpedoman's Mate (TM)</td>
</tr>
<tr>
<td>10. Sensor Operations</td>
<td>Electronics Warfare Technician (EW), Ocean Systems Technician (OT), Sonar Technician (ST)</td>
</tr>
<tr>
<td>11. Weapons Systems Support</td>
<td>Trademan (TD)</td>
</tr>
<tr>
<td>12. Data Systems</td>
<td>Data Processing Technician (DP), Data Systems Technician (DS)</td>
</tr>
<tr>
<td>13. Construction</td>
<td>Builder (BU), Construction Electrician (CE), Construction Mechanic (CM), Engineering Aid (EA), Equipment Operator (EO), Steeler (SW), Utilitiesman (UT)</td>
</tr>
<tr>
<td>14. Health Care</td>
<td>Dental Technician (DT), Hospital Corpsman (HC)</td>
</tr>
<tr>
<td>15. Administration</td>
<td>Legalman (LN), Navy Counselor (NC), Personnelman (PN), Postal Clerk (PC), Yeoman (YN), Religious Program Specialist (RP)</td>
</tr>
<tr>
<td>16. Logistics</td>
<td>Aviation Storekeeper (AK), Disbursing Clerk (DK), Mess Management Specialist (MS), Ship's Serviceman (SH), Storekeeper (SK)</td>
</tr>
<tr>
<td>17. Media</td>
<td>Illustrator Draftsman (DM), Journalist (JO), Lithographer (LI), Photographer's Mate (PH)</td>
</tr>
<tr>
<td>18. Musician</td>
<td>Musician (MU)</td>
</tr>
<tr>
<td>19. Master-at-Arms</td>
<td>Master-at-Arms (MA)</td>
</tr>
<tr>
<td>20. Cryptology</td>
<td>Cryptologic Technician (CT)</td>
</tr>
<tr>
<td>21. Communications</td>
<td>Radioman (RM)</td>
</tr>
<tr>
<td>22. Intelligence</td>
<td>Intelligence Specialist (IS)</td>
</tr>
<tr>
<td>23. Meteorology and Oceanography</td>
<td>Aerographer's Mate (AG)</td>
</tr>
</tbody>
</table>
Appendix C

Naval Occupational Standards

Occupational Standards define the tasks enlisted personnel must perform to be proficient in their ratings. Knowledge required to perform a given task is assumed to be inherent in the proper performance of the task. Occupational Standards are written as task statements which are derived by personnel experts from the data resulting from a thorough analysis of the task and the rating.

The task statements are listed under topic titles. The topic titles provide a method of grouping similar standards for various ratings. Examples of topic titles are administration, publications, and maintenance planning and quality assurance. An example of a task statement for the air traffic controller second class administration is “maintain air traffic operations logs and records.”

Task statements are identified by five-digit numbers. The first two digits identify the topic title (38 for administration, for example). The remaining three digits identify the specific task statement. For example, the five-digit number that identifies the topic title and task statement for the air traffic controller second class mentioned in the preceding paragraph is 38235.

The occupational standards for the general rating, Air Traffic Controller, follow.

GENERAL INFORMATION

Career Pattern

ACCM
ACC8
ACC
AC1
AC2
AC3
Airman Apprenticeship

Normal path of advancement to Warrant Officer and Limited Duty Officer categories is to Aviation Operations Technician (732X) and LDO Aviation Operations (632X).

Special Physical Requirements

Vision 20/200 correctable in each eye to 20/20; normal color perception; normal hearing; no speech impediment; meet the physical requirements contained in Article 15-69, Manual of the Medical Department, U.S. Navy; pass examination for Class II FAA Medical Certificate (Part 67, FAA Regulations).

Citizenship/Security Requirements

Must be eligible for access to classified information.

Air Traffic Controllers (AC) perform air traffic control duties in air control towers, radar air traffic control facilities, and air operations offices ashore and afloat, operate radiotelephones, light signals and systems, and direct aircraft under VFR and IFR conditions; operate surveillance radar, precision radar, and identification equipment, (IFF), operate ground- and barrier-controlled approach systems, assist pilots in the preparation and processing of flight plans and clearances; and maintain current flight planning information and reference materials.

Air Traffic Controller Third Class (AC3)

46 PUBLICATIONS

46323 Identify general contents and use of the flight information publication (FLIP) system

54 LOGISTICS SUPPORT

54537 Prepare, assemble, and maintain flight packets and brief pilots on their contents

63 AIR TRAFFIC CONTROL

63241 Identify the purpose and interrelationships of operator positions and equipment in air traffic control facilities

63242 Interpret Federal air regulations pertaining to air traffic control by Naval control tower personnel

63243 Direct air traffic under visual flight rules

63244 Issue instructions to vehicular traffic on the airfield and instructions to aircraft on the ground relative to taxiing, parking, and related airport information

63245 Issue oral instructions from the control tower to dispatch fire, crash, and rescue equipment for emergency landings, crashes, and accidents

63246 Record instrument flight rules (IFR) clearances and relay to aircraft

63247 Operate airport traffic control signal light gun

63248 Identify standard Navy airfield markings and lighting systems

63249 Identify types, designations, and comparative flight characteristics of U.S. military aircraft

63250 Carry out non-radar control of aircraft which have experienced an emergency situation in flight

63251 Effect radar handoff

63252 Provide advisory services utilizing air surveillance radar

63253 Interpret effect of weather and topography on the operating capability of radar, IFF and related equipment
APPENDIX C

63255 Maintain flight data and status boards
63256 Identify the types and purposes of flight assistance services
63257 Encode and decode hourly aviation weather
63258 Control aircraft utilizing precision approach radar
63259 Report and apply appropriate VFR weather minimums to air traffic control
63260 Process flight plans

77 SECURITY
77246 Carry out requirements for security of air traffic control communications
86 COMMUNICATIONS
86267 Prepare notams for release and process incoming notams
86268 Draft and process air traffic control data by teletype/interphone
86269 Operate intra/inter facility communications equipment
86270 Obtain and relay weather information to aircraft and local weather facilities
87 NAVIGATION AND TACTICAL SUPPORT
87211 Use standard aeronautical charts and publications used in air navigation
88 ELECTRICAL AND ELECTRONIC EQUIPMENT OPERATIONS
88231 Operate airfield lighting systems
88232 Check calibration and adjust radar indicators for effective target presentation
88233 Identify and monitor electronic aids to air navigation

Air Traffic Controller Second Class (AC2)
38 ADMINISTRATION
38235 Maintain air traffic operations logs and records
46 PUBLICATIONS
46735 Use DOD catalog of charts and publications to identify and order charts and publications
63 AIR TRAFFIC CONTROL
63254 Carry out radar control of aircraft which have experienced an emergency in flight
63259 Apply Federal air regulations and manuals and Navy directives pertaining to air traffic control facilities
63260 Assign and evaluate IFF/SIF codes
63261 Control aircraft utilizing air surveillance radar
63262 Apply procedures for search and rescue operations
63263 Direct air traffic under instrument flight rules
63264 Apply procedures for locating, identifying, and tracking aircraft
63265 Interpret characteristics, purposes, and general operating procedures of landing approach systems
63266 Direct air traffic control facility base operations function
63268 Apply minimums applicable to IFR approaches and departures and special VFR operations

Air Traffic Controller First Class (AC1)
38 ADMINISTRATION
38236 Maintain logs, publications, files, and records applicable to air traffic control facilities

44 TRAINING
44346 Carry out air traffic control facility training

54 LOGISTICS SUPPORT
54538 Requisition, inventory, and account for air traffic control equipment

63 AIR TRAFFIC CONTROL
63269 Supervise procedures used by control tower personnel
63270 Coordinate functions of radar air traffic control
63275 Apply holding pattern criteria

Chief Air Traffic Controller (ACC)
38 ADMINISTRATION
38237 Interpret and disseminate U.S. Navy and FAA regulations governing the operations of air traffic control facilities
38238 Prepare air traffic control facility reports
38239 Supervise the use, filing, and maintaining of publications, logs, and records

44 TRAINING
44347 Conduct emergency drills for air traffic control personnel
44348 Supervise the air traffic control facility training program

Senior Chief Air Traffic Controller (ACCS)
20 SAFETY
20259 Manage, coordinate, and evaluate safety programs and emergency drills

35 ADMINISTRATION
35476 Provide information and advise on utilization, capabilities, reliability, and operations in own area of responsibility
35478 Prepare local directives and instructions for attaining organization objectives and improving operations
35479 Prepare correspondence
35480 Establish and implement a program for interviewing, evaluating and assigning personnel to assure maximum utilization
35650 Plan, organize, and prepare runway use and noise abatement programs
35651 Review and submit air traffic control facility reports

44 TRAINING
44375 Organize and schedule training programs, evaluate effectiveness, and initiate improvements

50 MAINTENANCE, PLANNING AND QUALITY ASSURANCE
50713 Establish required inspection procedures, coordinate and ensure maintenance of air traffic control facility equipment

63 AIR TRAFFIC CONTROL
63271 Supervise radar air traffic control operations
63284 Supervise ATC facility flight checks

54 LOGISTICS SUPPORT
54538 Requisition, inventory, and account for air traffic control equipment
Coordinate ATC facility flight checks
Serve as air traffic control facility watch officer

Master Chief Air Traffic Controller (ACCM)

ADMINISTRATION

Plan, organize, implement, and control activities in compliance with policy statements, operation orders, and directives
Forecast future requirements, and plan and initiate action to satisfy requirements in own area of responsibility
Establish goals, objectives and priorities in own area of responsibility
Review personnel, equipment and material requirements
Administer an air traffic control facility

FINANCIAL CONTROL

Develop operating budgets and monitor expenditures

APPENDIX C C-3

63 AIRCRAFT HANDLING AND AVIATION SUPPORT

Prepare and interpret letters of agreement, directives, and memoranda applicable to air traffic control

Air Traffic Controller (AC)

Navy Enlisted Classifications
Occupational Area—Defense Grouping Code
DG-9720 Communications and Intelligence Specialists
Rating Conversion Code
AC-6999 Air Traffic Controller Basic

AC
OS-0317 NTDS Input/Utilization Display Equipment Operator, OS AC
AC-6901 Facility Rated Approach Controller, AC
AC-6902 Carrier Air Traffic Control Center Controller, AC
AC-6911 Carrier Air Traffic Control Center Controller Supervisor, AC
AC-6912 Carrier Controlled Approach Controller, AC
Appendix D

Naval Standards

Naval standards are tasks—skills and knowledge—other than those defined by occupational standards, that are essential to the overall effectiveness of enlisted personnel in the performance of their duties. They pertain to general rates and ratings for paygrades E-2 through E-9. They include standards pertaining to military requirements, professional development, and Naval tradition.

Naval standards are identified by six-digit numbers. The first three digits, always in the 900's, identify the standard topic title. The remaining three digits identify the specific task statement. For example, the number 901201 indicates that the standard topic title is "Watch, Quarter and Station Bill" and the specific task is "Procedures for preparation and station bill."

### 900 Military Requirements

901 WATCH, QUARTER AND STATION BILL

- 901201 Purpose and content of watch, quarter and station bill
- 902 SEAMANSHIP
  - 902201 Terminology commonly used in deck and boat seamanship
  - 902202 Procedures for locating an object by relative bearing and position angle measured in degrees
  - 902203 Difference between true and relative bearings
  - 902204 Nomenclature of deck equipment
  - 902205 Methods of splicing rope and tying basic knots
  - 902206 Types and sizes of line

903 DRILL

- 903201 Individual positions and facings used in close-order drill with arms
- 903202 Individual positions and facings without arms

904 UNIFORMS

- 904201 Qualifications to earn and wear the service stripes
- 904202 Sleeve insignia and/or collar device identification of U.S. Navy enlisted rates
- 904203 Grade insignia and corps devices of U.S. Naval officers
- 904204 Regulations for correct keeping, wearing, marking, and exchanging U.S. Navy enlisted uniforms
- 904205 Regulations concerning identification tags and identification cards

904206 Grade insignia of other armed service grades and comparative U.S. Navy grades

- 904207 Regulations for correct wearing of U.S. Navy awards
- 904208 Regulations concerning proper grooming standards

905 SMALL ARMS

- 905201 Fire the service rifle and pistol in prescribed positions
- 905202 Perform field stripping, cleaning, and assembling of the service rifle and pistol
- 905203 Precautions required to prevent hearing loss when exposed to repeated small arms fire
- 905204 Safety precautions to be observed in handling fire arms

906 WATCHSTANDING

- 906201 Relieve an armed watch
- 906202 Stand a proper military watch
- 906203 Eleven general orders of a sentry (watch)
- 906204 Duties and responsibilities of a lookout
- 906205 Duties and responsibilities of a military watch

### 907 COMMUNICATIONS

- 907201 Standard telephone procedures and phraseology when using (A) sound-powered telephones; (B) dial telephones; (C) intercoms
- 907202 Procedures to break-out, man, test, and secure a shipboard sound-powered headset
- 907203 Pronunciation of numbers and phonetic alphabet
- 907204 Communications security
- 907205 General administrative and emergency signal flags and pennants

### 908 SHIP AND AIRCRAFT CHARACTERISTICS

- 908201 Major types of ships and aircraft of the U.S. Navy
- 908202 Nomenclature of superstructure, decks, and components of the hull
- 908203 Numbering system for decks and lettering and numbering system for compartments
- 908204 General characteristics and mission of U.S. ships and aircraft

### 911 Personnel Safety

- 911201 Hazards to personnel when entering or working in unventilated spaces where CO₂ extinguishers have been discharged in such spaces
- 911202 Hazards to personnel when CO₂ "snow" is directed toward the face or exposed skin
- 911203 Precautions to be observed when handling and stowing fire extinguishers
- 911204 Dangers involved in letting go of a charged fire hose
- 911205 Dangers involved in grasping all-purpose nozzle by the control handle when securing
- 911206 Reasons for not using water on a Class "C" (electrical) fire
- 911207 Dangers involved in the operation of an internal combustion engine in an unventilated space
- 911208 Dangers of energizing and using electrical equipment in a space filled with explosive vapors
- 911209 Use, care, and stowage of the following life float equipment: (A) signal mirror, day and night distress signal, and dye marker, (B) first aid kit, ration and tarpaulin
- 911210 Typical hazardous or unacceptable environmental conditions
- 911211 Safety precautions when embarked in small boats
- 911212 Safety precautions for recreation and sports
- 911213 Safety precautions to be observed when in the vicinity of aircraft
APPENDIX D

911214 Safety precautions to be observed around living quarters

911215 General safety precautions involved in working with or in the vicinity of (A) fuel, paints, approved cleaning agents, and flammables, (B) weapons, ammunition, and pyrotechnics, (C) electric and electronic equipment, (D) compressed gases, (E) compressed air, (F) liquids under pressure, (G) steam, (H) lifelines, ladders, and scaffolding, (I) heavy weights and moving equipment, (J) personnel aloft or over the side, (K) voids, tanks, and closed compartments, (L) cutting and welding operations, (M) power tools, (N) high powered transmitters, (O) suspended loads.

911216 Safety precautions when operating motor vehicles on and off duty

912 FIRST AID AND PERSONAL HYGIENE

912201 Procedure for applying a bandage

912202 Procedures for control of arterial and venous bleeding by compress, far CHR pressure, and tourniquet

912203 Procedures for preparing and applying an improvised splint

912204 Procedures for cardiopulmonary resuscitation

912205 Procedures for transporting an injured person by firemen's lift and tied hands crawl

912206 Procedure for closed chest cardiac massage

912207 Purpose, general rules, and limitations of first aid

912208 Symptoms of and immediate treatment for shock

912209 Procedures for rescuing a person in contact with an energized electrical circuit and subsequent treatment for electrical shock

912210 Symptoms of, and first aid treatment for, simple and compound fractures and heat exhaustion, and heat stroke

912211 Classification of burns, symptoms of, and first aid treatment for each

912212 Reasons for maintaining sanitary conditions

912213 Proper body cleanliness and personal care of the feet, hair and scalp

912214 Procedures and required equipment to maintain good oral hygiene

912215 Procedures for abdominal/chest thrust to remove foreign body obstruction

913 SURVIVAL

913201 Perform prescribed minimum swimming qualifications

913202 Techniques for preparing and using clothing and buoyant objects for staying afloat

913203 Proper use and care of inherently buoyant and CO2 inflatable life-jackets

913204 Techniques of swimming through oil, flames, and debris under simulated conditions

913205 Preparation, and methods for abandoning ships, best ways of going over the side, and type of clothing to be taken in abandoning ships in hot or cold climate

913206 Use of distilling equipment for obtaining drinking water. methods of catching and stowing rainwater

913207 Fundamentals of escape, evasion and the basic concepts of land survival

913208 Use of emergency escape breathing device

914 NUCLEAR, BIOLOGICAL AND CHEMICAL (NBC) DEFENSE

914201 Use of protective mask in a chamber or environment of riot control agent (CS) or tear gas smoke

914202 Use of currently issued protective and self-aid equipments and methods of adapting regularly issued clothing and equipments for protection against contamination

914203 Markers used to indicate that an area is contaminated

914204 Methods by which biological operation agents enter the body

914205 Methods of dissemination of agents (A) aerosols, (B) sabotage
923 SECURITY REQUIREMENTS
923201 General scope and principles of security requirements and procedures pertinent to classified information and material (A) bases of security; (B) security of classifications, (C) compromise of classified information, (D) security areas, (E) marking of classified material

930 Discipline

MILITARY CONDUCT
931201 Authority of, and services rendered by military police
931202 Basic content and responsibilities stated in Articles I through VI of the code of conduct for members of the Armed Forces of the United States

932 UNIFORM CODE OF MILITARY JUSTICE
932201 Purpose of military discipline and punishment
932202 General content of the following articles (A) commanding officer's nonjudicial punishment (Art. 15); (B) compulsory self-incrimination prohibited (Art. 31), (C) complaints of wrongs (Art. 138); (D) courts-martial; classified types (Art. 16), (E) cruel and unusual punishment (Art 55), (F) punitive articles (77-134) and Navy regulations, chapter 12; (G) apprehension and restraint (Art. 7 through 14), (H) persons subject to the code (Art 2); (I) redress of injuries to property (Art. 139), (J) articles to be explained (Art 137), (K) who may serve on courts-martial (Art 25), (L) appointment of trial counsel and defense counsel (Art 27), (M) unlawfully influencing action of court (Art 37), (N) duties of trial and defense counsel (Art 38)

940 Professional Development
941 CAREER INFORMATION
941201 Purpose of entry series NEC codes
941202 Reasons for and consequences of five, types of discharges
941203 Basic understanding of the enlisted career structure and eligibility for advancement
941204 Purpose and effect of marks received on report of enlisted performance evaluation
941205 Meaning of accrued, earned, emergency, excess, and advance leave
941206 Basic understanding of military pay system
941207 Basic understanding of educational and training opportunities
941208 Contents of the enlisted service record
941209 Opportunity for acquiring a Naval commission
941210 Eligibility for and cost of government insurance benefits
941211 Reenlistment quality control program
941212 Incentives for making the Navy a career
941213 Meaning of sea duty, shore duty and neutral duty

950 Naval Tradition
951 SEA POWER
951201 Basic Naval history and the evolution of today's Navy
951202 Basic roles and missions of the Navy

952 CUSTOMS AND COURTESIES
952201 Perform the hard salute
952202 Perform the rifle salute
952203 Procedures for proper handling of the ensign and jack
952204 When and to whom the individual hand and rifle salutes are to be rendered

APPENDIX D
D-3

952205 Military courtesies required in the following situations (A) during colors; (B) boarding or leaving a Naval vessel, (C) crossing or being in the vicinity of the quarter deck, (D) when in Naval uniform or civilian dress the national ensign passes or national anthem is played, (E) when passing, meeting, addressing, introducing, replying to, walking or riding with any officer of the U.S.-foreign armed forces, (F) when addressing and introducing enlisted personnel of the U.S. armed forces; (G) when ship and boat passing honors are rendered and when in the vicinity of a gun salute

953 ORGANIZATION
953201 Purpose and function of the chain of command

960 Human Goals

961 EQUAL OPPORTUNITY AND HUMAN RIGHTS
961201 Basic Navy policy for equal opportunity and human rights

962 DRUG AND ALCOHOL ABUSE
962201 Basic Navy policy for drug and alcohol abuse

970 International Agreements
970201 General provisions of Geneva Convention with respect to treatment and rights of POWs and information that every POW is required to provide, when questioned
972201 General purpose of the status of forces agreement concerning personnel of the armed forces in foreign countries

Apprentice (E-3)

App preceding requirements and the following additional requirements:

910 Personnel Safety
914 NUCLEAR, BIOLOGICAL AND CHEMICAL (NBC) DEFENSE
914301 Effects of nuclear radiation (alpha and beta particles, gamma rays and neutrons)
914302 Meaning of the following terms as applied to radiological defense: (A) radac, (B) radiation dose. (C) radiation dose rate, (D) safe stay time, (E) material condition "Circle William"
914303 Differences between radiation and radiological contamination
914304 Purpose and use of the casualty dosimeter in terms of when used, by whom, and for what purpose
914305 Purpose, use of, and how to interpret a self-reading pocket dosimeter

920 Material Condition

922 SURFACE PRESERVATION
922301 Basic methods and procedures to prepare and paint a surface
922302 Fixtures and devices to which paint or liquid cleaners should not be applied

950 Naval Tradition
953 ORGANIZATION
953301 Purpose and content of the ship's command's organization and regulations manual
953302 Standard unit organization and general responsibility of each department
Petty Officer Third Class (E-4)

All preceding requirements and the following additional requirements:

900 MILITARY REQUIREMENTS
903 DRILL
903401 Conduct close-order drill
906 WATCHSTANDING
906401 General duties of petty officer of the watch, section leader, master-at-arms, police petty officer, and military police
920 MATERIAL CONDITION
921 DAMAGE CONTROL
921401 Identification of damage control lockers and use of contents (construction ratings exempt)
922 SURFACE PRESERVATION
922401 Appropriate types of cleaning solvents for interior and exterior use
930 Discipline
931 MILITARY CONDUCT
931401 Know and when to place personnel on report
940 Professional Development
944 LEADERSHIP
944401 Fundamentals of leadership (A) guided by reason and experience based on rules and regulations, (B) recognition of value and worth of the individual, (C) recognition of basic equality of man
944402 Meaning and application of the following leadership principles. (A) knowing the job to be done, (B) exhibiting and instilling pride in high standards of work, (C) seeking additional responsibility, (D) knowing own men and recognizing individual differences; (E) possessing own sense of responsibility, (F) delegating authority, (G) keeping men informed; (H) being farsighted, (I) commanding and leading, (J) promoting morale; (K) when to praise, censure, and warn
944 MANAGEMENT
944401 Principles of the maintenance and material management system in own area of responsibility

Petty Officer Second Class (E-5)

All preceding requirements and the following additional requirements:

900 Military Requirements
901 WATCH, QUARTER AND STATION BILL
901501 Procedures for preparation and maintenance of the watch, quarter and station bill
910 Personnel Safety
914 NUCLEAR, BIOLOGICAL AND CHEMICAL (NBC) DEFENSE
914501 Basic organization of teams to decontaminate radioactive areas and areas contaminated by chemical or biological agents
940 Professional Development
941 CAREER INFORMATION
941501 Purpose and effect of marks received on evaluation report as applicable to paygrades E-5 through E-9
942 TRAINING
942501 Procedures for indoctrination of personnel reporting for duty

Chief Petty Officer (E-7)

All preceding requirements and the following additional requirements:

910 Personnel Safety
911 SAFETY
911701 Procedures for preliminary investigation of personal injury/death including completion of accident report forms
920 Material Condition
921 DAMAGE CONTROL
921701 Function of personnel protective clothing system as stated in disaster control (ashore and afloat) and Navsea Technical Manual

940 Professional Development
941 CAREER INFORMATION
941701 Supervisory responsibilities for the career counseling program
942 TRAINING
942701 Methods of developing and administering a written test which includes multiple-choice, true-false, and completion type questions
942702 Use of graphic or visual training aids
942703 Procedures for instructing by each of the following methods: (A) lecture, (B) questions and guided instruction, (C) drill and practical work, (D) written study materials, (E) on-the-job training
944 MANAGEMENT
944701 Procedures for preparation and submission of budget requests for management of quarterly allotments within area of responsibility
944702 Administration of the procurement, care, preservation, stowage, inventory and disposal of stores, equipment, and repair parts within area of responsibility
1. General, function and use of Navy Enlisted Classification (NEC) System
2. Responsibility for signature authority on official documents
3. Preparation of reports
4. Standards to follow in indoctrinating personnel in completing enlisted performance evaluation forms
5. Critique and follow-up procedures used by petty officers to counsel personnel on their performance evaluations

**Naval Tradition**

**Organization**

- General organization and operation of senior chief petty officer messes

**Senior Chief Petty Officer (E-8)**

- All preceding requirements and the following additional requirements:

**Professional Development**

**Training**

- Methodology for planning, organizing, directing, and coordinating programs

**Management**

- Regulations and policies for preparing and conducting administrative, material, and operational readiness inspections
- Procedures for conducting formal and informal investigations
- Management techniques for the following (A) fiscal responsibility, (B) production efficiency, (C) personnel administration
- Preparation and presentation of briefings
- Procedures for establishing programs of individual and group counseling regarding drug abuse, excessive consumption of alcohol, and personal financial management
- Duties and responsibilities of a division officer
- Procedures for the following. (A) Rate/NEC changes in manpower authorization (OPNAV Form 1000/2) and enlisted distribution and verification report (NAVPER 1080-14). (B) school quotas. (C) NEC assignment to personnel
- Coordinating procedures for preparation and implementation of local directives, regulations, bills, orders, reports, and training plans

**Master Chief Petty Officer**

- All preceding requirements.
# Navy Occupational Title Index

The following columns cross-reference Navy enlisted occupations to exhibit ID numbers. Titles are listed alphabetically.

<table>
<thead>
<tr>
<th>Navy Occupational Title</th>
<th>Navy ID</th>
<th>Navy Occupational Title</th>
<th>Navy ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerographer's Mate</td>
<td>NER-AG-001</td>
<td>Constructionman</td>
<td>NER-CN-001</td>
</tr>
<tr>
<td>Air Controller</td>
<td>NER-AC-001</td>
<td>Constructionman, Master Chef</td>
<td>NER-CU-001</td>
</tr>
<tr>
<td>Air Traffic Controller</td>
<td>NER-AC-001</td>
<td>Construction Mechanic</td>
<td>NER-CM-001</td>
</tr>
<tr>
<td>Aircraft Maintenanceman, Master Chief</td>
<td>NER-AF-001</td>
<td>Cryptologic Technician</td>
<td>NER-CT-001</td>
</tr>
<tr>
<td>Aircrew Survival Equipmentman</td>
<td>NER-PR-001</td>
<td>Data Processing Technician</td>
<td>NER-DP-001</td>
</tr>
<tr>
<td>Airman</td>
<td>NER-AN-001</td>
<td>Data Systems Technician</td>
<td>NER-DS-001</td>
</tr>
<tr>
<td>Aviation Antisubmarine Warfare Operator</td>
<td>NER-AW-001</td>
<td>Dentalman</td>
<td>NER-DN-001</td>
</tr>
<tr>
<td>Aviation Antisubmarine Warfare Technician</td>
<td>NER-AX-001</td>
<td>Dental Technician</td>
<td>NER-DT-001</td>
</tr>
<tr>
<td>Aviation Boatswain's Mate</td>
<td>NER-AB-001</td>
<td>Disbursing Clerk</td>
<td>NER-DK-001</td>
</tr>
<tr>
<td>Aviation Boatswain's Mate, Aircraft Handling</td>
<td>NER-ABH-001</td>
<td>Electrician's Mate</td>
<td>NER-EM-001</td>
</tr>
<tr>
<td>Aviation Boatswain's Mate, Fuels</td>
<td>NER-ABF-001</td>
<td>Electrician's Mate, Master Chief</td>
<td>NER-EM-002</td>
</tr>
<tr>
<td>Aviation Boatswain's Mate, Launching and Recovery Equipment</td>
<td>NER-ABE-001</td>
<td>Electronics Technician</td>
<td>NER-ET-001</td>
</tr>
<tr>
<td>Aviation Electrician's Mate</td>
<td>NER-AE-001</td>
<td>Electronics Technician, Communications</td>
<td>NER-ENT-001</td>
</tr>
<tr>
<td>Aviation Electronics Technician</td>
<td>NER-AT-001</td>
<td>Electronics Technician, Radar</td>
<td>NER-ETR-001</td>
</tr>
<tr>
<td>Aviation Fire Control Technician</td>
<td>NER-AQ-001</td>
<td>Electronics Warfare Technician</td>
<td>NER-EW-001</td>
</tr>
<tr>
<td>Aviation Machinist's Mate</td>
<td>NER-AD-001</td>
<td>Engineering Aid</td>
<td>NER-EA-001</td>
</tr>
<tr>
<td>Aviation Machinist's Mate Jet Engine Mechanic</td>
<td>NER-ADR-001</td>
<td>Engineman</td>
<td>NER-EN-001</td>
</tr>
<tr>
<td>Aviation Machinist's Mate, Reciprocating Engine Mechanic</td>
<td>NER-AD-002</td>
<td>Equipmentman, Master Chief</td>
<td>NER-EQ-001</td>
</tr>
<tr>
<td>Aviation Machinist's Mate, Senior Chief</td>
<td>NER-AD-003</td>
<td>Equipment Operator</td>
<td>NER-EO-001</td>
</tr>
<tr>
<td>Aviation Maintenance Administrationman</td>
<td>NER-AZ-001</td>
<td>Fire Control Technician</td>
<td>NER-FT-001</td>
</tr>
<tr>
<td>Aviation Ordnanceman</td>
<td>NER-AO-001</td>
<td>Fire Control Technician, Ballistic Missile Fire Control</td>
<td>NER-FTB-001</td>
</tr>
<tr>
<td>Aviation Storekeeper</td>
<td>NER-AK-001</td>
<td>Fire Control Technician, Gun Fire Control</td>
<td>NER-FTG-001</td>
</tr>
<tr>
<td>Aviation Structural Mechanic, Hydraulics</td>
<td>NER-AMH-001</td>
<td>Fire Control Technician, Surface Missile Fire Control</td>
<td>NER-FTM-001</td>
</tr>
<tr>
<td>Aviation Structural Mechanic, Safety Equipment</td>
<td>NER-AME-001</td>
<td>Fireman</td>
<td>NER-FM-001</td>
</tr>
<tr>
<td>Aviation Structural Mechanic, Senior Chief</td>
<td>NER-AM-001</td>
<td>Gas Turbine System Technician</td>
<td>NER-GS-001</td>
</tr>
<tr>
<td>Aviation Structural Mechanic, Structures</td>
<td>NER-AMS-001</td>
<td>Gas Turbine System Technician, Electrical</td>
<td>NER-GSE-001</td>
</tr>
<tr>
<td>Aviation Support Equipment Technician, Electrical</td>
<td>NER-ASE-001</td>
<td>Gas Turbine System Technician, Mechanical</td>
<td>NER-GSM-001</td>
</tr>
<tr>
<td>Aviation Support Equipment Technician, Mechanical</td>
<td>NER-ASM-001</td>
<td>Gunner's Mate</td>
<td>NER-GM-001</td>
</tr>
<tr>
<td>Aviation Support Equipment Technician, Electrical</td>
<td>NER-ASE-002</td>
<td>Gunner's Mate, Guns</td>
<td>NER-GMG-001</td>
</tr>
<tr>
<td>Aviation Support Equipment Technician, Hydraulics and Structures</td>
<td>NER-ASH-001</td>
<td>Gunner's Mate, Missiles</td>
<td>NER-GMM-001</td>
</tr>
<tr>
<td>Aviation Support Equipment Technician, Mechanical</td>
<td>NER-ASM-002</td>
<td>Gunner's Mate, Technician</td>
<td>NER-GMT-001</td>
</tr>
<tr>
<td>Avionics Technician, Master Chief</td>
<td>NER-AV-001</td>
<td>Constructor</td>
<td>NER-CN-001</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Navy Occupational Title</th>
<th>Navy ID</th>
<th>Navy Occupational Title</th>
<th>Navy ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boatswain's Mate</td>
<td>NER-BM-001</td>
<td>Constructionman, Master Chief</td>
<td>NER-CU-001</td>
</tr>
<tr>
<td>Boiler Technician</td>
<td>NER-BT-001</td>
<td>Construction Mechanic</td>
<td>NER-CM-001</td>
</tr>
<tr>
<td>Builder</td>
<td>NER-BU-001</td>
<td>Cryptologic Technician</td>
<td>NER-CT-001</td>
</tr>
<tr>
<td>Construction Electrician</td>
<td>NER-CE-001</td>
<td>Data Processing Technician</td>
<td>NER-DP-001</td>
</tr>
<tr>
<td>Electrician's Mate</td>
<td>NER-EM-001</td>
<td>Data Systems Technician</td>
<td>NER-DS-001</td>
</tr>
<tr>
<td>Electrician's Mate, Master Chief</td>
<td>NER-EM-002</td>
<td>Dentalman</td>
<td>NER-DN-001</td>
</tr>
<tr>
<td>Dentist</td>
<td>NER-DO-001</td>
<td>Dental Technician</td>
<td>NER-DT-001</td>
</tr>
<tr>
<td>Dentist Administrator</td>
<td>NER-DT-002</td>
<td>Disbursing Clerk</td>
<td>NER-DK-001</td>
</tr>
<tr>
<td>Dentist Lab Technician</td>
<td>NER-DT-003</td>
<td>Electrician's Mate</td>
<td>NER-EM-001</td>
</tr>
<tr>
<td>Dentist Office Technician</td>
<td>NER-DT-004</td>
<td>Electrician's Mate, Master Chief</td>
<td>NER-EM-002</td>
</tr>
<tr>
<td>Dentist Pharmacy Technician</td>
<td>NER-DT-005</td>
<td>Electronics Technician</td>
<td>NER-ET-001</td>
</tr>
<tr>
<td>Dentist Radiology Technician</td>
<td>NER-DT-006</td>
<td>Electronics Technician, Communications</td>
<td>NER-ENT-001</td>
</tr>
<tr>
<td>Dentist Radiology Technician</td>
<td>NER-DT-007</td>
<td>Electronics Technician, Radar</td>
<td>NER-ETR-001</td>
</tr>
<tr>
<td>Dentist Radiology Technician</td>
<td>NER-DT-008</td>
<td>Electronics Warfare Technician</td>
<td>NER-EW-001</td>
</tr>
<tr>
<td>Dentist Radiology Technician</td>
<td>NER-DT-009</td>
<td>Engineering Aid</td>
<td>NER-EA-001</td>
</tr>
<tr>
<td>Dentist Radiology Technician</td>
<td>NER-DT-010</td>
<td>Engineman</td>
<td>NER-EN-001</td>
</tr>
<tr>
<td>Dentist Radiology Technician</td>
<td>NER-DT-011</td>
<td>Equipmentman, Master Chief</td>
<td>NER-EQ-001</td>
</tr>
<tr>
<td>Dentist Radiology Technician</td>
<td>NER-DT-012</td>
<td>Equipment Operator</td>
<td>NER-EO-001</td>
</tr>
<tr>
<td>Dentist Radiology Technician</td>
<td>NER-DT-013</td>
<td>Fire Control Technician</td>
<td>NER-FT-001</td>
</tr>
<tr>
<td>Dentist Radiology Technician</td>
<td>NER-DT-014</td>
<td>Fire Control Technician, Ballistic Missile Fire Control</td>
<td>NER-FTB-001</td>
</tr>
<tr>
<td>Dentist Radiology Technician</td>
<td>NER-DT-015</td>
<td>Fire Control Technician, Gun Fire Control</td>
<td>NER-FTG-001</td>
</tr>
<tr>
<td>Dentist Radiology Technician</td>
<td>NER-DT-016</td>
<td>Fire Control Technician, Surface Missile Fire Control</td>
<td>NER-FTM-001</td>
</tr>
<tr>
<td>Dentist Radiology Technician</td>
<td>NER-DT-017</td>
<td>Fireman</td>
<td>NER-FM-001</td>
</tr>
<tr>
<td>Dentist Radiology Technician</td>
<td>NER-DT-018</td>
<td>Gas Turbine System Technician</td>
<td>NER-GS-001</td>
</tr>
<tr>
<td>Dentist Radiology Technician</td>
<td>NER-DT-019</td>
<td>Gas Turbine System Technician, Electrical</td>
<td>NER-GSE-001</td>
</tr>
<tr>
<td>Dentist Radiology Technician</td>
<td>NER-DT-020</td>
<td>Gas Turbine System Technician, Mechanical</td>
<td>NER-GSM-001</td>
</tr>
<tr>
<td>Dentist Radiology Technician</td>
<td>NER-DT-021</td>
<td>Gunner's Mate</td>
<td>NER-GM-001</td>
</tr>
<tr>
<td>Dentist Radiology Technician</td>
<td>NER-DT-022</td>
<td>Gunner's Mate, Guns</td>
<td>NER-GMG-001</td>
</tr>
<tr>
<td>Dentist Radiology Technician</td>
<td>NER-DT-023</td>
<td>Gunner's Mate, Missiles</td>
<td>NER-GMM-001</td>
</tr>
<tr>
<td>Dentist Radiology Technician</td>
<td>NER-DT-024</td>
<td>Gunner's Mate, Technician</td>
<td>NER-GMT-001</td>
</tr>
</tbody>
</table>

---
<table>
<thead>
<tr>
<th>Hospital Corpsman</th>
<th>NER-HM-001</th>
<th>Patternmaker</th>
<th>NER-PM-001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hull Maintenance Technician</td>
<td>NER-HT-001</td>
<td>Personnelman</td>
<td>NER-PN-001</td>
</tr>
<tr>
<td>Illustrator Draftsman</td>
<td>NER-DM-001</td>
<td>Photographic's Mate</td>
<td>NER-PH-001</td>
</tr>
<tr>
<td>Instrumentman</td>
<td>NER-IM-001</td>
<td>PoilIce Clerk</td>
<td>NER-PC-001</td>
</tr>
<tr>
<td>Intelligence Specialist</td>
<td>NER-IS-001</td>
<td>Precision Instrumentman, Master Chief</td>
<td>NER-PI-001</td>
</tr>
<tr>
<td>Interior Communications Electrician</td>
<td>NER-IC-001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Journalist</td>
<td>NER-J0-001</td>
<td>Quartermaster</td>
<td>NER-QM-001</td>
</tr>
<tr>
<td>Legalman</td>
<td>NER-LN-001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lithographer</td>
<td>NER-LI-001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machinery Repairman</td>
<td>NER-MR-001</td>
<td>Radarman</td>
<td>NER-OS-001</td>
</tr>
<tr>
<td>Machinist's Mate</td>
<td>NER-MM-001</td>
<td>Radianman</td>
<td>NER-OM-001</td>
</tr>
<tr>
<td>Master-at-Arms</td>
<td>NER-MA-001</td>
<td>Religious Program Specialist</td>
<td>NER-RP-001</td>
</tr>
<tr>
<td>Meg Management Specialist</td>
<td>NER-MS-001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mineman</td>
<td>NER-MN-001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missile Technician</td>
<td>NER-MT-001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molder</td>
<td>NER-ML-001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molder, Senior Chief and Master Chief</td>
<td>NER-ML-002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Musician</td>
<td>NER-MU-001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Navy Counselor</td>
<td>NER-NC-001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ocean Systems Technician</td>
<td>NER-OT-001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operations Specialist</td>
<td>NER-OS-001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opticalman</td>
<td>NER-OM-001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seller</td>
<td>NER-OS-004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shop's Serviceman</td>
<td>NER-OS-005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Signalman</td>
<td>NER-OS-006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sonar Technician, Master Chief</td>
<td>NER-OS-007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sonar Technician, Submarine</td>
<td>NER-OS-008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sonar Technician, Surface</td>
<td>NER-OS-009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steekeeper</td>
<td>NER-OS-010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storekeeper</td>
<td>NER-OS-011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Torpedoman's Mate</td>
<td>NER-OS-012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trademans</td>
<td>NER-OS-013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilitiesman</td>
<td>NER-UT-001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yeoman</td>
<td>NER-YN-001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Keyword-Index

This index is designed to provide rapid access to the courses described in the course exhibit section. Titles of courses are arranged alphabetically under keywords which have been extracted verbatim from the titles. For example, the keyword *Data Processing* is followed by all titles containing the words *Data Processing*. To locate a specific course, identify a word or group of words in the title which seems to be unique or descriptive. For example, the title *Data Processing Specialty, COBOL* can be found under the keywords *Data Processing* or *COBOL*. Similarly, the title *Russian Technician* can be found under the keyword *Russian*.

The ID number for each course is displayed to the right of the title. Refer to that number in the course exhibit section for a full description of the course.

<table>
<thead>
<tr>
<th>Keyword/Title</th>
<th>ID Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-3 Bomber Data Computer CP-66A/ASB-1 Maintenance</td>
<td>NV-1715-0263</td>
</tr>
<tr>
<td>A-3 Related Avionics System (AT/AQ) Organizational Level Maintenance</td>
<td></td>
</tr>
<tr>
<td>NV-1715-0279</td>
<td></td>
</tr>
<tr>
<td>A-3 Related Avionics System (AT/AQ) Organizational Maintenance</td>
<td></td>
</tr>
<tr>
<td>NV-1715-0279</td>
<td></td>
</tr>
<tr>
<td>A-3 S-5 Auto Pilot Maintenance</td>
<td>NV-1704-0198</td>
</tr>
<tr>
<td>Missile Technician Mk 84 Polaris (A-3)</td>
<td></td>
</tr>
<tr>
<td>NV-1715-0607</td>
<td></td>
</tr>
<tr>
<td>A3B</td>
<td></td>
</tr>
<tr>
<td>A3B AN/ASB-1A System Maintenance (Less Computer CP-66A)</td>
<td>NV-1715-0281</td>
</tr>
<tr>
<td>A3B ASB-7 Radar Stabilization and Auxiliary Subsystems Maintenance (Less CP-209 and AN/APN-122)</td>
<td>NV-1715-0363</td>
</tr>
<tr>
<td>A3B, RA3B, EA3B AN/ALQ-35 DEC System Maintenance</td>
<td>NV-1715-0525</td>
</tr>
<tr>
<td>A-4</td>
<td></td>
</tr>
<tr>
<td>A-4 AN/AJB-3/JA Organizational Maintenance</td>
<td>NV-1715-0294</td>
</tr>
<tr>
<td>A-4 Armament System Organizational Maintenance</td>
<td></td>
</tr>
<tr>
<td>NV-1715-0631</td>
<td></td>
</tr>
<tr>
<td>A-4 Automatic Flight Control System Intermediate Maintenance</td>
<td>NV-1704-0015</td>
</tr>
<tr>
<td>A-4 Automatic Flight Control System Organizational Maintenance</td>
<td></td>
</tr>
<tr>
<td>NV-1704-0035</td>
<td></td>
</tr>
<tr>
<td>A-4 Conventional Weapons Training</td>
<td>NV-2202-0073</td>
</tr>
<tr>
<td>A-4 Integrated Electronics Organizational Maintenance</td>
<td>NV-1704-0185</td>
</tr>
<tr>
<td>A-4(J52P-6A/8A) Power Plant and Related Systems Organizational Maintenance</td>
<td>NV-1704-0170</td>
</tr>
<tr>
<td>A-4 Tactical Air Navigation (TACAN)</td>
<td></td>
</tr>
<tr>
<td>AN/ARN-32(V)</td>
<td>NV-1715-0288</td>
</tr>
<tr>
<td>A-4 Walleye Weapon Delivery System</td>
<td></td>
</tr>
<tr>
<td>NV-1715-0733</td>
<td></td>
</tr>
<tr>
<td>A-4C/E</td>
<td></td>
</tr>
<tr>
<td>A-4C/E Bombing System AN/AJB-3 and Remote Standby Attitude Indicator</td>
<td>NV-1715-0615</td>
</tr>
<tr>
<td>A-4C/E/F</td>
<td></td>
</tr>
<tr>
<td>A-4C/E/F AN/APG-53A Radar Intermediate Maintenance</td>
<td>NV-1715-0289</td>
</tr>
<tr>
<td>A-4E</td>
<td></td>
</tr>
<tr>
<td>A-4E Bombing System AN/AJB-3JA and Remote Standby Indicator System (Organizational)</td>
<td></td>
</tr>
<tr>
<td>NV-1704-0098</td>
<td></td>
</tr>
<tr>
<td>A-4E Communication/Navigation Identification (CNI)/Weapons Systems Organizational Maintenance</td>
<td></td>
</tr>
<tr>
<td>NV-1715-0452</td>
<td></td>
</tr>
<tr>
<td>A-4E/F/TA-4F</td>
<td></td>
</tr>
<tr>
<td>A-4E/F/TA-4F Aircraft Mechanic System Organizational Maintenance</td>
<td>NV-1704-0023</td>
</tr>
<tr>
<td>A-4F/L/TA-4F</td>
<td></td>
</tr>
<tr>
<td>A-4F/L/TA-4F Communication Navigation Identification (CNI)/Weapons Systems Organizational Maintenance</td>
<td></td>
</tr>
<tr>
<td>NV-1715-0383</td>
<td></td>
</tr>
<tr>
<td>A-4M</td>
<td></td>
</tr>
<tr>
<td>A-4M Aircraft Mechanics</td>
<td>NV-1704-0065</td>
</tr>
<tr>
<td>A-4M Electrical Systems Organizational Maintenance</td>
<td></td>
</tr>
<tr>
<td>NV-1704-0102</td>
<td></td>
</tr>
<tr>
<td>A-5A</td>
<td></td>
</tr>
<tr>
<td>A-5A RA-5C AN/ASB-12 Line and Shop Maintenance</td>
<td>NV-1715-0521</td>
</tr>
<tr>
<td>A-6</td>
<td></td>
</tr>
<tr>
<td>A-6 AN/APQ-112 Track Radar and Associated Test Equipment Intermediate Maintenance</td>
<td></td>
</tr>
<tr>
<td>NV-1715-0302</td>
<td></td>
</tr>
<tr>
<td>A-6 AN/APQ-92 Radar Antenna System</td>
<td></td>
</tr>
<tr>
<td>Receiver and Associated Test Set Intermediate Maintenance</td>
<td>NV-1715-0514</td>
</tr>
<tr>
<td>A-6 AN/APQ-92 Search Radar and Associated Test Equipment Intermediate Maintenance</td>
<td></td>
</tr>
<tr>
<td>NV-1715-0596</td>
<td></td>
</tr>
<tr>
<td>A-6 AN/ASQ-31 Inertial Navigation System and Test Console Intermediate Maintenance</td>
<td></td>
</tr>
<tr>
<td>NV-1715-0475</td>
<td></td>
</tr>
<tr>
<td>A-6 AN/ASQ-61A Ballistics Computer Intermediate Maintenance</td>
<td>NV-1715-0068</td>
</tr>
<tr>
<td>A-6 AN/ASQ-61A Ballistics Computer Theory</td>
<td>NV-1715-0067</td>
</tr>
<tr>
<td>A-6 AN/ASQ-61A Ballistics Computer Intermediate Maintenance</td>
<td>NV-1715-0288</td>
</tr>
<tr>
<td>A-6 AN/ASQ-61A Ballistics Computer Theory</td>
<td></td>
</tr>
<tr>
<td>NV-1715-0370</td>
<td></td>
</tr>
<tr>
<td>A-6 Associated Radar Test Equipment Intermediate Level Maintenance</td>
<td>NV-1715-0406</td>
</tr>
<tr>
<td>A-6 Avionics Systems Organizational Level Maintenance</td>
<td>NV-1715-0474</td>
</tr>
<tr>
<td>A-6 Ballistics Computer Test Console Intermediate Maintenance</td>
<td>NV-1715-0342</td>
</tr>
<tr>
<td>A-6 BNCN and BNCB Test Set Intermediate Maintenance</td>
<td>NV-1715-0051</td>
</tr>
<tr>
<td>A-6 Bombardier Navigator Control Box and Associated Test Set, Intermediate Maintenance</td>
<td></td>
</tr>
<tr>
<td>NV-1715-0051</td>
<td></td>
</tr>
<tr>
<td>A-6 Data Processing Unit and Associated Test Set Interimmediate Maintenance</td>
<td></td>
</tr>
<tr>
<td>NV-1715-0630</td>
<td></td>
</tr>
</tbody>
</table>
Aviation Antisubmarine Warfare (AASW) for Second Tour Pilots, P3A/B/D

Aviation Antisubmarine Warfare (AASW) for Second Tour Pilots, PJC

Aviation Antisubmarine Warfare (AASW) Nonacoustic Operator PJC

Aviation Antisubmarine Warfare (AASW) Technician, Class A

Aviation Antisubmarine Warfare (AASW) Sensor Station Three Operator, Class A

Aviation Antisubmarine Warfare (AASW) Acoustic Operator (Passive)

Aviation Antisubmarine Warfare (AASW) Nonacoustic Operator P3C

Aviation Antisubmarine Warfare (AASW) Sensor Station One and Two (Acoustic System Technician) Organizational Maintenance

Aviation Antisubmarine Warfare (AASW) Sensor Station One and Two (Acooustic Systems Technician) Organizational Maintenance

Aviation Antisubmarine Warfare (AASW) Technician, Class B

Aviation Antisubmarine Warfare (AASW) Sensor Station Three Operator, Class B

Aviation Antisubmarine Warfare (AASW) Technician, Class C

Aviation Antisubmarine Warfare (AASW) Sensor Station One and Two (Acooustic Systems Technician) Organizational Maintenance

Aviation Antisubmarine Warfare (AASW) Technician, Class D

Aviation Antisubmarine Warfare (AASW) Sensor Station Three Operator, Class D

Aviation Antisubmarine Warfare (AASW) Technician, Class E

Aviation Antisubmarine Warfare (AASW) Sensor Station One and Two (Acooustic Systems Technician) Organizational Maintenance

Aviation Antisubmarine Warfare (AASW) Technician, Class F

Aviation Antisubmarine Warfare (AASW) Sensor Station Three Operator, Class F

Aviation Antisubmarine Warfare (AASW) Technician, Class G

Aviation Antisubmarine Warfare (AASW) Sensor Station One and Two (Acooustic Systems Technician) Organizational Maintenance

Aviation Antisubmarine Warfare (AASW) Technician, Class H

Aviation Antisubmarine Warfare (AASW) Sensor Station Three Operator, Class H
K-4 KEYWORD INDEX

Aerographet’s Mate, Class II
NV-1304-0004
Aerospace
NV-1304-0005
Aerospace Medical Technician, Class C
NV-0709-0003
Aerospace Physiology Technician
NV-0709-0004
AFTI
Advanced First Ternt Avionics, Class B (AFTA)
NV-1715-0556
AH-IJ
AH-IJ Electrical Organizational Maintenance
NV-1704-0105
AH-IJ Power Plant and Related Systems Organizational Maintenance
NV-1704-0162
AH-IJ Powertrain and Rotors Organizational Maintenance
NV-1704-0153
Aids
Advanced Minor Aids to Navigation, Class C
CG-1715-0046
Aids to Navigation Construction
CG-1722-0004
Aids to Navigation Mechanic
CG-1715-0015
Aids to Navigation Officer Advanced
CG-2205-0008
Aids to Navigation Officer Basic
CG-22050009
Aids to Navigation School (Short Course for Officers)
CG-2205-0003
Automated Aids to Navigation Electronics Maintenance
CG-1715-0041
Basic Minor Aids to Navigation
CG-1715-0042
Minor Aids to Navigation
CG-2205-0002
Officers Advanced Aids to Navigation
CG-2205-0008
Officers Basic Aids to Navigation
CG-2205-0009
Officers Basic Aids to Navigation, Class C
CG-2205-0009
AIMS
AIMS Mk XII IFF System Maintenance (Electronics Technician, Class C)
NV-1715-0012
AIMS Mk XII System Differences Equipment Maintenance, Class C-1
NV-1715-0013
Air
110 Ton R11 Centrifugal Air Conditioning Unit (York)
NV-1701-0004
8th Class Air Observation School
MC-1606-0003
A-4 Tactical Air Navigation (TACAN)
AN/ARN-52(V)
NV-1715-0288
Air Conditioning and Refrigeration, Class C
NV-1701-0005
Air Conditioning and Refrigeration, Class C-1
NV-1701-0005
Air Conditioning Refrigerant 11
NV-1730-0006
Air Control/Antiaircraft Warfare Electronics Operator
MC-1704-0002
Air Control/Antiwar Electronics Operator
MC-1704-0002
Air Control, Class O
NV-1704-0011
Air Control Electronic Operator
MC-2204-0001
Air Control Electronics Operator, Automated System
MC-1704-0001
Air Controlman—Carrier Air Traffic Control Center Utilization—Operator
NV-1704-0220
Air Controlman, Class A
NV-1704-0004
Air Controlman, Class B
NV-1704-0007
Air Controlman (Radar), Class A
NV-1704-0010
Air Controlman T (Tower), Class A
NV-1704-0008
Air Controlman W (Early Warning), Class A
NV-1704-0009
Air Intercept Control, Class O
NV-1704-0001
Air Intercept Controller
NV-1704-0002
Air Intercept Controller Supervisor
NV-1704-0005
Air Intercept Control (Requalification), Class O/C
NV-1704-0115
Air Intercept Control (Supervisor), Class C
NV-1704-0117
Air Launched Weapons Guided Missile Intermediate Maintenance
NV-1715-0589
Air Navigation
MC-1606-0002
Air Observer
MC-1606-0001
Air-Ocean Environment Course, Class C
NV-1704-0002
Air Support Control Officer
MC-1715-0078
Air Support Operations Operator
MC-1715-0031
Air Traffic Management
NV-0419-0013
Amphibious Tactical Air Control Party
NV-2202-0006
AN/APX-76A Air/Air IFF Interrogator Set Intermediate Maintenance
NV-1715-0434
Antisubmarine Air Control, Class C/O
NV-2202-0052
Antisubmarine Air Control, Class O
NV-2202-0052
Anti-Submarine Air Control (Officer and Enlisted)
NV-2202-0052
Automatic Flight Control System (AN/ASW-15) and Air Data Computer (S507T27-1) Organizational Maintenance
NV-1715-0741
Automatic Flight Control System (AN/ASW-15) and Air Data Computer (A/A24G-13) Intermediate Maintenance
NV-1715-0661
Centrifugal Air Conditioning Plant Operation and Maintenance
NV-1701-0006
CVA/CVS Air Launched Weapons
NV-0802-0009
CVA/CVS Air Launched Weapons General Ordinance
NV-2202-0024
CVA/CVS Air Launched Weapons Supervisor
NV-0802-0009
Douglas Model D-704 and Sargent-Fletcher Model 31-300 Air Refueling Stores Organizational Maintenance
NV-1704-0046
E-2A Automatic Flight Control System (AN/ASW-15) and Air Data Computer (A/A24G-13)
NV-1715-0860
E-2A Automatic Flight Control System and Air Data Computer Semi-Automatic Check-out Equipment Operation and Maintenance
NV-1715-0478
F-4/B/J Air Data Computer System Intermediate Maintenance
NV-1715-0552
Fleet Air Intelligence Officer
NV-2202-0002
Fleet Officer and Fleet Enlisted Air Intelligence
NV-2202-0022
F/RF-4B Air Data Computer Set Maintenance
NV-1715-0329
Fleet Air Intelligence Officer
NV-1606-0006
Lithium Bromide Air Conditioning
NV-1701-0002
Naval Air Weapons Systems Orientation, Class O
NV-1704-0743
Naval Gunfire Air Spotter
NV-2202-0053
NV-2202-0059
P-3 Air Conditioning, Pressurization and Utilities Organizational Maintenance
NV-1701-0001
R-11 Centrifugal 110 Ton Air Conditioning Combined Maintenance
NV-3701-0004
RA-5C Air Data and Flight Reference Systems
NV-1715-0454
RA-5C Air Data and Flight Reference Systems Organizational Maintenance
NV-1715-0454
RA-5C Semi-Automatic Test Equipment Air Data, Flight Reference, and Flight Control Intermediate Maintenance
NV-1715-0542
Refrigerant 11 Air Conditioning
NV-1730-0006
Refrigeration and Air Conditioning (Operation and Maintenance)
CG-1701-0001
Reserve Air Intelligence (RAI)
NV-1606-0055
Submarine Refrigeration and Air Conditioning R-12
NV-1730-0003
Tactical Air Command Central (TACC) Technician
NV-1715-0046
Tactical Air Control Party
NV-2202-0006
Tactical Air Operations Central (TAOC) Repairman (TAOCR) MC-1715-0053
Tactical Air Operations Central (TAOC) AN/TVQ-2) Repair MC-1715-0053
Tactical Air Operations Central (TAOC) Weapons Controller/Operator MC-2204-0013
Tactical Air Operations Central Technician MC-1715-0082
Airborne Advanced Airborne ELINT Evaluator NV-1715-0215
Advanced Naval Flight Officer Training, Airborne Electronic Warfare Phase NV-1715-0569
Airborne Communicator NV-1409-0004
Airborne Early Warning, Class O NV-2202-0036
Airborne Early Warning/Electronics Countermeasures Evaluator, Class O NV-1715-0599
Airborne Electronic Warfare, Class O NV-1715-0002.
Airborne Radar Intercept Operator NV-17150635
Airborne Radio Communications Operator (ARCO) NV-1715-0481
Airborne Radio Operator/Loadmaster MC-2204-0019
Airborne Radio Operators MC-1715-0032
Airborne Systems NV-1606-0061
Airborne Tactical Data System Operations, Class O NV-1402-0036
Basic Airborne Radio Communications Operator NV-1715-0481
E-2B Aircraft Launch and Recovery Equipment (C-7/11 Catapult); Class C NV-1710-0071
E-2B Aircraft Launch and Recovery Equipment, Class O NV-1704-0184
E-2B Aircraft Launch and Recovery Equipment Maintenance Officer (C-13 Catapult), Class O NV-1704-0200
E-2B Aircraft Launch and Recovery Equipment Maintenance Officer (C-7/11 Catapult), Class O NV-1704-0183
Aviation Boatswain's Mate E (Aircraft Launch and Recovery Equipment), Class A NV-1704-0042
Aviation Boatswain's Mate H (Aircraft Handling), Class A NV-1728-0014,
C-2A Aircraft Familiarization (Pilots) NV-1704-0121
E-1B Aircraft Pilot Training NV-1606-0053
E-2A Aircraft Familiarization (Pilots) NV-1704-0054
E-2B Aircraft Pilot Training NV-1606-0054
E-2B Aircraft Familiarization (Pilots) NV-1704-0054
E-2B Aircraft Pilot Training NV-1606-0054
Electronics Technician, Ship's Navigation and Aircraft Inertial Alignment System (SNAIAS), Class C Operator Maintenance NV-1715-0014
F/RF-4B/F Aircraft Mechanics NV-1704-0192
Marine Aircraft Launch and Recovery Equipment, Class A NV-1710-0061
Naval Aircraft Maintenance Management NV-1717-0011
P-3 Aircraft Familiarization, No 2 NV-1704-0039
P-3 Aircraft Familiarization (Pilots) NV-4704-0039
RA-5C Aircraft Familiarization NV-1606-0022
RA-5C Aircraft Familiarization (Pilot/ RAN) NV-1606-0022
Aircraft Electrical F-4B Aircraft Electrical System NV-1704-0017
Organizational Maintenance NV-1704-0092
F-4J Aircraft Electrical System NV-1704-0094
Organizational Maintenance NV-1704-0014
B/RF-4B Aircraft Electrical Systems NV-1704-0104
Aircraft Maintenance Aircraft Maintenance Nondestructive Inspection School, Class C NV-1704-0156
Aircraft Maintenance Officers, Class O NV-1704-0156
Aircraft Maintenance Radiography School, Class C NV-1704-0156
HC-131A Aircraft Maintenance Class C NV-1704-00156
BH-16E Aircraft Maintenance Class C NV-1704-0006
Aircraft Maintenance Class C NV-1704-0003

KEYWORD INDEX K-5

Aircraft Mechanic
A-4E/F/TA-4F Aircraft Mechanic Organizational Maintenance NV-1704-0023
C-130 Aircraft Mechanic Organizational Maintenance NV-1704-0237
Aircrew
Advanced Aircrew Survival Equipmentman NV-1704-0208
Aircrew Survival Equipmentman, Class A NV-1704-0234
Aircrew Survival Equipmentman, Class A1 NV-1704-0234
Aircrew Survival Equipmentman, Class C7 NV-1704-0208
Aircrew Survival Equipmentman School, Class B NV-1704-0208
Basic Aircrew Survival Equipmentman NV-1704-0234
Aircrewman
E-1B Naval Flight Officer and Aircrewman NV-1704-0233
VS CRAG Enlisted Aircrewman ASW Indocribrnation and Equipments NV-2202-0039
Air Defense
Air Defense Control Officer, Automated System MC-2204-0030
Air Defense Control Officer, Automated System (ADCO) MC-1704-0006
Air Defense Officer MC-2204-0030
Airfield
Marine Corps Short Airfield For Tactical Support, Class C NV-1710-0014
Airframe
E-1B Airframe and Hydraulic Systems Organizational Maintenance NV-1704-0195
F-14A Airframe and Hydraulic Systems Specialist (Crew Leader) Organizational NV-1704-0215
Airframe and Hydraulic Systems Technician (Crew Member) Organizational NV-1704-0215
F-14A Airframe and Hydraulic Systems NV-1704-0215
Organizational Maintenance NV-1704-0216
F-4B/F Airframe and Hydraulic Systems NV-1704-0056
Organizational Maintenance NV-1704-0056
F-4B/F Airframe and Hydraulic Systems NV-1704-0056
Organizational Maintenance NV-1704-0056
HH-52A, Airframe and Powertrain, Class C NV-1704-0056
QH-50 Aircraft and Related Systems Intermediate Maintenance NV-1704-0051
QH-50C Airframe and Related Systems Intermediate Maintenance NV-1704-0052
QH-50D Airframe, Powerplant and Related Systems Organizational Maintenance
KEYWORD INDEX

Airframes
F-8 Airframes/Hydraulic Systems
Organizational Maintenance
NV-1704-0120
SH-3 Airframes and Hydraulic Systems
NV-1704-0100
UH-1E Airframe and Rotor Systems
NV-1704-0043
UH4D Airframe, Hydraulics and Flight Controls
NV-1704-0064

Airframe Systems
-Intermediate Maintenance
Airframe Components
NV-1704-0093
Organizational Maintenance
NV-1704-0010

Air control
Carrier Air Traffic Control Center Equipment Maintenance AN/SPN-44
NV-1715-0234
Carrier Air Traffic Control Center Equipment Maintenance AN/SPN-6 and AN/SPN-12 (XN-4), Class C
NV-1715-0715
Carrier Air Traffic Control Center Equipment Maintenance (AN/SPN-6), Class C
NV-1715-0293
Car Air Traffic Control Center Equipment Maintenance, Radar Set AN/SPN-43, Class C
NV-1715-0236
Ground Controlled Approach/Radar Air Traffic Control Center Electronics Maintenance Officers, Class O
NV-1715-0670
Marine Air Traffic Control Communications Repairman, Class C
NV-1715-0799
Marine Air Traffic Control Maintenance Supervisor Training, Class C
NV-1715-0742
Marine Air Traffic Control Navigational Aids Maintenance
NV-1715-0037
Marine Air Traffic Control Navigational Aids Repairman, Class C
NV-1715-0037
Marine Air Traffic Control Unit Auxiliary Equipment Maintenance, Class C
NV-1715-0669
Marine Air Traffic Control Unit Equipment Maintenance, Class C
NV-1715-0039
Marine Air Traffic Control Unit Maintenance Management, Class C
NV-1715-0166
Marine Air Traffic Control Unit Maintenance Management, Class O
NV-1715-0039
Marine Air Traffic Control Unit Radar Maintenance, Class C
NV-1715-0039
Marine Air Traffic Control Unit Radar Repairman, Class C
NV-1715-0039

Alarm
Cluster Suppressor and Automatic Alarm for the AN/SPS-10
NV-1715-0433

Albanian
Albanian
DD-0602-0001
DD-0602-0002
DD-0602-0003

ALCO 251-C
Engineerman, Class C, American Locomotive (ALCO 251-C) Diesel Engine
NV-1712-0010

Alcohol
Drug and Alcohol Program Advisor
NV-0799-0005
Navy Alcohol Safety Action Program (NASAP)
NV-0799-0002
Alcoholism
Alcoholism Treatment Specialist (ATS)
NV-0801-0008

Alfred
Cable Tester Alfred Model 9500
Intermediate Maintenance
NV-1715-0397

Alignment
Alignment Group Mk 1 Mods 0 and 1, Class F-I
NV-1715-0891
Electronics Technician, Ship's Navigation and Aircraft Inertial Alignment System (SNAIAS), Class C Operator Maintenance
NV-1715-0014

Allison 501
Ship's Service Gas Turbine Generator Module (Allison 501) Maintenance, Class C1
NV-1703-0009

Alternating
Alternating Current Power Systems
NV-1715-0490

Altimeter
AN/APN-920 Electronic Altimeter
Intermediate Maintenance
NV-1715-0144
AN/APN-171 Radar Altimeter System
Class C
CG-1715-0026
AN/APN-171 (V) Radar Altimeter (High Level) Intermediate Maintenance
NV-1715-0359
AN/APN-171(V) Radar Altimeter (Low Level) Intermediate Maintenance
NV-1715-0493
RA-5C AN/APN-120 Electronic Altimeter Intermediate Maintenance
NV-1715-0479
RF-4B AN/APN-159 Radar Altimeter Maintenance
NV-1715-0223

AM-2310/ASQ
NV-1715-0375
NV-1715-0746

Ammunition
Ammunition Handlers
MC-0802-0003
Ammunition Officer
MC-1717-0003
Ammunition Technician
MC-0802-0004
MC-0802-0006
Ammunition Technician (Advanced)
MC-0802-0005
Ammunition Technician (Basic)
MC-0802-0006

Amphibian
Amphibian Tractor Crewman Training
MC-0802-0005

Armored Amphibian Crewman Training
MC-1703-0011
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AN/ARC-51</td>
<td>Avionics Equipment, Class C, AN/ARC-51</td>
</tr>
<tr>
<td>AN/ARC-52</td>
<td>AN/ARC-52 Radio Set Intermediate Maintenance</td>
</tr>
<tr>
<td>AN/ARC-54</td>
<td>AN/ARC-54 VHF Communication Set Intermediate Maintenance</td>
</tr>
<tr>
<td>AN/ARC-80</td>
<td>E-2A AN/ARC-80 Radio Set Intermediate Maintenance</td>
</tr>
<tr>
<td>AN/ARC-94</td>
<td>AN/ARC-94 Class C and 490 T High Frequency (HF) Communications System and Antenna Coupler</td>
</tr>
<tr>
<td>AN/ARN-21B/D</td>
<td>AN/ARN-21B/D TACAN Intermediate Maintenance</td>
</tr>
<tr>
<td>AN/ARN-52</td>
<td>F-8 AN/ARN-52 TACAN Intermediate Maintenance</td>
</tr>
<tr>
<td>AN/ARN-52(V)</td>
<td>A-4 Tactical Air Navigation (TACAN) AN/ARN-52(V)</td>
</tr>
<tr>
<td>AN/ARN-52(V)</td>
<td>AN/ARN-52(V) TACAN Receiver Intermediate Maintenance</td>
</tr>
<tr>
<td>AN/ARN-52(V)</td>
<td>AN/ARN-52(V) TACAN Intermediate Maintenance</td>
</tr>
<tr>
<td>AN/ARN-81</td>
<td>AN/ARN-81 Loran Intermediate Maintenance</td>
</tr>
<tr>
<td>AN/ARN-86</td>
<td>F-4J AN/ARN-86 TACAN Intermediate Maintenance</td>
</tr>
<tr>
<td>AN/ARN-97</td>
<td>AN/ARN-97 Avionics Equipment, Class C, AN/ARN-97</td>
</tr>
<tr>
<td>AN/ARN-99</td>
<td>AN/ARN-99 Avionics Equipment, Class C, AN/ARN-99</td>
</tr>
<tr>
<td>AN/ASA-3A</td>
<td>AN/ASA-3A Navigational Computer Group Intermediate Maintenance</td>
</tr>
<tr>
<td>AN/ASA-16</td>
<td>AN/ASA-16 Data Display Group Maintenance</td>
</tr>
<tr>
<td>AN/ASA-47</td>
<td>AN/ASA-47 Doppler/Airmass Navigational Computer System Intermediate Maintenance</td>
</tr>
<tr>
<td>AN/ASP-1A</td>
<td>AN/ASP-1A System Maintenance (Less Computer-CP-66A)</td>
</tr>
<tr>
<td>AN/ASP-7</td>
<td>AN/ASP-7 Radar Sub-System Intermediate Maintenance</td>
</tr>
<tr>
<td>AN/ASH-20</td>
<td>AN/ASH-20 (V) Flight Recorder-Locator System Intermediate Maintenance</td>
</tr>
<tr>
<td>AN/ASM-118</td>
<td>A-6 Card Module Analyzer Test Console, AN/ASM-118 Intermediate Maintenance</td>
</tr>
<tr>
<td>AN/ASM-316</td>
<td>A-6 Memory Test Console, AN/ASM-316 (XN-1) and Card and Module Tester Intermediate Maintenance</td>
</tr>
<tr>
<td>AN/ASM-33A</td>
<td>E-2A AN/ASM-33A In-Flight Performance Monitor Maintenance</td>
</tr>
<tr>
<td>AN/ASM-37S</td>
<td>A-7E AN/ASM-37S Inertial Measurement System Test Set Intermediate Maintenance</td>
</tr>
<tr>
<td>AN/ASM-398</td>
<td>AN/ASM-398 Projected Map Display Set (FMDS) Intermediate Maintenance</td>
</tr>
<tr>
<td>AN/ASN-28</td>
<td>E-1B AN/ASN-28 Central Gyro Reference System Maintenance</td>
</tr>
<tr>
<td>AN/ASN-30</td>
<td>S-2D/E AN/ASN-30 Navigational Computer Display Unit and AN/ASN-30 Coordinate Data Set System Maintenance</td>
</tr>
<tr>
<td>AN/ASN-31</td>
<td>AN/ASN-31 Inertial Navigation Organizational Level Maintenance</td>
</tr>
<tr>
<td>AN/ASN-36</td>
<td>E-2A Inertial Navigation System AN/ASN-36 Maintenance</td>
</tr>
<tr>
<td>AN/ASN-42</td>
<td>P-3 AN/ASN-42 Navigational Computer Set Intermediate Maintenance</td>
</tr>
</tbody>
</table>
AN/ASN-46/56
RF-4B AN/ASN-46/56 Navigational Computer and Inertial Navigation System Intermediate Maintenance
NV-1715-0228

AN/ASN-46/74
RF-4B AN/ASN-46/74 Navigational Computer and Inertial Navigation System Intermediate Maintenance
NV-1715-0465

AN/ASN-50
AN/ASN-50 Attitude Heading Reference System Intermediate Maintenance
NV-1715-0534

AN/ASN-55
RF-4B AN/ASN-55 Attitude Heading Reference System Intermediate Maintenance
NV-1715-0488

AN/ASN-66B
EKA-3B AN/ASN-66B Navigation Computer Set Intermediate Maintenance
NV-1715-0505

AN/ASN-70
F-16 AN/AJB-7 Loft Bomb Computer System and AN/ASN-70 Vertical Flight Reference System Intermediate Maintenance
NV-1715-0549

AN/ASN-90
A-7 AN/ASN-90 Inertial Measurement Set Intermediate Maintenance
NV-1715-0388

AN/ASN-91
A-7E AN/ASN-91 Tactical Computer Intermediate Maintenance
NV-1715-0070

AN/ASN-99
AN/ASN-99 Projected Map Display Set Intermediate Maintenance
NV-1715-0162

AN/ASQ-108
RF-4B AN/ASQ-88 and AN/ASQ-108 Communication Navigation Identification (CNI) Line Troubleshooting Maintenance
NV-1715-0357

AN/ASQ-10A
AN/ASQ-10A Magnetic Anomaly Detecting Systems Intermediate Maintenance
NV-1715-0178

AN/ASQ-17B
AN/ASQ-17B Integrated Electronics Central Intermediate Maintenance
NV-1715-0515

AN/ASQ-19
RF-4B AN/ASQ-19 TACAN System (RT-547 and RT-312) Intermediate Maintenance
NV-1715-0964

AN/ASQ-52
E-2A AN/ASQ-52 Data Communications System Special Support Equipment Intermediate Maintenance
NV-1715-0527

AN/ASQ-56A
AN/ASQ-56A Integrated Electronics Central and Related Systems Intermediate Maintenance
NV-1715-0045

AN/ASQ-57
NV-1715-0370

AN/ASQ-58
NV-1715-0370

AN/ASQ-61
A-6 AN/ASQ-61 Ballistic Computer Intermediate Maintenance
NV-1715-0546

AN/ASQ-61A
A-6 AN/ASQ-61A Ballistic Computer Theory
NV-1715-0068

AN/ASQ-80
S-2D/E AN/ASN-30 Navigational Computer Display Unit and AN/ASQ-80 Coordinate Data Set System Intermediate Maintenance
NV-1715-0331

AN/ASQ-88
RF-4B AN/ASQ-88 and AN/ASQ-108 Communication Navigation Identification (CNI) Line Troubleshooting Maintenance
NV-1715-0357

AN/AVM-11
A-6A AN/AVA-1 Vertical Display Indicator Group and Associated Test Equipment Intermediate Level Maintenance
NV-1715-0159

AN/AVM-11 (V)
AN/AVM-11 (V) Head Up Display Test Set Intermediate Maintenance (A-7E)
NV-1704-0229

AN/AWG-10
AN/AWG-10 Receiver, Intermediate Maintenance
NV-1715-0350

AN/AWG-10 and Electronic Counter Countermeasure Circuitry Intermediate Maintenance
NV-1715-0371

AN/AWG-10 and Electronic Counter Countermeasure Circuitry Intermediate Maintenance
NV-1715-0371

AN/AWG-10 Receiver, Intermediate Maintenance
NV-1715-0350

AN/AWG-10 Missile Control Display and Built-In Test (BIT) Intermediate Maintenance
NV-1715-0706

AN/AWG-10 Missile Control Display and Built-In Test (BIT) Intermediate Maintenance
NV-1715-0706

AN/AWM-55(V)
AN/AWM-55(V) Armament Station Control Unit Test Set Intermediate Maintenance
NV-1715-0174

AN/AWR-13
P-3C AN/AWR-13 Low Light Level Television Camera Intermediate Maintenance
NV-1715-0358

KEYWORD INDEX

Annotation System Maintenance
NV-1715-0240

E-2A Digital Data Communications System (AN/ASN-14A) Intermediate Maintenance
NV-1715-0347

NV-1715-0461

NV-1715-0460

A-7 AN/ASN-26/30 Automatic Flight Control System Organizational Maintenance
NV-1715-0807

A-7 AN/ASN-26/30 Automatic Flight Control System Intermediate Maintenance
NV-1715-0017

A-6 AN/ANA-7 Vertical Display Indicator Group and Associated Test Equipment Intermediate Level Maintenance
NV-1715-0159

AN/AWM-11
AN/AWM-11 (V) Head Up Display Test Set Intermediate Maintenance (A-7E)
NV-1704-0229
<table>
<thead>
<tr>
<th>K-12 KEYWORD INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>AN/AYA-1 RA-5C AN/AYA-1 Signal Data Converter Group Intermediate Maintenance NV-1715-0424</td>
</tr>
<tr>
<td>AN/AÝN-1 AN/AÝN-1 Navigation Computer Systems Class C Class C AN/AÝN-1 Maintenance CG-1715-0024</td>
</tr>
<tr>
<td>AN/AÝN-2 AN/AÝN-2, AN/ASN-50 Fligh Director and Gyrocompass Systems Class C AN/AÝN-2 Maintenance CG-1715-0024</td>
</tr>
<tr>
<td>AN/BPS-12 AN/BPS-12, 13, 14 Radar System Maintenance NV-1715-0312</td>
</tr>
<tr>
<td>AN/BPS-13 AN/BPS-13 Radar Maintenance NV-1715-0312</td>
</tr>
<tr>
<td>AN/BPS-15 AN/BPS-15 Radar Combined Maintenance NV-1715-0491</td>
</tr>
<tr>
<td>AN/BQG Sonar Receiving Set AN/BQG-4/4A (PUEFS) Combined Maintenance NV-1715-0261 Sonar Receiving Set AN/BQG PUEFS Maintenance NV-1715-0261</td>
</tr>
<tr>
<td>AN/BQG-4/4A Sonar Receiving Set AN/BQG-4/4A (PUEFS) Combined Maintenance NV-1715-0261</td>
</tr>
<tr>
<td>AN/BQH-2D/E Sonar Classification Set AN/BQH-2D/E Combined Maintenance NV-1715-0503</td>
</tr>
<tr>
<td>AN/BQH-5(V)2 Data Gathering Set AN/BQH-5(V)2 Basic Maintenance NV-1715-0502</td>
</tr>
<tr>
<td>AN/BQH-3A Sonar AN/BQH-3A Sonar Maintenance NV-1715-0307</td>
</tr>
<tr>
<td>AN/BQR-15 Sonar Receiving Set AN/BQR-15 Mod 0 Advanced Maintenance, Class F1 NV-1715-0912 Sonar Receiving Set AN/BQR-15 Mod 0 Operator and Maintenance NV-1715-0912</td>
</tr>
<tr>
<td>AN/BQS-11 Sonar AN/BQS-11/12/13 Maintenance NV-1715-0865 Sonar Detecting Ranging Set AN/BQS-11/12/13 Combined Maintenance NV-1715-0865 Submarine Sonar AN/BQS-11/12/13 Maintenance NV-1715-0865</td>
</tr>
<tr>
<td>AN/BQ8-4 AN/BQ8-4 Sonar Maintenance NV-1715-0303</td>
</tr>
<tr>
<td>AN/BQ8-8 Sonar AN/BQ8-8 (Series) Sonar Maintenance NV-1715-0214 Sonar Detecting/Ranging Set AN/BQS-8/10/14/20 Combined Maintenance NV-1715-0868</td>
</tr>
<tr>
<td>AN/BRA-16 Antenna Group AN/BRA-16 Functional Check and Maintenance NV-1715-0161 Antenna Multiplexer AN/BRA-16 Combined Maintenance NV-1715-0161</td>
</tr>
<tr>
<td>AN/BRD-6 Radio Direction Finder AN/BRD-6 Combined Maintenance NV-1715-0903 Radio Direction Finder AN/BRD-6 Operational Maintenance NV-1715-0903</td>
</tr>
<tr>
<td>AN/BRD-7 AN/BRD-7, AN/WYQ-1, AN/BRQ-1 Basic Operator, Class C AN/BRD-7 Combined Maintenance, Class C NV-1715-0445</td>
</tr>
<tr>
<td>AN/BRQ-1 AN/BRQ-1 Basic Operator, Class C1 NV-1715-0445 AN/WYQ-1 and AN/BRQ-1 Combined Maintenance Class C-1 NV-1715-0494</td>
</tr>
<tr>
<td>AN/BST-1 AN/BST-1 SECT Maintenance for Submarine Tender Technician NV-1715-0900 AN/BST-1 Tender Maintenance NV-1715-0588 SECT Buoy AN/BST-1 Basic Maintenance, Class F1 NV-1715-0900 Submarine Emergency Communications Transmitter (SECT) Buoy AN/BST-1 Maintenance NV-1715-0900</td>
</tr>
<tr>
<td>AN/CPN-4A Ground Controlled Approach Electronics Maintenance, Radar Set AN/CPN-4A, Class C NV-1715-0079 Ground Controlled Approach Maintenance (Engineeian), Radar Sets AN/CPN-4A and AN/MPN-5, Class C NV-1715-0081</td>
</tr>
<tr>
<td>AN/DPM-7 AN/DPM-7 Sparrow III Guided Missile Test Equipment Intermediate Maintenance NV-1715-0628 Sparrow III, Missile Test Equipment Maintenance Training-Depot Test Equipment of the AN/DPM-7 NV-1715-0628</td>
</tr>
<tr>
<td>AN/DSM-32 AN/DSM-32 Sparrow III Guided Missile Test Equipment Intermediate Maintenance NV-1715-0446</td>
</tr>
<tr>
<td>AN/FGC-60 Electronics Technician, Class C, AN/FGC-60, AN/FTA-15 Multichannel Voice Frequency Telegraph Terminal Equipment NV-1715-0194</td>
</tr>
<tr>
<td>AN/FLR-11 Cryptologic Technician T. Field Operations Type Three, Class A3, AN/FLR-11/15 Operators NV-1715-0840</td>
</tr>
<tr>
<td>AN/FLR-15 Cryptologic Technician M AN/FLR-15 Maintenance, Class C3 NV-1715-0835</td>
</tr>
<tr>
<td>AN/FPN-36 Ground Controlled Approach Electronics Maintenance (Radar Set AN/FPN-36), Class C NV-1715-0217</td>
</tr>
<tr>
<td>AN/FPN-38 AN/FPN-38 Timer Synchronizer NV-1715-0019</td>
</tr>
<tr>
<td>AN/FPN-41 AN/FPN-41 Timer NV-1715-0005</td>
</tr>
<tr>
<td>AN/FPN-46 AN/FPN-46 Monitor/Timer NV-1715-0009</td>
</tr>
<tr>
<td>AN/FPN-46 Timer NV-1715-0009</td>
</tr>
<tr>
<td>AN/FRT-83 AN/FRT-83, 84 and 85 Radio Transmitters Maintenance, Class C1 NV-1715-0325</td>
</tr>
<tr>
<td>AN/FTA-15 Electronics Technician, Class C, AN/FGC-60, AN/FTA-15 Multichannel Voice Frequency Telegraph Terminal Equipment NV-1715-0194</td>
</tr>
</tbody>
</table>
AN/MPN-1B
Ground Controlled Approach Electronics Technician, Radar Set AN/MPN-1B, Class C
NV-1715-0078

AN/MPN-5
Ground Controlled Approach Electronics Maintenance, Radar Set AN/MPN-5, Class C
NV-1715-0080

AN/SkR-4
AN/ASQ-10A Magnetic Anomaly Detecting Systems Intermediate Maintenance
NV-1715-0178

AN/SLQ-2
Telemetering Ground Station AN/SLQ-2
NV-1715-0791

AN/SLQ-19
AN/SLQ-19 and AN/SLQ-26(V) with AN/SLD-1 Countermeasures Set Maintenance
NV-1715-0842

AN/SLQ-22A(V)2
Electronic Warfare Deception Repeater Systems Maintenance, AN/SLQ-22A(V)2
NV-1715-0781

AN/SLQ-26
AN/SLQ-19 and AN/SLQ-26(V) with AN/SLD-1 Countermeasures Set Maintenance
NV-1715-0842

AN/SPA-25 Electronics Technician AN/SPA-25
Indicator Group Class C Maintenance
NV-1715-0310

AN/SPA-40 Electronics Technician, Indicator Group AN/SPA-40, Class C
NV-1715-0013

AN/SPA-41 Electronics Technician, Class C, Indicator Group AN/SPA-41 Maintenance
NV-1715-0018

AN/SPA-62 AN/SPA-62 Countermeasures Receiving Group, Class C
NV-1715-0645

AN/SPA-63 AN/SPA-37/37A Radar Sets, AN/SPA-63 Countermeasures Receiving Group, and AN/SPS-43/43A Radar Sets Differences
NV-1715-0790

AN/SPA-49B Talos Radar AN/SPA-49B, Class C
NV-1715-0282

AN/SPA-50 AN/SPA-50 Maintenance
NV-1715-0006

AN/SPA-51B Tartar Radar AN/SPA-51B or Radar AN/SPA-51C, Class C
NV-1715-0421

AN/SPA-51C Tartar Radar AN/SPA-51B or Radar AN/SPA-51C, Class C
NV-1715-0421

AN/SPA-53A AN/SPA-53A Radar Maintenance
NV-1715-0281

AN/SPA-53F Mk 68 Gun Director and AN/SPA-53F Radar Maintenance
NV-1715-0239

AN/SPA-53B Terrier Radar Set AN/SPA-53B Continuous Wave Acquisition and Tracking (CWAT)
NV-1715-0693

AN/SPA-55B Terrier Radar Set AN/SPA-55B Mod 5
NV-1715-0526

AN/SPH-2 Electronic Warfare Technician, Class C, Radar Data Recorder-Reproducer AN/SPH-2 and Video Recorder-Reproducer '15-E-27 Maintenance
NV-1715-0027

AN/SPN-10 AN/SPN-10 Operator A
NV-1715-0482

AN/SPN-29 AN/SPN-29 Receiver
CG-1715-0006

AN/SPN-30 AN/SPN-30 Receiver
CG-1715-0008

AN/SPN-35 AN/SPN-35 Radar Traffic Control Center Equipment Maintenance, AN/SPN-35A and AN/SPN-35, Class C
NV-1715-0713

AN/SPN-38 AN/SPN-38 Loran Receiving Set Maintenance
NV-1715-0006

AN/SPN-40 AN/SPN-40 Radio Navigation Set (Electronics Technician, Class C)
NV-1715-0015

AN/SPN-44 AN/SPN-44 Carrier Air Traffic Control Center Equipment Maintenance AN/SPN-44
NV-1715-0230

AN/SPN-6 All Weather Carrier Landing System Equipment Maintenance, AN/SPN-42, Class C
NV-1715-0086

AN/SPN-43 AN/SPN-43 Automatic Carrier Landing System Equipment Maintenance AN/SPN-42 (ET), Class C
NV-1715-0086

AN/SPN-49 AN/SPN-49 Carrier Air Traffic Control Center Equipment Maintenance, Radar Set AN/SPN-49, Class C
NV-1715-0026

AN/SPN-44 AN/SPN-44 Carrier Air Traffic Control Center Equipment Maintenance AN/SPN-44
NV-1715-0023

AN/SPS-10 AN/SPN-10 Operator A
NV-1715-0482

AN/SPS-6 Carrier Air Traffic Control Center Equipment Maintenance, AN/SPS-6 and AN/SPS-12 (XN-4), Class C
NV-1715-0715

AN/SPS-29 AN/SPS-29 Receiver
CG-1715-0006

AN/SPS-30 AN/SPS-30 Receiver
CG-1715-0008

AN/SPS-35 AN/SPS-35 Radar Traffic Control Center Equipment Maintenance, AN/SPS-35A and AN/SPS-35, Class C
NV-1715-0713

AN/SPQ-5A AN/SPQ-5A Radar Traffic Control Center Equipment Maintenance AN/SPQ-5, Class C
NV-1715-0293

AN/SPQ-10 AN/SPN-10 Operator A
NV-1715-0482

AN/SPQ-10 AN/SPQ-10 Operator A
NV-1715-0482

AN/SPQ-10 Clutter Suppressor and Automatic Alarm for the AN/SPS-10
K-14 KEYWORD INDEX

AN/SPS-29
AN/SPS-29 Maintenance and Repair, Class C
    Electronics Technician, Class C, AN/SPS-29 Radar Set
    NV-1715-0049

AN/SPS-29C
    AN/SPS-29C Radar Set Maintenance
    (Electronics Technician, Class C)
    NV-1715-0756

AN/SPS-29E
    AN/SPS-29E Radar Set Maintenance
    (Electronics Technician, Class C)
    NV-1715-0749

AN/SPS-37
    Electronics Technician, Class C, AN/SPS-37, 37A Radar Sets and AN/SPA-63
    Countermeasures Receiving Group
    NV-1715-0298

AN/SPS-39
    AN/SPS-39A Radar Operation and Maintenance
    AN/SPS-39 Radar Set Maintenance
    NV-1715-0233

AN/SPS-39A
    AN/SPS-39A Radar Operation and Maintenance
    AN/SPS-39 Radar Set Maintenance
    NV-1715-0233

AN/SPS-40
    AN/SPS-40 Radar System
    NV-1715-0199

AN/SPS-40A
    Electronics Technician AN/SPS-40 Radar Set Maintenance
    NV-1715-0557

AN/SPS-40B
    AN/SPS-40B/C/D Radar Set Maintenance
    NV-1715-0006

AN/SPS-40B/C/D
    AN/SPS-40B/C/D Radar Set Maintenance
    NV-1715-0006

AN/SPS-40B/C/D
    AN/SPS-40B/C/D Radar Set Difference Maintenance
    NV-1715-0145

AN/SPS-43A
    AN/SPS-43A/37A Radar Set Maintenance
    (Electronics Technician, Class C)
    NV-1715-0790

AN/SPS-48
    AN/SPS-48 Radar Set
    NV-1715-0304

AN/SPS-52
    AN/SPS-52 Radar Set

AN/SPS-57
    AN/SPS-57 Maintenance and Repair, Class A
    NV-1715-0524

AN/SPS-64(V)
    AN/SPS-64(V) -1,2,3,4 Radar
    NV-1715-0054

AN/SPS-66
    AN/SPS-66 Maintenance and Repair, Class A
    NV-1715-0055

AN/SPS-8
    Electronics Technician, Class-C, AN/SPS-8 Radar Maintenance
    NV-1715-0305

AN/SPS-T3
    AN/SPS-T3 Radar Trainer Class C
    NV-1715-0199

AN/SPW-2B
    Talos Radar AN/SPW-2B
    NV-1715-0199

AN/SPW-2B
    Talos Radar AN/SPW-2B, Class C
    NV-1715-0278

AN/SQA-13
    AN/SQA-13 (V) Independent Variable Depth Sonar Operation and Maintenance
    NV-1715-0232

AN/SQR-14
    AN/SQ-14 Maintenance (Enlisted)
    NV-1715-0290

AN/SQA-23
    Sonar AN/SQA-23 (PAIR) Operator Basic
    NV-1715-0860

AN/SQR-17
    Sonar AN/SQR-17 and AN/SKR-4 (LAVA) Maintenance
    NV-1715-0859

AN/SQR-17
    Sonar AN/SQR-17 Organizational Maintenance
    NV-1715-0859

AN/SQS-23
    AN/SQS-23, 23A, 23B, 23C Maintenance and ASPECT
    NV-1715-0277

Sonar AN/SQS-23 D-G Series (TRAM) Maintenance
    NV-1715-0864

Sonar AN/SQS-23 D-G Series (TRAM), MIP, LORA Maintenance
    NV-1715-0864

Sonar AN/SQS-23 Operator
    NV-1715-0857

Sonar AN/SQS-23 Series (Sonar) Operator Basic
    NV-1715-0867

AN/SQS-26
    AN/SQS-26 AXR & CX Operator
    NV-1715-0420

AN/SQS-26 AXR Electronic Maintenance
    NV-1715-0420

Sonar AN/SQS-26 AXR(R) and CX Operations Basic
    NV-1715-0420

Sonar AN/SQS-26 BX Maintenance
    NV-1715-0861

Sonar AN/SQS-26 Series Sonar Operator Basic
    NV-1715-0420

AN/SQS-26CX
    Sonar AN/SQS-26CX and AN/SQS-53 Maintenance
    NV-1715-0405

Sonar AN/SQS-26CX Maintenance
    NV-1715-0405

Sonar AN/SQS-26CX Sonar Detecting-Ranging Set AN/SQS-26CX
    NV-1715-0405

AN/SQS-35
    Sonar AN/SQS-35(V) AN/SQ-38 Operator Basic
    NV-1715-0858

AN/SQS-35(V)
    Sonar AN/SQS-35(V) Maintenance
    NV-1715-0866

AN/SQS-38
    Sonar AN/SQS-35(V) AN/SQ-38 Operator Basic
    NV-1715-0858

Sonar AN/SQS-38 Maintenance (USCG)
    NV-1715-0404

AN/SQS-39
    Sonar AN/SQS-39 Through 46 and Aspect Maintenance
    NV-1715-0783

AN/SQS-53
    Sonar AN/SQS-53 Operator Basic
    NV-1715-0861

AN/SQS-54B
    Sonar AN/SQS-54B and AN/SKR-4 (LAVA) Maintenance
    NV-1715-0320

Sonar AN/SQS-54B Organizational Maintenance
    NV-1715-0320

Sonar AN/SQS-54B/TKR-4 Maintenance
    NV-1715-0320

AN/SRC-20
    AN/SRC-20, AN/SRC-21 Radio Sets Maintenance (Electronics Technician, Class I)
    NV-1715-0088

AN/SRC-20, Operation and Maintenance, Enlisted
    NV-1715-0089

AN/SRC-20 Radio Transceiver
    NV-1715-0089

Electronics Technician, AN/SRC-20, AM/SRC-21 Radio Set Maintenance
    NV-1715-0088

Electronics Technician, AN/JRC-9, AN/SRC-20, AN/SRC-21 Radio Sets with AN/SRA-33 Antenna Coupler Maintenance
    NV-1715-0088

Radio Transceiver AN/SRC-20
    NV-1715-0088

Transceiver AN/SRC-20 Combined Maintenance
    NV-1715-0089

AN/SRC-21
    AN/SRC-20, AN/SRC-21 Radio Sets
    NV-1715-0089
Maintenance (Electronics Technician, Class C) NV-1715-0088
AN/SRC-21 Radio Set CG-1715-0045
AN/SRC-42(V) AN/SRC-42(V) Radio Set CG-1715-0053
AN/SRN-12 Electronics Technician, Class C, AN/SRN-12, Omega Receiver Set Maintenance NV-1715-0201
AN/SRN-14 Electronics Technician, AN/SRN-14, Omega Receiver, Class C NV-1715-0590
AN/SRN-15 AN/SRN-15 TACAN Dme Azimuth Measuring Equipment (DAME) Maintenance (Electronics Technician, Class C) NV-1715-0175
AN/SRN-18 AN/SRN-18 Radio Satellite Navigation Set Maintenance, Class C NV-1715-0810
AN/SRN-9 AN/SRN-9 Satellite Radio Navigation Set Maintenance (Electronics Technician, Class C) NV-1715-0099
AN/SRN-9A AN/SRN-9A, Radio Navigation Set, Operation and Maintenance NV-1715-0441
Satellite Receiver AN/SRN-9A, BRN-6 Combined Maintenance, Class F1 NV-1715-0492
Satellite Receiver AN/SRN-9A Combined Maintenance NV-1715-0492
AN/SWR-4B OH-50D Target Control System AN/SWR-4B Intermediate Maintenance NV-1715-0417
AN/SSM-5 Electronics Technician, Class C, AN/SSM-5 Monitor Test Set Maintenance NV-1715-0008
Antenna 490T-1/1A Antenna Coupler Intermediate Maintenance NV-1715-0314
A-6 AN/AFQ-92 Radar Antenna/ Receiver and Associated Test Set Intermediate Maintenance NV-1715-0514
AN/ARC-94 Class C and 490 T High Frequency (HF) Communications System and Antenna Coupler CG-1715-0019
Antenna Coupler CU-1441 Combined Maintenance NV-1715-0132
Antenna Group AN/BRA-16 Functional Check and Maintenance NV-1715-0161
Antenna Multicoupler AN/BRA-16 Combined Maintenance NV-1715-0161
Antenna Series (CU-1441/BRR Multicoupler) NV-1715-0132
AN/URT-23 Radio Transmitter With AN/URA-38 Antenna Coupler Maintenance (Electronics Technician, Class C) NV-1715-0056
AN/URT-23 Radio Transmitting Set and AN/URA-38 Antenna Coupler Group CG-1715-0058
AN/URT-23(V) Radio Transmitting Set and AN/URA-38 Antenna Coupler Maintenance, Class C NV-1715-0056
AN/WSC-3 Satellite Communications Set and OE-82B/WSC-1(V) Antenna Group NV-1715-0876
Coupler, Antenna CU-1441/BRR Checkout and Maintenance NV-1715-0132
Electronics Technician, AN/URC-9, AN/URA-38 Antenna Coupler Group NV-1715-0876
F-4J AN/AWG-10 Antenna Control and Missile Control Intermediate Maintenance NV-1715-0611
F-4J AN/AWG-10 Transmitter and Antenna Positioning Intermediate Maintenance NV-1715-0594
AN/TGC-37 Communication Central, AN/TGC-37, System Maintenance MC-1715-0006
Mobile Communications Central Technician (AN/TGC-37(v)) MC-1715-0006
Antiaircraft Light Antiaircraft Artillery (AAA) Fire Control Repair MC-1715-0034
Medium Antiaircraft Artillery (AAA) Fire Control Repair MC-1715-0056
Antisubmarine Antisubmarine Air Control, Class C/O NV-2202-0052
Antisubmarine Air Control, Class O NV-2202-0052
Aviation Antisubmarine Warfare (AASW) for First Tour Pilots P3A/B/D NV-1715-0270
Aviation Antisubmarine Warfare (AASW) for First Tour Pilots, P3C NV-1715-0270
Aviation Antisubmarine Warfare (AASW) for Naval Flight Officers P3A/B/D NV-1715-0555
Aviation Antisubmarine Warfare (AASW) for Naval Flight Officers, P3C NV-1715-0555
Aviation Antisubmarine Warfare (AASW) for Second Tour Pilots, P3A/B/D NV-1715-0304
Aviation Antisubmarine Warfare (AASW) for Second Tour Pilots, P3C NV-1715-0304
Aviation Antisubmarine Warfare (AASW) for Second Tour Pilots, P-3C NV-2202-0032
Aviation Antisubmarine Warfare (AASW) for Second Tour Pilots, P-3C NV-2202-0032
Aviation Antisubmarine Warfare NV-1715-0696
Aviation Antisubmarine Warfare (AASW) Operator, Class A NV-1715-0536
Aviation Antisubmarine Warfare (AASW) Sensor Station Three Operator, P3C NV-1715-0696
Aviation Antisubmarine Warfare (AASW) Technician, Class A NV-1715-0514
Aviation Electronics Technician S (Antisubmarine), Class A NV-1715-0514
Carrier Aviation Antisubmarine Warfare (AASW) Acoustic Operator (Passive) NV-2202-0096
Carrier Fixed Wing Antisubmarine Warfare (AASW) Warfare Tactics NV-2202-0001
Helicopter Aviation Antisubmarine Warfare (AASW) Electronic Warfare Operator NV-2202-0080
Intermediate Aviation Antisubmarine Warfare (AASW) Technician, Class B NV-1715-0167
Nonacoustic Antisubmarine Operator Transition P3C NV-1715-0679
Rotary Wing Antisubmarine Warfare Tactics NV-2202-0008
Antitank Antitank "Assaulim" MC-2204-0049
AN/TPQ-10 Aviation Fire Control Repair, AN/TPQ-10 (AFC) MC-1715-0033
AN/TPX-42A(V) 5 Electronics Maintenance Course (AFC) NV-1715-0566
AN/TRN-28 Air Traffic Control Center Equipment NV-1715-0771
Maintenance AN/TRN-28, Class C NV-1715-0771
AN/TTC-28 Telephone System, Transportable AN/TTC-28 MC-1715-0016
AN/TYA-11 Communications Central Group AN/TYA-11 Technician MC-1715-0030
AN/TYQ-1 Tactical Air Command Central (TAO) AN/TYQ-1 Repair MC-1715-0020
AN/TYQ-2 Tactical Air Operations Central (TAOC) AN/TYQ-2 Repair MC-1715-0053
TAOC (AN/TYQ-2) Technician MC-1715-0082
AN/TYQ-3 Tactical Data Communications Central (TDCC AN/TYQ-3) Technician MC-1715-0082
Combined Maintenance AN/WSC-5

AN/WSC-1 Radio Set Maintenance
-Electronics Technician, Class C-1
- NV-1715-0010
Radio Transceiver AN/WRC-1 Famiily Equipment

AN/WRN-5

AN/WRN-5 Combined Maintenance
-Loran AN/WRN-5 Combined
- NV-1715-0913
Satellite Navigation System AN/WRN-5
- NV-1715-0913
Satellite Receiver AN/WRN-5 Combined Maintenance, Class C-1
- NV-1715-0913

AN/WRC-1

AN/WRC-1 Radio Set Maintenance
-Electronics Technician, Class C-1
- NV-1715-0010

AN/WRT-2

AN/WRT-2 Radio, Transmitter Maintenance (Electronics Technician, Class C)
- NV-1715-0011
Electronics Technician Class C, AN/WRT-2 and AN/WRR-2
- NV-1715-0011

AN/WRT-4

Special Communications Equipment AN/WRT-4 Maintenance
- NV-1715-0250
Transmitter AN/WRT-4 Combined Maintenance
- NV-1715-0250

AN/WSC-3

AN/WSC-3 Satellite Communications Set and OE-82B/WSC-1(V) Antenna Group
- NV-1715-0876

AN/WSC-5

AN/WSC-5 Tactical Satellite Communications System Maintenance
- NV-1715-0877
Tactical Satellite Communications Equipment Maintenance AN/WSC-1(V)
- NV-1715-0877

AN/WYQ-1

AN/BRD-7, AN/WYQ-1, AN/BQ-1 Basic Operator, Class C-1
- NV-1715-0445
AN/WYQ-1 and AN/BQ-1 Combined Maintenance Class C-1
- NV-1715-0494
Electronic Surveillance Maintenance (ESM) AN/WYQ-1, AN/BQ-1 Combined Maintenance
- NV-1715-0494

APA-56

APA-56 Indicator Assembly
- NV-1715-0707

Appliance Orthopedic Appliance Mechanics
- NV-1704-0001
Orthopedic Appliance Technicians
- NV-1704-0001
Orthopedic Appliance Technician, Class C
- NV-1704-0001

Approach Ground Controlled Approach Controller
-Class C
- NV-1715-0213
Ground Controlled Approach Electronics Maintenance, Radar Set AN/CPN-4A, Class C
- NV-1715-0079
Ground Controlled Approach Electronics Maintenance, Radar Set AN/FPN-36, Class C
- NV-1715-0079
Ground Controlled Approach Electronics Maintenance, Radar Set AN/MPN-5, Class C
- NV-1715-0080
Ground Controlled Approach Electronics Technician, AN/MPN-5 Class C
- NV-1715-0080
Ground Controlled Approach Electronics Technician, Radar Set AN/MPN-1B, Class C
- NV-1715-0078
Ground Controlled Approach Engineeman, Class A, AN/MPN-5
- NV-1715-0081
Ground Controlled Approach Maintenance (Engineeman), Class C
- NV-1715-0081
Ground Controlled Approach Maintenance (Engineeman), Radar Sets AN/CPN-4A and AN/MPN-5, Class C
- NV-1715-0081
Ground Controlled Approach Operator, Class C
- NV-1715-0122
Ground Controlled Approach/Radar Air Traffic Control Center Electronics Maintenance Officers, Class O
- NV-1715-0670

AQA-4(V)

S-2D/E AQA-4(V) Indicator Group System Intermediate Maintenance
- NV-1715-0561

Arabic

Arabic
- DD-0602-0001
- DD-0602-0002
- DD-0602-0003
- DD-0602-0004
- DD-0602-0006
- DD-0602-0009

ARC-160

ARC-160 Communications System
- CG-1715-0029

ARC-97

E-1B ARC-97 Radio Repeater System Maintenance
- NV-1715-0195
ARC-97
- NV-1715-0195

ARCO

Airborne Radio Communications Operator (ARCO)
- NV-1715-0481

Armament

A-4 Armament System Organizational Maintenance
- NV-1715-0631
A-6A Armament Systems Organizational Maintenance
- NV-1704-0167
A-7 Armament Systems Maintenance
- NV-1704-0084
A-7E Armament System Maintenance

Arresting

Catapult and Arresting Gear, Class C
- NV-1710-0009
Catapult, Arresting Gear and Visual Landing Aids (C-13 Catapult and Mk-7 Arresting Gear), Class C
- NV-1710-0006
Catapult, Arresting Gear and Visual Landing Aids (C-7/C-11 Catapults and Mk-7 Arresting Gear), Class C
- NV-1710-0005
Catapult, Arresting Gear and Visual Landing Aids CVA (C-13 Catapults), Class C
- NV-1710-0006
Catapult, Arresting Gear and Visual Landing Aids CVA (C-7/11 Catapults), Class C
- NV-1710-0005

Arms

Small Arms Instructor
- CG-1408-0001
Supporting Arms Coordinator
- NV-2202-0055
Supporting Arms Coordinator
- NV-2202-0055

Arming

Infantry Weapons Amorers (Basic)
- MC-2204-0052
Infantry Weapons Amorers (Advanced)
- MC-2204-0044
Automatic Propulsion System Operator, Class C
NV-1710-0056
Automated Supply and Accounting Systems Afloat (AN/UYSK-5(V))
NV-1401-0003

Automatic
A-6A, Automatic Flight Control System Intermediate Maintenance
NV-1715-0699
A-7/A/B/E AN/ASW-26/30 Automatic Flight Control System Organizational Maintenance
NV-1715-0807
A-7/AN/ASW-26/30 Automatic Flight Control System Intermediate Maintenance
NV-1715-0617
A-7 Automatic Flight Control System Organizational Maintenance
NV-1715-0807
Automatic Combustion Control Maintenance
NV-1710-0011
Automatic Electric Ströwer Switching Telephone Systems Maintenance, Class C1
NV-1715-0735
Automatic Telephones, Class C
NV-1715-0546
Dynalet Automatic Telephone System Maintenance, Class C1
NV-1404-0007
F-8 Automatic Flight Control System Intermediate Maintenance
NV-1715-0737
NV-1715-0613
H-53 Automatic Flight Controls Systems Intermediate Maintenance
NV-1715-0738
H-53 Automatic Flight Control System Organizational Maintenance
NV-1704-0133
HH-2D/SH-2D Automatic Stabilization Equipment Intermediate Maintenance
NV-1704-0205
KC-130 F-5 S Automatic Pilot and Related Instruments Intermediate Maintenance
NV-1715-0736
P-3 PB-20N Automatic Flight Control System Maintenance, No. 13
NV-1715-0600
SH-3A Automatic Stabilization Equipment Maintenance
NV-1715-0616
SH-3 Automatic Stabilization Equipment Intermediate Maintenance
NV-1715-0621
SH-3 Automatic Stabilization Equipment Organizational Maintenance
NV-1704-0096
Stendt Plant Automatic Controls Maintenance (Bailey Meter)
NV-1710-0074
Steam Plant Automatic Controls Maintenance (General Regulator)
NV-1710-0072
Steam Plant Automatic Controls Maintenance (Hagan)
NV-1710-0073
Stromberg Carlson Automatic Telephone XY Switching System Maintenance, Class C1

UH-2A/B Automatic Stabilization Equipment Intermediate Maintenance
NV-1715-0661
UH-2A/B Automatic Stabilization Equipment Maintenance
NV-1715-0644
UH-2A/B Automatic Stabilization Equipment Organizational Maintenance
NV-1715-0644
UH-2C Automatic Stabilization Equipment Intermediate Maintenance
NV-1715-0646
NV-1715-0610
UH-2C, HH-2C, HH-2D Automatic Stabilization Equipment Organizational Maintenance
NV-1715-0661

Automotive
Advanced Automotive Mechanic/ Maintenance Noncommissioned Officer (NCO) Leadership
MC-1703-0012
Automotive Maintenance Officer
MC-1703-0012
Automotive Mechanic
MC-1703-0009
Automotive Mechanics
MC-1703-0009
Automotive Organizational Maintenance
MC-1703-0008
Automotive Organizational Mechanics
MG-1701-0008
Automotive Preventive Maintenance
MC-1703-0007
Basic Automotive Mechanic
MC-1703-0009
CMC'S' Automotive Electrical Maintenance
NV-1703-0001

Auxiliary
Auxiliary Equipment Maintenance
NV-1715-0002

Aviation
Aviation Antisubmarine Warfare (AASW) for First Tour Pilots, P3A
NV-1608-0028
Aviation Antisubmarine Warfare (AASW) for Naval Flight Officers P3A/B(D)
NV-1715-0655
Aviation Antisubmarine Warfare (AASW) for Naval Flight Officers, P3C
NV-1304-0003
Aviation Antisubmarine Warfare (AASW) for Second Tour Pilots, P3A/B(D)
NV-2022-0032
Aviation Antisubmarine Warfare (AASW) for Second Tour Pilots, P-3C
NV-2022-0021
Aviation Antisubmarine Warfare (AASW) Nonacoustic Operator P3C
NV-1715-0696
Aviation Antisubmarine Warfare (AASW) operator, Class A
NV-1715-0536
Aviation Antisubmarine Warfare (AASW) Sensor Station Three Operator, P3C
NV-1715-0661
Aviation Antisubmarine Warfare (AASW) Sensor Station Three Operator, P3E
NV-1715-0661
Aviation Antisubmarine Warfare (AASW) Sensor Station Three Operator, P4C
NV-1715-0661
Aviation Antisubmarine Warfare (AASW) Sensor Station Three Operator, P4C
NV-1715-0661
Aviation Boatswain's Mate E (Aircraft Launch and Recovery Equipment), Class A
NV-1704-0042
Aviation Boatswain's Mate E (Equipment), Class A
NV-1704-0042
Aviation Boatswain's Mate F (Fuel), Class A
NV-1728-0005
Aviation Boatswain's Mate G (Gasoline School), Class A
NV-1722-0001
Aviation Boatswain's Mate H (Aircraft Handling), Class A
NV-1728-0014
Aviation Boatswain's Mate H (Handling), Class A
NV-1728-0014
Aviation-Boatswain's Mate U (Utility), Class A
NV-1728-0013
Aviation Corrosion Control by Correspondence
CG-1704-0016
Aviation Crash Crewman Class C
NV-1728-0006
Aviation Electrician Conversion
NV-1704-0068
NV-1704-0070
Aviation Electrician Mate, First Class, by Correspondence
CG-1714-0004
Aviation Electrician-Mate, Second Class, by Correspondence
CG-1714-0003
Aviation Electrician'S Mate, Class A
NV-1704-0068
Aviation Electrician'S Mate, Class B
NV-1715-0134
Aviation Electrician'S Mate, Class B (Advanced)
NV-1715-0134
Aviation Electrician'S Mate, Class B (Intermediate)
NV-1715-0135
Aviation Electrician'S Mate, First Class, by Correspondence
CG-1714-0004
Aviation Electrician'S Mate I (Instrument), Class A
NV-1704-0068
Aviation Electrician'S Mate M (Electrician), Class A
NV-1704-0070
Aviation Electrician'S Mate, Second Class, by Correspondence
CG-1714-0003
Aviation Electronics Technician/Aviation Fire Control Technician, Advanced Class
NV-1715-0137
Aviation Electronics Technician, Class B
NV-1715-0137
Aviation Electronics Technician Class C
AN/ARC-94
Aviation Electronics Technician, First Class, by Correspondence
CG-1715-0019
Aviation Electronics Technician, Second Class, by Correspondence
CG-1715-0032

Marine Aviation Supply (Mechanized), Class C  NV-1405-0007
Naval Aviation Maintenance/Material Management, Class B  NV-1715-0003
Naval Aviation Observer (Controller), Class O  NV-1704-0197
Pre-flight, Naval Aviation Cadets and Aviation Officer Candidates  NV-1606-0046
Warrant Officer (WO) Aviation Indocragenation  NV-2202-0016
Aviation Electronics
Aviation Electronics Fundamentals, Class A  NV-1715-0380
Aviation Electronics Intelligence, Class O/C  NV-1715-0504
Aviation Electronics Officers, Class O  NV-1715-0522
Aviation Electronics Operator, Class O  MC-1715-0049
Aviation Electronics Technician (AT) Communications, Class A  CG-1405-0001
Aviation Electronics Technician/Aviation Fire Control Technician, Advanced Class B  NV-1715-0137
Aviation Electronics Technician, Class A  CG-1715-0001
CG-1715-0012
NV-1715-0289
NV-1715-0137
Aviation Electronics Technician N (Navigation), Class A  NV-1715-0097
Aviation Electronics Technician R (Radar), Class A  NV-1715-0295
Aviation Electronics Technician S (Antisubmarine), Class A  NV-1715-0154
Aviation Support
Aviation Support Equipment Gasoline Engine Intermediate Maintenance  NV-1703-0006
Aviation Support Equipment GTCP-100 and Enclosures Intermediate Maintenance  NV-1704-0109
Aviation Support Equipment GTCP-100 Engine Intermediate Maintenance  NV-1704-0109
Aviation Support Equipment Mobile Electric Power Plant Intermediate Maintenance  NV-1715-0541
Aviation Support Equipment NC-10B Mobile Electric Power Plant Systems Intermediate Maintenance  NV-1715-0698
Aviation Support Equipment NC-2A Mobile Electric Power Plant Intermediate Maintenance  NV-1715-0700
Aviation Support Equipment Technician, Class A (Hydraulic Specialty)  NV-1704-0112
Aviation Support Equipment Technician, Class A (Mechanical Specialty)  NV-1704-0113
Aviation Support Equipment Technician, Class B  NV-1704-0138
Aviation Support Equipment Technician, Mechanical, Class A  NV-1704-0145
Aviator
Advanced Navigation Training (Postgraduate Coast Guard Aviator)  NV-1606-0033
Advanced Navigation Training (Postgraduate Naval Aviator)  NV-1606-0032
Aviation Flight Training, Naval Aviator and Naval Flight Officer  NV-1606-0045
Avionics
SH-2D Light Airborne Multipurpose Systems (LAMPS) Avionics Equipment Organizational Maintenance  NV-1715-0697
Avionics
A-3 Related Avionics System (AT/AQ) Organizational Level Maintenance  NV-1715-0279
A-3 Related Avionics System (AT/AQ) Organizational Maintenance  NV-1715-0279
A-6 Avionics Systems Organizational Level Maintenance  NV-1715-0474
A-7A/B Integrated Avionics Weapons System Technician Organizational Maintenance  NV-1715-0450
Advanced First Term Avionics, Class B (AFTA)  NV-1715-0056
Avionics Advanced, Class B  NV-1715-0137
Avionics Advanced, Class C  NV-1715-0137
Avionics, Class B  NV-1715-0137
Avionics Equipment, Class C, AN/ARC-51A  CG-1715-0022
Avionics Equipment, Class C, AN/ARC-94  CG-1715-0019
Avionics Equipment, Class C, AN/ARN-52(V)  CG-1715-0021
Avionics Equipment, Class C, AN/ARN-79  CG-1715-0020
Avionics Fundamentals, Class A  NV-1715-0049
NV-1715-0380
Avionics Intermediate, Class B  NV-1715-0102
Avionics Officers, Class O  NV-1715-0170
Avionics Repairman, Class C  NV-1704-0228
Avionics Technician (AV), Class A  NV-1715-0380
Avionics Technician, Class A  NV-1715-0380
Integrated Avionics Radar Systems  NV-1715-0035
Integrated Avionics Weapons System Specialist  NV-1715-0266
Integrated Avionics Weapons System Technician  NV-1715-0267
Intermediate Avionics, Class B  NV-1715-0102
P.3C Integrated Avionics System Technician  NV-1715-0329
RA-5C Avionics Officers/Supervisors Familiarization  NV-1704-0038
S-2D/E Avionics Systems Organizational Maintenance  NV-1715-0641
S-3A Copilot Avionics  NV-1606-0057
Avionicesman
11CS/30 Avionicsman by Correspondence  CG-1715-0040
HH-3F Avionicsman by Correspondence  CG-1715-0039
AVQ-2
P-3 Power Generating System and AVQ-2 Searchlight Intermediate Maintenance  NV-1715-0659
AVROC
Aviation Reserve Officer Candidate (AVROC)  NV-2202-0088
AWTT
Torpedoes Mk 46 Mod 1, Mk 44 Mod 1, and AWTT Mk 32 Organizational Maintenance  NV-1715-0785
Azimuth
AN/SRN-15 TACAN Distance Azimuth Measuring Equipment (DAME) Maintenance (Electronics Technician, Class CI)  NV-1715-0175
Bailey Meter
Steam Plant Automatic Controls Maintenance (Bailey Meter)  NV-1710-0074
Baker
Advanced Baker  MC-1729-0012
Baker  MC-1729-0001
Basic Baker  MC-1729-0001
Basic Specialist Training Baker  MC-1729-0001
Bakery
Bakery Management  MC-1729-0011
Bakery Noncommissioned Officer (NCO) Leadership  MC-1729-0006
Ballistic
Fleet Ballistic Missile (FBM) Navigation Officer  NV-1715-0456
OA-3734/ASM-77 Ballistic Computer Test Console Intermediate Maintenance  NV-1715-0548
Ballistics
A-6 AN/ASQ-61A Ballistics Computer Intermediate Maintenance
Battalion Staff Officers (Amphibious Planning)

Batteryman
Field Artillery Batteryman
Special Anti-Air Warfare Batteryman

Beacon
AN/APN-154(V) Radar Beacon

Intermediate Maintenance

Advanced

Atomic, Biological and Chemical (ABC)
Defense for Shipboard Instructors
Nuclear, Biological and Chemical (NBC) Defense Ashore
Nuclear, Biological and Chemical (NBC) Defense for Petty Officers
Nuclear, Biological and Chemical (NBC) Warfare Defense
Nuclear, Biological and Chemical (NBC) Warfare Ashore
Nuclear, Biological, and Chemical (NBC) Weapons Employment

F-4J AN/AWG-10 Missile Control Display and Built-In Test (BIT) Intermediate Maintenance

BITCS
Reserve Basic Intelligence Training Subjects (BITCS)

Blasts
EO"C" Blasting and Quarry Operations

Blood Bank and Clinical Laboratory Technician

BN CN
A-6 B N-CN and B NCB Test Set, Intermediate Maintenance

Boat
Assault Boat Coxswain
Assault Boat Engineer

Boat Group Officers
Depot Level Boat Repairman (Engineman)

Swim Boat Crew Training

Boating
Boating Safety by Correspondence

National Boating Safety

Boatswain's
Aviation Boatswain's Mate F (Fuels), Class A
Aviation Boatswain's Mate G Gasoline School, Class A
Aviation Boatswain's Mate H Aircraft Handling, Class A
Aviation Boatswain's Mate H (Handling), Class A
Aviation Boatswain's Mate U (Utility), Class A
Basic Boatswain's Mate (General)
Boatswain's Mate, Class A
Boatswain's Mate First Class by Correspondence
Boatswain's Mate School
Boatswain's Mate Second Class by Correspondence
Boatswain's Mate Third Class by Correspondence
Boatswain's Mate Training

Boiler
Boiler Technician, Class A (1200 PSI)
Boiler Technician, Class A (600 PSI)
Pressure Fired Boiler, Class C
Utilityman, Shore Based Boiler Controls, Class C

Boilerman
1200 PSI BT Maintenance (Boilerman)
Boilerman, Class B
Boilerman Enlisted Maintenance

Boilermen
Boilermen, Class A

Bomb
Aviation Fire Control Technician B (Bomb Director), Class A
F4B AN/AJB-3A Loft Bomb Release Computer Set
F-4J AN/AJB-7 Loft Bomb Computer System and AN/ASN-70 Vertical Flight Reference System Intermediate Maintenance
RA-SC AN/ASB-12 Bomb Directing Set Organizational Maintenance
RA-SC Semi-Automatic Test Equipment Bomb Director

Bombardier
A-6 Bombardier Navigator Control Box and Associated Test Set, Intermediate Maintenance
Candidate
Officer Candidate
Officer Candidate School, Class C (Career Information and Counseling)

Warrant Officer Candidate
Warrant Officer Candidate, Class C (Career Information and Counseling)

Woman Officer Candidate

Card
A-6 Card Module Analyzer Test

Cardiopulmonary
Cardiopulmonary Technician, Class C

Career
Instructor, Class C (Career Information and Counseling)
Personnelman, Class C (Career Information and Counseling)

Carrier
All Weather Carrier Landing System

Automatic Carrier Landing System Equipment AN/SPN-42 (ET), Class C

Carrier Air Traffic Control Center Controller Class C/O

Carrier Air Traffic Control Center Equipment Maintenance AN/SPN-10, Class C

Carrier Air Traffic Control Center Equipment Maintenance, AN/SPN-35A, and AN/SPN-35, Class C

Carrier Air Traffic Control Center Equipment Maintenance, AN/SPN-35, Class C

Carrier Air Traffic Control Center Equipment Maintenance AN/SPN-44

Carrier Air Traffic Control Center Equipment Maintenance, AN/SPN-6 and AN/SPN-12 (XN-4), Class C

Carrier Air Traffic Control Center Equipment Maintenance (AN/SPN-6), Class C

Carrier Air Traffic Control Center Equipment Maintenance, Radar Set AN/SPN-43, Class C

Carrier Aviation Anti-submarine Warfare (AASW) Warfare Tactics

Carrier Fixed Wing Anti-submarine Warfare (AASW) Warfare Tactics

Carrier Gasoline and Inert Gas Systems, Class C

Cartographic
Advanced Photogrammetric Cartographic Techniques

Basic Photogrammetric Cartographic Techniques

Cartographic Drafting

Basic Cartography

Cascadex
Cascadex 100 Pound Washer/Extractor Maintenance, Class C

Cataapult
Aircraft Launch and Recovery Equipment (C-7/11 Catapult), Class C

Aircraft Launch and Recovery Equipment Maintenance Officer (C-13 Catapult), Class O

Aircraft Launch and Recovery Equipment Maintenance Officer (C-7/11 Catapult), Class O

Catapult and Arresting Gear, Class O

Catapult, Arresting Gear and Visual Landing Aids (C-7/C-11 Catapults and Mk-7 Arresting Gear), Class C

Catapult, Arresting Gear and Visual Landing Aids (C-7/C-11 Catapults and Mk-7 Arresting Gear), Class C

Catapult, Arresting Gear and Visual Landing Aids CVA (C-13 Catapults), Class C

Catapult, Arresting Gear and Visual Landing Aids CVA (C-13 Catapults), Class C

Catapult, Arresting Gear and Visual Landing Aids (CVS) (H-8 Catapults and Mk-5 Arresting Gear)

CVA Catapult Electrician, Class C

CVA Catapult Steam and Drain Systems, Class C

CVS Catapult, Arresting Gear, and Visual Landing Aids, Class C

CCL-611
CCL-611 and Motorola Triton VHF-FM Transceivers

CDFO-5000
CDFO-5000, Class C

CE"A"
Construction Electrician, Class A (CE"A")

CE"C"
CE"C" Cable Splicing

CE"J"
Construction Electrician, Class J (CE"J")

Celestial
Celestial Navigation by Correspondence

Central
Atmosphere Analyzer, CAMS (Central Atmosphere Monitoring System) Mk 1

Central Computer Complex Combined Maintenance and Software

High Frequency Communication Central Operator

Mobile Data Central Technician

Mobile Data Central Technician

SSN Central Computer Complex System Level Maintenance and Software

Tactical Air Operations Central Technician

Centrifugal
110 Ton R11 Centrifugal Air Conditioning Unit (YQD)

Centrifugal Air Conditioning Plant Operation and Maintenance

R-11 Centrifugal 110 Ton Air Conditioning Combined Maintenance

CH-46A
CH-46A AN/ALQ-52(V) Navigational TACAN Maintenance

CH-46A Electrical and Instrument Systems

CH-46A Rotors and Related Systems Maintenance

CH-53
CH-53 Communication, Navigation and Identification (CNI) Systems Organizational Maintenance
<table>
<thead>
<tr>
<th>Keyword</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controllers and Circuit Breakers Combined Maintenance</td>
<td>NV-1715-0898</td>
</tr>
<tr>
<td>Controllers Circuit-Breakers, Class F1</td>
<td>NV-1715-0898</td>
</tr>
<tr>
<td>DD963 Basic Circuit Concepts for Gas Turbine Controls, Class CI</td>
<td>NV-1402-0020</td>
</tr>
<tr>
<td>Electronics Technician, Class A-A-2 (Electronic Circuit Applications)</td>
<td>NV-1715-0723</td>
</tr>
<tr>
<td>Solid State Circuit Troubleshooting Techniques</td>
<td>NV-1715-0149</td>
</tr>
<tr>
<td>Circuitry</td>
<td>F-4J AN/AWG-10 and Electronic Counter Countermeasure Circuitry Intermediate Maintenance</td>
</tr>
<tr>
<td>Civil</td>
<td>Advanced Undersea Weapons Circuits</td>
</tr>
<tr>
<td>Civil Engineer Corps Officer Basic—Contract Administration Specialty</td>
<td>NV-1408-0013</td>
</tr>
<tr>
<td>Civil Engineer Corps Officer Basic—Naval Construction Battalion Operations Specialty</td>
<td>NV-1408-0015</td>
</tr>
<tr>
<td>Civil Engineer Corps Officer Basic—Public Works Management Specialty</td>
<td>NV-1408-0014</td>
</tr>
<tr>
<td>Clarinet</td>
<td>Clarinet Pilgrim</td>
</tr>
<tr>
<td>Class A</td>
<td>Class A Marine Science Technician</td>
</tr>
<tr>
<td>Classification</td>
<td>Interviewing and Classification</td>
</tr>
<tr>
<td>Personnelman, Class C-1, Interviewing and Classification</td>
<td>NV-1406-0018</td>
</tr>
<tr>
<td>Self-Noise Determination and Classification</td>
<td>NV-1601-0012</td>
</tr>
<tr>
<td>Clerical</td>
<td>Marine Aviation Operations Clerical, Class C</td>
</tr>
<tr>
<td>Neuropsychiatric Clerical Technician</td>
<td>NV-1403-0001</td>
</tr>
<tr>
<td>Clerk</td>
<td>Administrative Clerk</td>
</tr>
<tr>
<td>Advanced Disbursing Clerk</td>
<td>MC-1408-0002</td>
</tr>
<tr>
<td>Basic Legal Clerk and Reporter</td>
<td>MC-1407-0001</td>
</tr>
<tr>
<td>Basic Travel Clerk</td>
<td>MC-1481-0005</td>
</tr>
<tr>
<td>Disbursing Clerk, Class C (Financial Returns)</td>
<td>NV-1408-0001</td>
</tr>
<tr>
<td>Disbursing Clerk, Class C (Travel Payments)</td>
<td>NV-1408-0002</td>
</tr>
</tbody>
</table>
Disbursing Clerk Course
Disbursing Clerk Financial Returns Class C
Disbursing Clerk (Pay Records Maintenance) Class C
Fiscal Accounting Clerk
Legal Clerk and Court Reporting
Legal Clerk/Court Reporter
Personnel Clerk
Postal Clerk, Class A
Unit Diary Clerk

Clinical
Blood Bank and Clinical Laboratory Technician
Clinical Chemistry Technician
Clinical Laboratory Assistant Technician
Clinical Laboratory Technician, Class C
Clinical Laboratory Technician, Class C
Clinical Nuclear Medicine Technician
Clinical Nuclear Medicine Technician

Clock
Watch and Clock Repair, Class C

Close
Close Combat Instructor

Closed
Closed and Semiclosed Scuba
Closed Circuit Television Maintenance, Class CI
Closed Circuit Television Systems by Correspondence
Closed Circuit TV Maintenance, Class CI
Commissioned Officers' Mess Closed Mess Management
Legal Services Reporter SPCM (Closed Microphone)

Clubs
Management of Marine Corps Clubs

Clutter
Clutter Suppressor and Automatic Alarm, for the AN/SPS-19

CM\"A\" Construction Mechanic, Class A1
CM\"A\"

CM\"C\" Automotive Electrical Maintenance

CM\"C\" Auto Trans

CM\"J\" Construction Mechanic, Class J (CM\"J\")

CMS-2
AN/UYK-7 CMS-2 (Y) Compiler Language Programming
CMS-2 Compiler Language Programming
CMS-2 Programming (CP-642 A&B/USQ-20)

CNI
A-4E Communication Navigation Identification (CNI)/Weapons Systems Organizational Maintenance
A-4F/L/A-4F Communication Navigation Identification (CNI)/Weapons Systems Organizational Maintenance
CH-53 Communication, Navigation and Identification (CNI) Systems Organizational Maintenance

F-4B Communication Navigation Identification (CNI) Line Troubleshooting Maintenance
F-4J Communication Navigation Identification (CNI) Line Troubleshooting Maintenance

F-8 Communication Navigation and Identification (CNI) Systems Organizational Maintenance

RA-5C Communication Navigation Identification (CNI) and DECM Organizational Maintenance

RF-4B AN/ASQ-88 and AN/ASQ-108 Communication Navigation Identification (CNI) Line Troubleshooting Maintenance

Coastal
Coastal Patrol Craft Training

COBOL
IBM System 360 Computer System Programming (COBOL Language) Class C
IBM System 360 (DOS) COBOL Programming
IBM System 360 OS COBOL Language

Cold
Cold Weather Field Indoctrination
Cold Weather Field Indoctrination Training for FMF Cadets and Reservists
F/RF-4B J-79-GE-5/8A Cold Section Repair

Collection
Cryptologic Technician Collection Branch

Combat
Close Combat Instructor
Combat Engineer (Advanced)
Combat Engineer Basic
Combat Engineer Basic Specialist
Combat Engineer Officer
Combat Information Center (CIC) Officer, Class O
Combat Information Center (CIC) Watch Officer, Class O
Combat Sensor Warfare Training
DLG 6-16 Combat System
Inactive Duty Reserve Combat Information Center (CIC) Class—Basic, Supervisory and Officer Team Training
Infantry Replacement and Individual Combat Training
Marine Enlisted Basic Combat Intelligence

Combustion
Automatic Combustion Control Maintenance

Command
Amphibious Command Indoctrination
College of Naval Command and Staff
Command and Control
Command and Staff Course
Command Intelligence Officer (CIO)
KEYWORD INDEX

Communication Officer (ARCO) NV-1715-0481
AN/ARC-142 H.F. Communications System Intermediate Maintenance NV-1715-0058
AN/ARC-143 Communications Systems Intermediate Maintenance NV-1715-0059
AN/ARC-160 Communications System NV-1715-0029
AN/ARC-94 Class C and 490 T High Frequency (HF) Communications System NV-1715-0019
AN/WSC-3 Satellite Communications Set and OE-82B/WSC-1(V) Antenna Group NV-1715-0876
AN/WSC-5 Tactical Satellite Communications System Maintenance NV-1715-0877
ARC-160 Communications System NV-1715-0029
Aviation Electronics Technician (AT) Communications, Class A NV-1715-0058
Basic Airborne Radio Communications NV-1715-0481
Communications Central Group AN/TYA-11 Technician NV-1715-0030
Communications Officer Ashore NV-1715-0113
Communications Officer (Short Course) NV-1404-0005
Communications Quality Monitoring System Operator NV-1715-0690
Communications Receiver Site Systems Maintenance, Class CI NV-1715-0356
Communications Systems, Class 'C' NV-1715-0047
Communications Systems Technician Class C NV-1715-0105
Communications Technician Administration Branch Class A NV-1715-0400
Communications Technician (M), Class A NV-1715-0544
Communications Technician "O" Branch, HDFC Communications Technical Control NV-1715-0800
Communications Technician T and R (Advanced Preparatory, Class A) NV-1715-0800
Communications Transmitter Site Systems Maintenance, Class CI NV-1715-0387
Communications Yeoman, Class A NV-1715-0800
Cryptologic Technician Communications Rating, Class A NV-1715-0850
Cryptologic Technician O, High Frequency Direction Finding (HDFC), Communications Technical Control, Class CI NV-1715-0849
K-28 KEYWORD INDEX

E-2A AN/ASQ-52 Data Communications System Special Support Equipment Intermediate Maintenance NV-1715-0527

E-2A Digital Data Communications System AN/ASW-14A Intermediate Maintenance NV-1715-0347

E-2A Multi-Purpose Communications System AN/ASQ-52 Intermediate Maintenance NV-1715-0379

EA-6B Communications, Navigation and Radar System Organizational Maintenance NV-1715-0311

Electronics Technician, Communications NV-1715-0851

Electronics Technician, Class A—A-3 (Communications) NV-1715-0724

Electronics Technician, Class A (Communications) NV-1715-0730

Electronics Technician, Class A, Communications NV-1715-0851

Electronics Technician, Communications NV-1715-0851

Electronics Technician, Nuclear Field, Class A NV-1715-0851

F-14A Communications, Navigation/Displays, Electronic Warfare NV-1715-0853

First Tour Pilot P-3C Communications Operator NV-1715-0217

Fleet Satellite Communications Fleet Broadcast-Control Subsystem Maintenance (Electronics Technician, Class C1) NV-1715-0847

High Frequency Direction Finding (HFDF) Communications Technical Control NV-1715-0874

Interior Communications Electricians, Class A (A-1) NV-1715-0729

Interior Communications (IC), Class A, Part II (Interior Communications Equipment) NV-1715-0173

Interior Communications (IC) Electrician, Class B NV-1715-0755

Interior Communications (IC) Electrician, Class C NV-1715-0755

Interior Communications (IC) Package NV-1715-0755

Interior Communications Technical Control NV-1715-0755

Maneuvering Communications NV-1715-0755

Mobile Data Communications Terminal Technician NV-1715-0841

Naval Amphibious Communications NV-1404-0006

Naval Flight Officer P3C Communications Operator NV-1704-0219

Naval Moduar Automated Communications System (NAVMACS) A Maintenance NV-1715-0875

P-3A/B Communications Navigation (COMM/NAV) Organizational Maintenance NV-1715-0096

P-3 AN/ARC-52 UHF Communications Systems Maintenance, No. 21 NV-1715-0346

P-3 AN/ARC-94 Communications System Maintenance, No. 19 NV-1715-0374

Radio Communications System Maintenance for DD963 Class Ships, Class C-1 NV-1715-0870

Reserve Cryptologic Technician, Communications Technical Control, Class F1 NV-1715-0848

Reserve Naval Security Group-7 Communications Technical Control NV-1715-0848

Special Communications Equipment AN/WRA-3 Maintenance NV-1715-0253

Special Communications Equipment AN/WRT-4 Maintenance NV-1715-0250

Submarine Communications Equipment NV-1715-0885

Submarine Communications Equipment Combined Maintenance NV-1715-0885

Submarine Emergency Communications Transmitter (SECT) Box AN/BST-1 Maintenance NV-1715-0900

Submarine Interior Communications (IC) Systems NV-1715-0642

Tactical Data Communications Central Repairman NV-1715-0077

Tactical Data Communications Central Technician NV-1715-0200

Tactical Data Communications Central Technician NV-1715-0200

Tactical Satellite Communications Equipment Maintenance AN/WSC-S(V) NV-1715-0877

Communicator Airborne Communicator NV-1409-0004

Compilation

Map Compilation DD-1713-0001

Photogrammetric Compilation DD-1601-0009

Compiler

AN/UYK-7 CMS-2 (V) Compiler Language Programming NV-1402-0046

CMS-2 Compiler Language Programming NV-1402-0017

Component

Electrical Component Maintenance, (UNREP) NV-1715-0025

Micronanure Component Repair Intermediate Maintenance NV-1715-0157

Miniature Component Repair NV-1715-0156

UNREP Electrical Component Maintenance United Controls NV-1715-0025

Compressed Gases, Class C NV-1601-0010

Compressed Gases, Class C, High Pressure Oxygen-Nitrogen Plant NV-1601-0010

Compressed Gases Cryogenerator Maintenance, Class C NV-1601-0001

Computation

Data Computation and Transmission Loops Fire Control System (FCS) Mk 80, Class C1 NV-1715-0895

Computer

A-3 Bombing Data Computer CP-6A/ASB-1 Maintenance NV-1715-0263

A-6 AN/ASQ-61A Ballistics Computer Intermediate Maintenance NV-1715-0068

A-6 AN/ASQ-61A Ballistics Computer Theory NV-1715-0067

A-6 AN/ASQ-61A Ballistics Computer Intermediate Maintenance NV-1715-0068

A-6 Ballistics Computer Test Console Intermediate Maintenance NV-1715-0342

A-7E AN/ASN-91 Tactical Computer Intermediate Maintenance NV-1715-0070

AN/AQA-7 (V) Sonar Computer Recorder Group Intermediate Maintenance NV-1715-0774

AN/ASA-13A Navigational Computer Group Intermediate Maintenance NV-1715-0326

AN/ASA-47 Doppler/Airmass Navigational Computer System Intermediate Maintenance NV-1715-0582

AN/AYN-1 Navigation Computer Systems Class C NV-1715-0004

AN/BRN-3 Computer Advanced Training NV-1715-0925

Auto Flight Control System AN/
K-30 KEYWORD INDEX

CONSTRUCTION

Concrete

- BU"C" Concrete

N-1710-0040

Conditioning

- Air Conditioning Refrigerant 11
  - NV-1730-0006
  - Refrigerant 11 Air Conditioning
    - NV-1730-0006
  - Refrigeration and Air Conditioning (Operation and Maintenance)
    
    CG-1701-0001

Console

DD963 Centralized Damage Control

Consolidate Operator, Class C1

- NV-1601-0015

DD963 Centralized Damage Control System Console Maintenance, Class C1

- NV-1601-0016

Navigation Operational Checkout

Console (NOCC) Mk 1 Mod 1 Advanced Maintenance

- NV-1715-0128

Construction

- Aids to Navigation Construction
  
  CG-1722-0004

- Basic Construction Man
  
  MC-1710-0018

- BU"C" Heavy Construction
  
  NV-1710-0034

- Builder/Heavy Construction Technician, Class C
  
  NV-1710-0034

- Civil Engineer Corps Officer Basic—Naval Construction Battalion Operations Specialty
  
  NV-1408-0015

- Construction Contract Administration and Management
  
  NV-1408-0015

- Construction Drafting
  
  DD-1713-0003

- Construction Electrician Cable Splicer
  
  (Class C)
  
  NV-1714-0015

- Construction Electrician, Class A
  
  (CE"A")
  
  NV-1714-0008

- Construction Electrician, Class B
  
  NV-1714-0010

- Construction Electrician, Class J (CE"J")
  
  NV-1714-0010

- Construction Electrician—Power and Communications Cable Splicing
  
  NV-1714-0015

- Construction Foreman
  
  MC-1710-0003

- Construction Mechanic/Automatic Transmissions, Class C
  
  NV-1703-0003

- Construction Mechanic/Automotive Electrical Maintenance, Class C
  
  NV-1703-0001

- Construction Mechanic, Class A1
  
  (CM"A")
  
  NV-1710-0035

- Construction Mechanic, Class B
  
  NV-1710-0065

- Construction Mechanic, Class J (CM"J")
  
  NV-1710-0065

- Construction Surveying
  
  DD-1601-0008

- Planning and Estimating Construction
  

Group Ratings, Class C

- NV-1408-0012

Continuous

- Continuous Wave Illuminator (CWI)

Common Core

- NV-1715-0163

Terrier Radar Set AN/SPG-55B

- Continuous Wave Acquisition and Tracking (CWAT)
  
  NV-1715-0693

Contract

- Civil Engineer Corps Officer Basic—Contract Administration Specialty
  
  NV-1408-0013

- Construction Contract Administration and Management
  
  NV-1408-0009

- Contract Administration—Accelerated
  
  NV-1408-0009

- Program Management for Contract Administration
  
  DD-1408-0004

Control

- A-7E C-8185 Armament Station Control Unit Intermediate Maintenance
  
  NV-1704-0203

- Air Control, Class O
  
  NV-1704-0011

- Air Defense Control Officer, Automated System
  
  MC-2204-0030

- Air Support Control Officer
  
  MC-1715-0078

- AN/AWM-55(V) Armament Station Control Unit Test Set Intermediate Maintenance
  
  NV-1715-0174

- Command and Control
  
  DD-1402-0001

- Control Panel Mk 309 Mod 0 Operation and Maintenance
  
  NV-1715-0381

- F-4B Airborne Missile Control System
  
  AERO I-A Organizational Maintenance
  
  NV-1715-0162

- F-4B/J Armament, Missile and Weapons Control System Maintenance
  
  NV-1715-0632

- F-4B/J Armament, Missile and Weapons Control System Organizational Maintenance
  
  NV-1715-0632

- F-4J AN/AWG-10 Missile Control System
  
  Display and Built-In Test (BIT)
  
  Interimade Maintenance
  
  NV-1715-0706

- F-4J AN/AWG-10 Missile Control System (Enlisted) Familiarization
  
  NV-1704-0231

- H-53 Automatic Flight Control System
  
  NV-1704-0231

- QH-50C Target Control System AN/HSW-2B Intermediate Maintenance
  
  NV-1715-0133

- QH-50C Target Control System AN/SWR-4F Intermediate Maintenance
  
  NV-1715-0418

- Submarine Satellite Information Exchange System (SSIXS) Operational Control Center Maintenance
  
  NV-1715-0871

- Submarine Satellite Information Exchange System (SSIXS) Operational Control Center Maintenance
  
  NV-1715-0878

Controller

- Air Intercept Controller
  
  NV-1704-0002

- Air Intercept Controller Supervisor
  
  NV-1704-0005

Basic Naval Tactical Data System (NTDS) Air Intercept Controller

- NV-1715-0674

Carrier Air Traffic Control Center

Controller Class C/O

- NV-1704-0012

Ground Controlled Approach Controller, Class C

- NV-1715-0123

Naval Aviation Observer (Controller), Class O

- NV-1704-0197

Controllers

- Circuit Breakers and Controllers
  
  NV-1715-0898

- Controllers and Circuit Breakers Combined Maintenance
  
  NV-1715-0898

- Controllers Circuit Breakers, Class F1
  
  NV-1715-0898

Controlman

- Air Controlman, Class A
  
  NV-1704-0004

- Air Controlman, Class B
  
  NV-1704-0007

- Air Controlman (Radar), Class A
  
  NV-1704-0010

- Air Controlman T (Tower), Class A
  
  NV-1704-0008

- Air Controlman W (Early Warning), Class A
  
  NV-1704-0009

Damage Controlman

- Damage Controlman First Class by Correspondence
  
  CG-1710-0001

- Damage Controlman Second Class by Correspondence
  
  CG-1710-0004

Contromen

- Damage Controlmen Class A HT-A
  
  Phase 1
  
  NV-1728-0012

Controls

- Controls and Indicators, Fire Control System (FCS) Mk 80, Class F1
  
  NV-1715-0892

- Steam Plant Automatic Controls Maintenance (Bailey Meter)
  
  NV-1704-0074

- Steam Plant Automatic Controls Maintenance (General Regulator)
  
  NV-1704-0072

- Steam Plant Automatic Controls Maintenance (Hagan)
  
  NV-1710-0073

Conventional

- A-4 Conventional Weapons Training
  
  NV-2202-0077

- A-6A Conventional Weapons
  
  NV-2202-0015

Conversion

- 3306/3309 FTD Conversion Training
  
  NV-1715-0887

Converter

- 60/400 Hz Power Converter
  
  Maintenance, Class C
  
  NV-1715-0301

- RA-5C Signal Data Converter Group
  
  Test Equipment Intermediate Maintenance
  
  NV-1715-0032

Cook

- Advanced Cook
Basic Specialist Training Cook
MC-1729-0003
MC-1729-0017
Cook, Basic Specialist Training
MC-1729-0017

Coordination
Rescue Coordination Center for
Reservists
CG-0802-0005

Copilot
S-3A Copilot Avionics
NV-1606-0057

Corpsman
Advanced Hospital Corpsman
NV-0709-0008
Basic Hospital Corpsman, Class A
CG-0703-0001
Hospital Corpsman, Advanced
NV-0709-0008
Hospital Corpsman (HM)
CG-0709-0001

Correlator
RF-4B Photographic Film Correlator-Processor Set ES-55A Intermediate Maintenance
NV-1715-0751

Correspondence
Aviation Corrosion Control by Correspondence
CG-1704-0016
Aviation Electrician Mate, First Class, by Correspondence
CG-1714-0004
Aviation Electrician Mate, Second Class, by Correspondence
CG-1714-0003
Aviation Electrician’s Mate, First Class, by Correspondence
CG-1714-0004
Aviation Electrician’s Mate, Second Class, by Correspondence
CG-1714-0003
Aviation Electronics Technician, First Class, by Correspondence
CG-1715-0032
Aviation Electronics Technician, Second Class, by Correspondence
CG-1715-0031
Aviation Machinist Mate, First Class, by Correspondence
CG-1704-0008
Aviation Machinist Mate, Second Class, by Correspondence
CG-1704-0007
Aviation Machinist’s Mate, First Class, by Correspondence
CG-1704-0008
Aviation Machinist’s Mate, Second Class, by Correspondence
CG-1704-0007
Aviation Structural Mechanic, First Class, by Correspondence
CG-1704-0015
Aviation Structural Mechanic, Second Class, by Correspondence
CG-1704-0013
Aviation Survivalman, First Class, by Correspondence
CG-1704-0019
Aviation Survivalman, Second Class, by Correspondence
CG-1704-0018
Boating Safety by Correspondence
CG-0802-0001
Boatswain’s Mate First Class by Correspondence
CG-1708-0004
Boatswain’s Mate Second Class by Correspondence
CG-1708-0003
Boatswain’s Mate Third Class by Correspondence
CG-1708-0002
Celestial Navigation by Correspondence
CG-1704-0004
Closed Circuit Television Systems by Correspondence
CG-1715-0064
Damage Controlman First Class by Correspondence
CG-1710-0003
Damage Controlman Second Class by Correspondence
CG-1710-0004
Electrician Mate First Class by Correspondence
CG-1714-0011
Electrician Mate Second Class by Correspondence
CG-1714-0010
Electrician’s Mate First Class by Correspondence
CG-1714-0011
Electrician’s Mate Second Class by Correspondence
CG-1714-0010
Electronics Technician First Class by Correspondence
CG-1715-0037
Electronics Technician Second Class by Correspondence
CG-1715-0036
Electronics Technician Third Class by Correspondence
CG-1715-0035
Fire Control Technician First Class by Correspondence
CG-1715-0036
Fire Control Technician Second Class by Correspondence
CG-1715-0035
Fireman by Correspondence
CG-1722-0001
Flight Mechanic HH-52A by Correspondence
CG-1714-0012
Fundamentals of Electronics by Correspondence
CG-1704-0010
Gas Turbine by Correspondence
CG-1731-0002
Gunner’s Mate First Class by Correspondence
CG-1714-0013
Gunner’s Mate Second Class by Correspondence
CG-1714-0009
HC-130 Avionicsman by Correspondence
CG-1715-0040
HC-130 Flight Engineer by Correspondence
CG-1704-0009
HH-3F Avionicsman by Correspondence
CG-1715-0039
HH-3F Flight Mechanic by Correspondence
CG-1704-0013

KEYWORD INDEX K-31
Correspondence
CG-1704-0011
Ice Observer by Correspondence
CG-1304-0006
Industrial Hydraulics by Correspondence
CG-1704-0014
Junior Officer Electronic Indocination by Correspondence
CG-1715-0062
Machinery Technician First Class by Correspondence
CG-1723-0001
Machinery Technician Second Class by Correspondence
CG-1723-0002
Machinery Technician Third Class by Correspondence
CG-1723-0003
Marine Science Technician by Correspondence
CG-1304-0003
Meteorology by Correspondence
CG-1304-0008
National Security Management (Correspondence Course of the Industrial College of the Armed Forces)
DD-1511-0001
Navigation Rules by Correspondence
CG-1708-0005
Oceanography by Correspondence
CG-1304-0005
Piloting by Correspondence
CG-1708-0006
Quartermaster First Class by Correspondence
CG-1304-0007
Quartermaster Second Class by Correspondence
CG-1722-0002
Quartermaster Third Class by Correspondence
CG-1722-0003
Radar Theory and Maintenance by Correspondence
CG-1715-0065
Radioman Second Class by Correspondence
CG-1404-0002
Shore Structure Maintenance by Correspondence
CG-1710-0005
Sonar Technician First Class by Correspondence
CG-1715-0034
Sonar Technician Second Class by Correspondence
CG-1715-0033
Telephone Technician Second Class by Correspondence
CG-1715-0063
Corrosion
Aviation Corrosion Control by Correspondence
CG-1704-0016
Counseling
Instructor, Class C-1 Administration and Counseling
NV-1408-0008
Instructor, Class C (Career Information and Counseling)
NV-1406-0004
Personnelman, Class C (Career Information and Counseling)
NV-1406-0004
Counselor
Navy Drug Abuse Counselor
Countermeasures

Operations Officer-Electronic Countermeasures (ECM)

MC-1715-0067

Technician Electronic Countermeasures

MC-1715-0001

Counterinsurgency

Counterinsurgency Orientation

NV-2202-0081

Counterinsurgency Pre-Deployment

NV-1721-0003

Counterinsurgency/Self-Protection/SEREP

NV-1511-0001

Countermeasures

Intermediate Maintenance

AN/ALQ-108 Countermeasures Set Intermediate Maintenance

NV-1715-0285

F-4J AN/AWG-10 and Electronic Countermeasures Circuitry Intermediate Maintenance

NV-1715-0317

RA-5C AN/ALQ-61 Countermeasures Set Shop Maintenance

NV-1715-0367

Airborne Early Warning/Electronics Countermeasures Evaluator, Class O

NV-1715-0599

AN/ALQ-51A Countermeasures Internal Set Maintenance

NV-1715-0187

AN/ALQ-51A Countermeasures Set Intermediate Maintenance

NV-1715-0328

AN/ALQ-81/100 Countermeasures Set Maintenance

NV-1715-0196

AN/ALQ-92 Countermeasures Set Intermediate Maintenance

NV-1715-0555

AN/ALQ-99 Jamming Transmitters and AN/ALM-107 Countermeasures Test Station Intermediate Maintenance

NV-1715-0053

AN/ALQ Countermeasures Set Intermediate Maintenance

NV-1715-0196

AN/ALR-45 Countermeasures Receiving Set Intermediate Maintenance

NV-1715-0933

AN/ALR-54 Countermeasures Receiving Set Intermediate Maintenance

NV-1715-0775

AN/SLQ-19 and AN/SLQ-26(V) with AN/SLD-1 Countermeasures Set Maintenance

NV-1715-0842

AN/SPA-37/37A Radar Sets, AN/SPA-63 Countermeasures Receiving Group, and AN/SPS-41/42A Radar Sets Differences

NV-1715-0790

AN/SPA-62 Countermeasures Receiving Group, Class C

NV-1715-0645

Countermeasures Receiving Set AN/WLR-11A

NV-1715-0841

Countermeasures Receiving Set AN/WLR-IC (IV) Class F-1

NV-1715-0817

Countermeasures AN/SLQ-26, Class C-1

NV-1715-0842

EKA-3B AN/ALQ-92 Countermeasures Set Intermediate Maintenance

NV-1715-0361

Electronics Technician Class C, R-1524(D) WMR Countermeasures Receiver Maintenance

NV-1715-0248

Electronic Warfare Technician, Class A (A-3). Electronic Countermeasures Systems Maintenance

NV-1715-0781

F-B/J-RF-4B AN/ALQ-88 Countermeasures Set Intermediate Maintenance

NV-1715-0393

RA-5C AN/ALQ-61 Countermeasures Set Special Support Equipment

NV-1715-0686

RA-5C AN/ALQ-61 Passive Electronic Countermeasures Organizational Maintenance

NV-1715-0366

RA-5C Semi-Automatic Test Equipment, Programmer, System Analyzer and Countermeasures Test Bench AN/ULM-I Intermediate Maintenance

NV-1715-0176

Coupler

Antenna Coupler CU-1441 Combined Maintenance

NV-1715-0132

AN/URC-21 Radio Transmitting Set and AN/URA-38 Antenna Coupler Group Intermediate Maintenance

NV-1715-0058

Coupler, Antenna CU-1441/BRR Checkout and Maintenance

NV-1715-0132

Electronics Technician, AN/URC-9, AN/SRC-20, AN/SRC-21 Radio Sets with AN/SRA-33 Antenna Coupler Maintenance

NV-1715-0088

Course

EA-6B Course Attitude Data Transmitter Intermediate Maintenance

NV-1735-0192

T-1073/A Course Attitude Data Transmitter, Intermediate Maintenance (EA-6B)

NV-1715-0192

Court

Legal Clerk and Court Reporting

NV-1407-0002

Coxswain

Assault Boat Coxswain

NV-1708-0006

CP-413/ASA-27

Computer Detector (CP-413/ASA-27) Intermediate Maintenance

NV-1715-0111

E-2A Computer Detector (CP-413/ASA-27) and Computer Detector Test Console (OA-3731/ASM-76) Intermediate Maintenance

NV-1715-0340

CP-642A

Data Systems Technician, Class A (Phase A-2)—Part III, CP-642A

NV-1715-0044

Data Systems Technician, Class A (Phase A-2)—Part II, CP-642A/642B/USQ-20(V) Digital Data Computer Maintenance

NV-1715-0044

Data Systems Technicians, Class A

NV-1715-0400

Cryptologic

Cryptologic Technician A (Administration)—Class A

NV-1715-0065

Cryptologic Technician A

NV-1715-0281

A-3 Bombing Data Computer CP-66A/ASB-I Maintenance

NV-1715-0263

CP-901/ASQ-114

CP-901/ASQ-114, Computer

NV-1402-0040

CP-967/UVR

CP-967/UVR Computer Maintenance (Electronics Technician, Class CI)

NV-1715-0016

Craft

Landing Craft Beach and Surf Salvage

NV-1708-0002

River Assault Craft Training

NV-1708-0001

River Patrol Craft Training

NV-1722-0010

Crash

Aviation Crash Crewman Class C

NV-1728-0006

Crew

Swift Boat Crew Training

NV-1722-0009

Weapons Systems Technician (Crew Member) Organizational Maintenance

NV-1715-0411

Weapon System Specialist (Crew Leader) Maintenance

NV-1715-0410

Crushing

EO "C" Crushing and Screening Operations

NV-1710-0043

Cryogenator

Compressed Gases Cryogenic Equipment Maintenance, Class C

NV-1601-0001

Cryogenics

Cryogenics, Class C

NV-1601-0010

Cryptanalysis

Reserve Cryptologic Technician, Basic Cryptanalysis

NV-1715-0824

Reserve Cryptologic Technician—Intermediate Cryptanalysis

NV-1715-0820

Reserve Naval Security Group-131 Intermediate Cryptanalysis

NV-1715-0820

Cryptographer

Cryptographer

MC-1409-0003

Cryptographic

Cryptographic Equipment Maintenance Preparatory

MC-1715-0065

Cryptologic

Cryptologic Technician A

NV-1715-0400

Cryptologic Technician Collection
### K-34 KEYWORD INDEX

**Measuring Equipment (DAME)**
- Maintenance (Electronics Technician, Class C)
  - NV-1715-0175

**Electronics Technician Class C**
- NV-1715-0175

**DD-0602-0001**
- NV-1715-0022

**DD-0602-0002**
- NV-1715-0022

**Data**
- A-3 Bombing Data Computer CP-66A/ASB-1 Maintenance
  - NV-1715-0263

**Airborne Tactical Data System Operations, Class O**
- NV-1402-0036

**AN/ASA-16 Data Display Group Maintenance Training**
- NV-1715-0488

**Automatic Flight Control System (AN/ASW-15) And Air Data Computer**
- (560727-1) Organizational Maintenance — NV-1715-0741

**Aviation Maintenance Data Analysis, Class C**
- NV-1402-0018

**Basic Naval Tactical Data System (NTDS) Air Intercept Controller**
- NV-1402-0048

**C-2A Automatic Flight Control System (AN/ASW-15) And Air Data Computer**
- (A/A24G-13) Intermediate Maintenance — NV-1715-0461

**Data Analysis, Class C**
- NV-1402-0018

**Data Analysis (Ship's 3-M System) Class C**
- NV-1408-0005

**Data Base Management—LCC**
- NV-1715-0015

**Amphibious Support Information System Language—Operator**
- NV-1402-0034

**Data Computer and Transmission**
- NV-1715-0015

**Loops Fire Control System (FCS) Mk 80, Class C1**
- NV-1715-0895

**Data Gathering Set AN/BQH-5(V)2 Basic Maintenance**
- NV-1715-0502

**Data Handling Repair**
- NV-1715-0502

**Data Systems Technician Class C Data Display Group Maintenance**
- NV-1715-0006

**Data Systems Technician Class C Data Transmission Group, Data Terminal Sets Intermediate Maintenance**
- NV-1715-0006

**Data Systems Technician—Data Conversion Group Equipment Maintenance, Class C**
- NV-1715-0006

**Data Systems Technician (Shipboard Tactical Data Systems Officer and Senior Technician Maintenance) Class C**
- NV-1715-0012

**Data Systems Technician (Shipboard Tactical Data Systems Senior Technician) Class C**
- NV-1715-0012

**DD963 Naval Tactical Data System, (NTDS) Data Utilization**
- NV-1402-0022

**DD963 Naval Tactical Data Systems (NTDS) Data Input**
- NV-1402-0010

**E-2A AN/ACQ-2 and AN/ACQ-2A Data Terminal Sets Intermediate Maintenance**
- NV-1715-0024

**E-2A AN/ACQ-52 Data Communications System Special Support Equipment Intermediate Maintenance**
- NV-1215-0027

**E-2A AN/ACQ-52 Data Communication System Special Support Equipment Intermediate Maintenance**
- NV-1715-0312

- NV-1715-0460

**E-2A Automatic Flight Control System And Air Data Computer Semi-Automatic Check-out Equipment Operation and Maintenance**
- NV-1715-0478

**E-2A Digital Data Communications System (AN/ASW-14A) Intermediate Maintenance**
- NV-1715-0347

**F-2B Airborne Tactical Data Systems (ATDS) Operator Training**
- NV-1715-0777

**EA-6B Course Attitude Data Transmitter Intermediate Maintenance**
- NV-1715-0192

**Electronics Technician Class C, Data Transmission Group, Transmission Equipment Maintenance**
- NV-1715-0026

**Electronic Warfare Technician, Class C—Radar Data Recorder-Reproducer AN/SPH-2 and Video Recorder-Reproducer 15-E-27 Maintenance**
- NV-1715-0296

**F-4B Air Data Computer Set Intermediate Maintenance**
- NV-1715-0552

**F-4J Data Link System Intermediate Maintenance**
- NV-1715-0499

**IBM System 360 (OS) Data Control Techniques**
- MC-1402-0047

**IBM System 360 (OS) Data Management**
- MC-1402-0039

**IBM System 300 OS System Control and Data Management**
- MC-1402-0038

**Intermediate Maintenance Level Data Analysis, Class C**
- NV-1115-0001

**IOIC Intelligence Data System (Storage and Retrieval) Maintenance**
- NV-1715-0030

**Marine Tactical Data System (MTDS) Technician**
- NV-1715-0030

**Marine Tactical Data System (MTDS) Weapons Controller/Operator**
- NV-1715-0021

**Mobile Data Communications, Terminal Technician**
- MC-1715-0081

**Naval Data Automated Computer (NAVDAC) Advanced Training**
- NV-1715-0926

**Naval Tactical Data System (NTDS) Basic Programmer (Operational)**
- NV-1402-0002

**Naval Tactical Data System (NTDS) Data Input—Basic**
- NV-1715-0673

**Naval Tactical Data System (NTDS)—Data Utilization—Basic**
- NV-1402-0005

**Naval Tactical Data System (NTDS) Evaluator/Supervisor (USER) Class O/C**
- NV-1402-0032

**Naval Tactical Data System (NTDS) Tracker/Supervisor**
- NV-1715-0673

**Naval Tactical Data System Operations, Class O**
- NV-1402-0037

**Naval Tactical Data Systems Data Transmission Group Maintenance**
- NV-1715-0273

**Naval Tactical Data Systems (NTDS)—Data Collection and Display (Basic Enlisted)**
- NV-1402-0003

**Naval Tactical Data Systems (NTDS) Data Utilization**
- NV-1402-0006

**Naval Tactical Data Systems (NTDS) Evaluator/Supervisor**
- NV-1402-0006

**Naval Tactical Data Systems (NTDS) Intermediate Programmer Course (CS-1) Evaluator**
- NV-1402-0004

**NTDS Data Utilization**
- NV-1402-0005

**P-3 AN/AQ-5 Sonar Data Recording System Maintenance, No. 46**
- NV-1715-0121

**P-3C Digital Data Handling Organizational Maintenance**
- NV-1715-0230

**Polaris/Poseidon Radio Navigation Set AN/BRN-1, Data Processor Advanced Training, Class F1**
- NV-1715-0915

**Programmer, Naval Tactical Data System (NT1) Operational (Officer and Enlisted)**
- NV-1402-0031

**RA-SC Air Data and Flight Reference Systems**
- NV-1715-0454

**RA-SC Air Data and Flight Reference Systems Organizational Maintenance**
- NV-1715-0454

**RA-SC AN/AAY-1 Signal Data Converter Group Intermediate Maintenance**
- NV-1715-0424

- NV-1715-0542

**RA-SC Signal Data Converter Group Test Equipment Intermediate Maintenance**
- NV-1715-0032

**RF-4B AN/ASQ-90 Airborne Data Annotation System Maintenance**
- NV-1715-0240

**Shipboard Tactical Data Systems Maintenance**
- NV-1715-0241

**SSBN Navigation Data Assimilation Computer Mk 2 Mod 4, Stabilization Data Computer Mk 2 Mod 4**
- NV-1715-0427

**T-1073A/A Course Attitude Data Transmitter Intermediate Maintenance**
Data Processing

- Advanced Data Systems Officer
- Data Systems Technician, Class A (DS "A")
- Data Systems Technician, Class A (DS "A")—Part II CP-642B
- Data Systems Technician, Class A, Phase A-1
- Data Systems Technician, Class A (Phase A-2)—Part II CP-642A/642B/USQ-20(V) Digital Data Computer Maintenance

DD963

- Basic Circuit Concepts for Gas Turbine Controls, Class C1
- Centralized Damage Control Console Operator, Class C1
- Centralized Damage Control System Console Maintenance, Class C1
- Facilities Control Quality Monitoring and Message Processing (FCQM) Operator, Class F-1

KEYWORD INDEX

- Facilities Control Quality Monitoring
- Processing Unit Operators
- Naval Tactical Data System (NTDS) Data Utilization
- Naval Tactical Data Systems (NTDS) Data Input
- Radio Communications System Maintenance for DD963 Class Ships, Class C-1
- Degaussing System for DD963 Class Destroyer, Class C1

Deception

- Electronic Warfare Deception Repeater Systems Maintenance, AN/SLQ-22(B) (V)
- Electronic Warfare Deception Repeater Systems Maintenance, AN/SLQ-22(B) (V)
- Electronic Warfare Technician, Class A (A-3), Deception Repeater Systems Maintenance

Decision

- Defense Economics and Decision Making Off-Campus Graduate Seminar
- Defense Economics and Decision Making Self-Administered Seminar (Naval War College)
- Naval War College Correspondence Course in Defense Economics and Decision Making

Deck

- Prospective Officer of the Deck

DECQ

- A3B, RA3B, EA3B AN/ALQ-35 DEMC System Maintenance
- RA-SC AN/ALQ-55 DEMC System Maintenance
- RA-SC Communication Navigation Identification (CNI) and DECM Organizational Maintenance

Decoder

- RT-541/ASQ Receiver/Transmitter and KY-30/ASQ Pulse Decoder and RT-541/ASQ-19 Receiver/Transmitter and KY-312/ASQ-19 Pulse Decoder Intermediate Maintenance

Decoy

- Shipboard Decoy System (CHAFFROC) Launcher Operation and Maintenance

Deep Sea

- Deep Sea Divers
- Helium-Oxygen Diving Officers
- Medical Deep Sea Diving Technician
<table>
<thead>
<tr>
<th>Defense</th>
<th>NV-1606-0014</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC Warfare Defense Afloat</td>
<td>NV-0802-0008</td>
</tr>
<tr>
<td>Atomic, Biological and Chemical (ABC)</td>
<td>NV-0802-0001</td>
</tr>
<tr>
<td>Defense for Shipboard Instructors</td>
<td>NV-1715-0570</td>
</tr>
<tr>
<td>Basic Point Defense Officer</td>
<td>NV-1801-0005</td>
</tr>
<tr>
<td>Basic Point Defense Surface Missile System</td>
<td>NV-1715-0778</td>
</tr>
<tr>
<td>Defense Economics and Decision Making Off-Campus Graduate Seminar</td>
<td>NV-1511-0003</td>
</tr>
<tr>
<td>Defense Economics and Decision Making Self-Administered Seminar (Naval War College)</td>
<td>NV-1511-0008</td>
</tr>
<tr>
<td>Defense Equal Opportunity Management Institute</td>
<td>DD-1512-0001</td>
</tr>
<tr>
<td>Defense Intelligence Course</td>
<td>DD-1511-0004</td>
</tr>
<tr>
<td>Defense Language Institute Advanced Courses</td>
<td>DD-0602-0007</td>
</tr>
<tr>
<td>Defense Language Institute Aural Comprehension Courses</td>
<td>DD-0602-0003</td>
</tr>
<tr>
<td>Defense Language Institute Basic Courses (1954-1956)</td>
<td>DD-0602-0001</td>
</tr>
<tr>
<td>Defense Language Institute Basic Courses (After 1956)</td>
<td>DD-0602-0002</td>
</tr>
<tr>
<td>Defense Language Institute Courses - East Coast Branch</td>
<td>DD-0602-0009</td>
</tr>
<tr>
<td>Defense Language Institute Extended or Basic-Intermediate Courses</td>
<td>DD-0602-0005</td>
</tr>
<tr>
<td>Defense Language Institute Intermediate Courses</td>
<td>DD-0602-0006</td>
</tr>
<tr>
<td>Defense Language Institute Short Basic Courses</td>
<td>DD-0602-0004</td>
</tr>
<tr>
<td>Defense Language Institute Special Courses</td>
<td>DD-0602-0008</td>
</tr>
<tr>
<td>Defense Language Institute Support Command Courses</td>
<td>DD-0602-0010</td>
</tr>
<tr>
<td>Defense Management Systems</td>
<td>NV-1408-0003</td>
</tr>
<tr>
<td>Defense Race Relations Institute</td>
<td>DD-1512-0001</td>
</tr>
<tr>
<td>Defense Security Assistance Management Core</td>
<td>DD-1408-0001</td>
</tr>
<tr>
<td>Defense Security Assistance Management Overseas</td>
<td>DD-0327-0001</td>
</tr>
<tr>
<td>Inter-American Defense College</td>
<td>DD-1511-0005</td>
</tr>
<tr>
<td>Naval War College Correspondence Course in Defense Economics and Decision Making</td>
<td>NV-1511-0005</td>
</tr>
<tr>
<td>NBC Defense for Petty Officers</td>
<td>NV-1728-0009</td>
</tr>
<tr>
<td>Nuclear, Biological and Chemical (NBC) Defense Ashore</td>
<td>NV-0801-0005</td>
</tr>
<tr>
<td>Nuclear, Biological and Chemical (NBC) Defense for Petty Officers</td>
<td>NV-0801-0004</td>
</tr>
<tr>
<td>Nuclear, Biological and Chemical (NBC) Warfare Defense Ashore</td>
<td>NV-0801-0005</td>
</tr>
<tr>
<td>Nuclear, Biological and Chemical (NBC) Warfare Defense for Petty Officers</td>
<td>NV-0801-0004</td>
</tr>
<tr>
<td>Nuclear, Biological and Chemical (NBC) Warfare Defense for Petty Officers</td>
<td>NV-0801-0005</td>
</tr>
<tr>
<td>Demogauing</td>
<td>NV-1600-0007</td>
</tr>
<tr>
<td>Basic Underwater Demolition/Seal Team Training</td>
<td>NV-1600-0007</td>
</tr>
<tr>
<td>Basic Underwater Demolition/Seal Training</td>
<td>NV-1600-0007</td>
</tr>
<tr>
<td>Underwater Demolition Training</td>
<td>NV-1600-0007</td>
</tr>
<tr>
<td>Underwater Demolition Training (Enlisted)</td>
<td>NV-1600-0007</td>
</tr>
<tr>
<td>Underwater Demolition Training (Officer)</td>
<td>NV-1600-0007</td>
</tr>
<tr>
<td>Dental</td>
<td>NV-0701-0004</td>
</tr>
<tr>
<td>Basic Dental Repair Technician</td>
<td>NV-1715-0680</td>
</tr>
<tr>
<td>Class A General Dental Technician School</td>
<td>NV-0701-0006</td>
</tr>
<tr>
<td>Class B General Dental Technician</td>
<td>NV-0701-0009</td>
</tr>
<tr>
<td>Class B General Dental Technician School</td>
<td>NV-0701-0006</td>
</tr>
<tr>
<td>Dental Officer Indocitration</td>
<td>NV-0701-0005</td>
</tr>
<tr>
<td>Dental Prosthetic Technician School, Class C</td>
<td>NV-0701-0006</td>
</tr>
<tr>
<td>Dental Prosthetic Technician School, Class C</td>
<td>NV-0701-0007</td>
</tr>
<tr>
<td>Dental Repair Technician, Basic</td>
<td>NV-1715-0680</td>
</tr>
<tr>
<td>Dental Technician, Advanced General, Class B</td>
<td>NV-0701-0009</td>
</tr>
<tr>
<td>Dental Technician, Advanced Prosthetic, Class B</td>
<td>NV-0701-0003</td>
</tr>
<tr>
<td>Dental Technician A School</td>
<td>NV-0701-0006</td>
</tr>
<tr>
<td>Dental Technician, General, Advanced, Class P</td>
<td>NV-0701-0005</td>
</tr>
<tr>
<td>Dental Technician, General, Class A</td>
<td>NV-0701-0006</td>
</tr>
<tr>
<td>Dental Technician, Maxillofacial Prosthetic</td>
<td>NV-0701-0001</td>
</tr>
<tr>
<td>Dental Technician, Maxillofacial Prosthetic, Class B</td>
<td>NV-0701-0001</td>
</tr>
<tr>
<td>Dental Technician, Prosthetic, Advanced, Class B</td>
<td>NV-0701-0003</td>
</tr>
<tr>
<td>Dental Technician, Prosthetic, Class C</td>
<td>NV-0701-0007</td>
</tr>
<tr>
<td>Dental Technician Repair, Class C</td>
<td>NV-1715-0680</td>
</tr>
<tr>
<td>Dental Technician Research Assistant, Class C</td>
<td>NV-0701-0004</td>
</tr>
<tr>
<td>General Dental Technician Advanced, Class B</td>
<td>NV-0701-0005</td>
</tr>
<tr>
<td>General Dental Technician School, Class B</td>
<td>NV-0701-0005</td>
</tr>
<tr>
<td>Medical Administrative Technician, Dental</td>
<td>NV-1408-0021</td>
</tr>
<tr>
<td>Medical Administrative Technician (Dental), Class C</td>
<td>NV-1408-0021</td>
</tr>
<tr>
<td>Depot</td>
<td>NV-1712-0013</td>
</tr>
<tr>
<td>Depot Level Boat Repairman (Engineman)</td>
<td>NV-1712-0013</td>
</tr>
<tr>
<td>Depth</td>
<td>NV-1715-0934</td>
</tr>
<tr>
<td>Electronic Hovering and Depth Control Combined Maintenance</td>
<td>NV-1715-0934</td>
</tr>
<tr>
<td>Design</td>
<td>NV-0709-0013</td>
</tr>
<tr>
<td>Data Processing Technician, Class C, Systems Analysis and Design</td>
<td>NV-1402-0001</td>
</tr>
<tr>
<td>Designation</td>
<td>NV-1715-0264</td>
</tr>
<tr>
<td>Target Designation System Mk 5 Maintenance</td>
<td>NV-1715-0264</td>
</tr>
<tr>
<td>Target Designation System Mk 5 Shipboard Maintenance</td>
<td>NV-1715-0315</td>
</tr>
<tr>
<td>Destroyer</td>
<td>NV-1722-0006</td>
</tr>
<tr>
<td>Destroyer Officer</td>
<td>NV-1722-0006</td>
</tr>
<tr>
<td>SSM Demogauing System for DD963 Class Destroyer, Class C</td>
<td>NV-1601-0017</td>
</tr>
<tr>
<td>Detecting</td>
<td>NV-1715-022</td>
</tr>
<tr>
<td>RA-5C AN/AAS-21 Infrared Detecting Set Intermediate Maintenance</td>
<td>NV-1715-022</td>
</tr>
<tr>
<td>Sonar Detecting Ranging Set AN/BQS-11/12/13 Combined Maintenance</td>
<td>NV-1715-0855</td>
</tr>
<tr>
<td>Sonar Detecting/Ranging Set AN/BQS-8/10/14/20 Combined Maintenance</td>
<td>NV-1715-0868</td>
</tr>
<tr>
<td>Sonar Detecting/Ranging Set AN/SQS-26CX</td>
<td>NV-1715-0405</td>
</tr>
<tr>
<td>Detection</td>
<td>NV-1715-0769</td>
</tr>
<tr>
<td>E-2B Detection System Organizational Maintenance</td>
<td>NV-1715-0769</td>
</tr>
<tr>
<td>Detector</td>
<td>NV-1715-0111</td>
</tr>
<tr>
<td>Computer Detector (CP-413/ASA-27) Intermediate Maintenance</td>
<td>NV-1715-0111</td>
</tr>
<tr>
<td>E-2A Computer Detector (CP-413/ASA-27) and Computer Detector Test Console (OA-3731/ASM-76) Intermediate Maintenance</td>
<td>NV-1715-0340</td>
</tr>
<tr>
<td>OA-3731/ASM-76 Computer Detector Test Console Intermediate Maintenance</td>
<td>NV-1715-0798</td>
</tr>
<tr>
<td>Determination</td>
<td>NV-1715-0798</td>
</tr>
<tr>
<td>Self-Noise Determination and Classification</td>
<td>NV-1715-0798</td>
</tr>
</tbody>
</table>
Dial
Mobile Dial Central Technician
MC-1715-0008

Diary
Unit Diary Clerk
MC-1403-0001

Diesel
American Locomotive (ALCO 251-C) Diesel Engine, Class C1
NV-1712-0010
Detroit Diesel V71 Series Engine Maintenance, Class C1
NV-1712-0019
Diesel Engine and Electrical Operation and Maintenance (Caterpillar Models D-397-399, D-333, D-353, D-379)
CG-1712-0002
Diesel Engine Technician, Class C1
NV-1712-0020
Engineman, Class C, American Locomotive (ALCO 251-C) Diesel Engine
NV-1712-0010
Engineer Foreman-Morse 84D 1/9 DR Diesel Engine
NV-1712-0014
Enginemen, Class C, General Motors 12-567E Diesel Engine
NV-1712-0006
Enginemen, Class C, General Motors 16-578A Diesel Engine
NV-1712-0005
Enginemen, Class C, General Motors 286A Diesel Engine
NV-1712-0007
Enginemen, Diesel Engine, Class C
NV-1712-0017
Fairbanks Morse 385I 1/4 Diesel Engine
NV-1712-0003
FM388D 1/8 DR Diesel Engine, Class C1
NV-1712-0014
GM-12-567E/645E Diesel Engine, Class C1
NV-1712-0006
GM-16-278A Diesel Engine, Class C1
NV-1712-0005
GM 268A Diesel Engine, Class C1
NV-1712-0007
Mine Warfare Packard diesel Engine (Class C)
NV-1712-0012
Mine Warfare Waukesha Diesel Engine, Class C
NV-1712-0004
SSN/SSBN Diesel Engine (Fairbanks-Morse) Maintenance
NV-1712-0002
Waukesha Diesel Engine
NV-1712-0001

DIFAR
DIFAR Training for Acoustic Operators PJA/B(D) and PJC
NV-1715-0704
Jezebel Gram Analysis for AW’s PJA/B (DIFAR Retrofit)
NV-1715-0704

Difference
AN/SPS-40B/C/D Radar Set Difference Maintenance
NV-1715-0745
E-2B OA-8206/ASA-27A Difference Organizational Maintenance
NV-1715-0508

Dial
Digital
A-5A RA-5C AN/ASB-12 Verdan and Digital Test Equipment
Basic Digital Computer Theory
NV-1402-0044
Basic Digital Fundamentals
NV-1715-0004
Basic Digital Fundamentals, Class F1
NV-1715-0004
Common User Digital Information Exchange System (CUDIXS) Maintenance
NV-1715-00872
Common Users Digital Information Exchange System (CUDIXS) Operators
NV-1715-00879
Data Systems Technician, Class A (Phase A-2)—Part II, CP-642A/642B/USQ-20(V) Digital Data Computer Maintenance
NV-1715-0044
Digital Analog, and Hybrid Computer Fundamentals
NV-1402-0013
Digital and Analog Computer Fundamentals
NV-1402-0012
Digital Fundamentals
NV-1402-0011
Digital Fundamentals, Basic
NV-1715-0004
Digital Principles and Techniques (Electronics Technician, Class C1)
NV-1402-0027
Digital Repair
NV-1715-0018
E-2A Digital Data Communications System (AN/ASW-14A) Intermediate Maintenance
NV-1715-0347
Fire Control System (FCS) Mk 88 Mod 1 Digital Control Computer
NV-1715-0353
Fundamentals of Digital Logic
MC-1402-0001
Missile Test and Readiness Equipment, (MTERE) Mk 3 Programmer/Timer
NV-1715-0084
Digital, Multimeter Advanced Training, Class C1
NV-1715-0884
P-3C Digital Data Handling Organizational Maintenance
NV-1715-0330
Programming, Digital Computer CP-642A&B/USQ-20 (Machine Language and, CS-1 Assembly Language)
NV-1402-0033
RA-5C AN/ASB-12 Verdan and Digital Test Equipment Intermediate Maintenance
NV-1402-0044
Tactical Air Operations Central (TAOC) Digital Repair
MC-1715-0018
Tactical Data Systems Digital Repair
MC-1715-0035
Terra Digital Systems with Digital Fire Control Systems (MFS Mk 76-6/AFCS)
NV-1715-0658
Direction
Cryptologic Technician O, High
K-38 KEYWORD INDEX

AN/ASRM-398 Projected Map Display
Set (PMDS) Intermediate Maintenance
NV-1715-0529

AN/ASRM-99 Projected Map Display
Set (PMDS) Intermediate Maintenance
NV-1715-0162

AN/AVM-11(V) Head Up Display Test
Set Intermediate Maintenance (A-7E)
NV-1704-0229

Missile Test and Readiness Equipment
(MTRE) Mk 3 Measurement, Display
and Simulation Groups Advanced
Training
NV-1715-0908

Missile Test and Readiness Equipment
(MTRE) Mk 3 Mods 4 and 5
Measurement, Display and Simulation
Groups Advanced Training, Class F1
NV-1715-0908

Naval Tactial Data Systems (NTDS)—
Data Collection and Display (Basic
Enlisted)
NV-1402-0003

P-3 AN/ASA-16 Display System
Intermediate Maintenance
NV-1715-0463

Disposal
Nuclear Weapons Disposal
NV-0802-0007

Distilling
Submarine Low Pressure and Vapor
Compression Distilling Units, Enlisted
NV-1710-0025

Distribution
Electrical Distribution and Control
NV-1714-0005

Distributor
Teletypewriter Reperforator TT-252/UG
Series and Teletypewriter Distributor
TT187/UG Series
NV-1715-0664

Teletypewriter Reperforator TT-253/UG
Series and Transmitter Distributor TT-
187/UG Series Teletype machines.
NV-1715-0664

Disturbed
Disturbed Line of Sight Gunfire Control
System Maintenance
NV-1715-0759

Diver
Diver First Class
NV-1606-0008

Diver Second Class
NV-1606-0010

EOD Diver Candidates
NV-1606-0010

Master Diver Qualification
NV-1606-0019

Scuba Diver
NV-1606-0016

Underwater Photographer/Scuba Diver
NV-1606-0011

Divers
Deep Sea Divers
NV-1606-0014

Divine
Deep Sea Helium-Oxygen Diving
Officers.
NV-1606-0009

Medical Deep Sea Diving Technician
NV-1606-0014

Medical Deep Sea Diving Technician
NV-1606-0014

Medical Department Diving Officers
NV-1606-0017

Ship Salvage Diving Officers
NV-1606-0015

DLG

DLG-16 (MOD) Torrier Weapons
System
NV-2202-0073

DLG 6-16 Combat System
NV-1715-0764

DLG 6-16 (MOD) Torrier Weapons
System Missile Fire Control System
(MFCS) Mk 76 Mod 5
NV-2202-0073

DLG-28
Terrier Weapon System DLG-28 (Class
System Level Maintenance)
NV-1715-0804

Documentary
Still Documentary Photography C1
NV-1709-0010

Doppler
A-7 AN/APN-190 Doppler Radar
Navigation System Intermediate
Maintenance
NV-1715-0200

AN/APM 341 (V) Doppler Test Set
Intermediate Maintenance
NV-1715-0360

AN/APN-122 Doppler Navigation
System Maintenance
NV-1715-0483

AN/APN-153(V) Doppler Radar
Navigation System Intermediate
Maintenance
NV-1715-0507

AN/APN-175 Doppler Radar,
Navigation
NV-1715-0507

AN/ASA-47 Doppler/Airmass
Navigational Computer System
Intermediate Maintenance
NV-1715-0582

S-2D/E AN/APN-122 Doppler Radar
Navigation System Intermediate
NV-1715-0422

SH-3A AN/APN-130 Doppler Radar
Navigation Maintenance
NV-1715-0237

DOS
IBM System 360 Disk Operating System
(DOS) Operations
NV-1715-0200

IBM System 360 (DOS) COBOL
Programming
MC-1402-0018

Douglas
Douglas Model D-704 and Sargent-
Fletcher Model 31-300 Air Refueling
Stores Organizational Maintenance
NV-1704-0046

Drafting
Cartographic Drafting
DD-1713-0002

Construction Drafting
DD-1713-0003

Draftsman
Illustrator Draftsman, Class A
NV-1715-0002

DRAI

Mk 9 Mod 4 Dead Reckoning Analyzer
Indicator (DRAI) and Mk 6 Mod 4B
Dead Reckoning Tracker (DRT), Class C
NV-1715-0344

Drill
Drill Instructor
MC-2204-0001

Drill Instructor
Drill Instructor
MC-2204-0001

Drone
Target Drone, Class C
NV-1704-0044

DRT
Mk 9 Mod 4 Dead Reckoning Analyzer
Indicator (DRAI) and Mk 6 Mod 4B
Dead Reckoning Tracker (DRT), Class C
NV-1715-0344

Drug
Drug Abuse Education Specialist
NV-0799-0004

Drug Abuse Program Officers
NV-0801-0006

Drug and Alcohol Program Advisor
NV-0799-0005

Navy Drug Abuse Counselor
NV-0801-0007

Drum
Drum and Bugle Corps
MC-1205-0002

DS
DS **A**
Data Systems Technician, Class A (DS
"A")
NV-1715-0753.

DSOT
Tartar DSOT Analysis Missile Fire
Control System (MFCS) Mk 74 Mod 0
NV-1715-0072

DVARS
AN/APN-187 DVARS Intermediate
Maintenance
NV-1715-0299

Dynalec
Dynalec Automatic Telephone System
Maintenance, Class C1
NV-1404-0007

E-1B
E-1B Aircraft Pilot Training
NV-1606-0033

E-1B Airframe and Hydraulic Systems
Organizational Maintenance
NV-1704-0195

E-1B AN/APS-82 Radar System
Maintenance
NV-1715-0287

E-1B AN/ASN-28 Radar System
Maintenance
NV-1715-0164

E-1B ARC-97 Radio Repeater System
Maintenance
NV-1715-0164

E-1B Electrical and Instrument Systems
Organizational Maintenance
NV-1715-0195

E-1B Electronic Systems Organizational,
Maintenance
NV-1714-0013

E-1B Integrated Electrical System
Organizational Maintenance
NV-1715-0698

E-1B MH-67 Automatic Flight Control
System Intermediate Maintenance
NV-1704-0034

E-1B Naval Flight Officer and
Aircrewman
NV-1704-0233

E-1B Power Plants and Related Systems
Organizational Maintenance

\( NV \)
<table>
<thead>
<tr>
<th>KEYWORD INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Economics</strong></td>
</tr>
<tr>
<td>Defense Economics and Decision Making Off-Campus Graduate Seminar</td>
</tr>
<tr>
<td>Defense Economics and Decision Making Self-Administered Seminar (Naval War College)</td>
</tr>
<tr>
<td>Naval War College Correspondence Course in Defense Economics and Decision Making</td>
</tr>
<tr>
<td><strong>Editor</strong></td>
</tr>
<tr>
<td>Newspaper Editor</td>
</tr>
<tr>
<td><strong>Education</strong></td>
</tr>
<tr>
<td>Drug Abuse Education Specialist</td>
</tr>
<tr>
<td>Troop Information and Education Enlisted</td>
</tr>
<tr>
<td>Troop Information and Education Officer</td>
</tr>
<tr>
<td>E, E &amp; H, Class P</td>
</tr>
<tr>
<td><strong>Egress</strong></td>
</tr>
<tr>
<td>F-4B/J Egress and Environmental Control Systems Maintenance</td>
</tr>
<tr>
<td>F-4B/J Egress and Environmental Control Systems Organizational Maintenance</td>
</tr>
<tr>
<td><strong>EKA-3B</strong></td>
</tr>
<tr>
<td>EKA-3B AN/ALQ-92 Countermeasures Set Intermediate Maintenance</td>
</tr>
<tr>
<td>EKA-3B AN/ASN-66B Navigational Computer Set Intermediate Maintenance</td>
</tr>
<tr>
<td><strong>Electric</strong></td>
</tr>
<tr>
<td>Automatic Electric—Strowger Switching Telephone Systems Maintenance, Class CI</td>
</tr>
<tr>
<td>Aviation Support Equipment Mobile Electric Power Plant Intermediate Maintenance</td>
</tr>
<tr>
<td>Aviation Support Equipment NC-10B Mobile Electric Power Plant Systems Intermediate Maintenance</td>
</tr>
<tr>
<td>Aviation Support Equipment NC-2A Mobile Electric Power Plant Intermediate Maintenance</td>
</tr>
<tr>
<td>Electric Hydraulic Power Drive for 5/38 Caliber Dual Purpose Single Mount</td>
</tr>
<tr>
<td>Electric Motor Rewind, Class C</td>
</tr>
<tr>
<td>General Electric LM100 and Solar T-1000 Emergency Gas Turbine Solar Main Propulsion Operation and Maintenance</td>
</tr>
<tr>
<td><strong>Electrical</strong></td>
</tr>
<tr>
<td>6L16 Oxygen Generator Electrical Technician</td>
</tr>
<tr>
<td>A-4M Electrical Systems Organizational Maintenance</td>
</tr>
<tr>
<td>A-6A Electrical Systems Intermediate Maintenance</td>
</tr>
<tr>
<td>A-6A Electrical Systems Maintenance</td>
</tr>
<tr>
<td>A-6A Electrical Systems Organizational Maintenance</td>
</tr>
<tr>
<td>A-7 Electrical and Instrument Systems Organizational Maintenance</td>
</tr>
<tr>
<td>Advanced Electrical/Electronics</td>
</tr>
<tr>
<td>AH-1J Electrical Organizational Maintenance</td>
</tr>
<tr>
<td>Aviation Support Equipment Technician, Class A (Electrical Specialty)</td>
</tr>
<tr>
<td>C-121 Electrical Systems</td>
</tr>
<tr>
<td>C-2A Electrical and Instruments Organizational Maintenance</td>
</tr>
<tr>
<td>CH-46A Electrical and Instrument Systems</td>
</tr>
<tr>
<td>&quot;CMC&quot; Automotive Electrical Maintenance</td>
</tr>
<tr>
<td>Construction Mechanic/Automotive Electrical Maintenance, Class C</td>
</tr>
<tr>
<td>Diesel Engine and Electrical Operation and Maintenance (Caterpillar Models D-397-399, D-333, D-343, D-353, D-379)</td>
</tr>
<tr>
<td>E-1B Electrical and Instrument Systems Organizational Maintenance</td>
</tr>
<tr>
<td>E-1B Integrated Electrical System Organizational Maintenance</td>
</tr>
<tr>
<td>E-2A Electrical and Instrument Maintenance</td>
</tr>
<tr>
<td>EC-130Q Electrical Systems and Circuits Organizational Maintenance</td>
</tr>
<tr>
<td>Electrical Accounting Machines (EAM)</td>
</tr>
<tr>
<td>Electrical Component Maintenance (UNREP)</td>
</tr>
<tr>
<td>Electrical Distribution and Control</td>
</tr>
<tr>
<td>Electrical/Electronic Fundamentals, Class P</td>
</tr>
<tr>
<td>Electrical Equipment Repairman</td>
</tr>
<tr>
<td>Electrical Gyrocompass Operation Maintenance Technician, Class C</td>
</tr>
<tr>
<td>F-14A Electrical Systems Technician (Crew Member) Organizational Maintenance</td>
</tr>
<tr>
<td>F-4B 20 KVA and AN/AJB-3A Electrical Organizational Maintenance</td>
</tr>
<tr>
<td>F-4B Aircraft Electrical System Organizational Maintenance</td>
</tr>
<tr>
<td>F-4B Aircraft Electrical System Organizational Maintenance</td>
</tr>
<tr>
<td>F-4 Basic Electrical Systems Organizational Maintenance</td>
</tr>
<tr>
<td>F-4B Electrical Systems Organizational Maintenance</td>
</tr>
<tr>
<td>F-4B/J Advanced Electrical Organizational Maintenance</td>
</tr>
<tr>
<td>F-4J Aircraft Electrical System Organizational Maintenance</td>
</tr>
<tr>
<td>F-4J Electrical Systems Organizational Maintenance</td>
</tr>
<tr>
<td>F-8 Electrical, Instruments, and Stabilization Systems Organizational Maintenance</td>
</tr>
<tr>
<td>F/RF-4B Aircraft Electrical System Maintenance</td>
</tr>
<tr>
<td>Gyrocompass Technician—Electrical, Class C</td>
</tr>
<tr>
<td>Gyrocompass Technician Electrical, Class CI</td>
</tr>
<tr>
<td>H-46 Electrical and Instrument Systems Organizational Maintenance</td>
</tr>
<tr>
<td>H-53 Electrical and Instruments Intermediate Maintenance</td>
</tr>
<tr>
<td>H-53 Electrical and Instruments Organizational Maintenance</td>
</tr>
<tr>
<td>KA-3A/KA-3B Electrical and Instruments Organizational Maintenance</td>
</tr>
<tr>
<td>KC-130F Electrical Systems and Circuits Maintenance</td>
</tr>
<tr>
<td>KC-130F Electrical System Organizational Maintenance</td>
</tr>
<tr>
<td>OV-10A Electrical Systems Organizational Maintenance</td>
</tr>
<tr>
<td>Oxygen Generator Electrical Model 6L16 (Enlisted)</td>
</tr>
<tr>
<td>P-3C Integrated Electrical Systems Organizational Maintenance</td>
</tr>
<tr>
<td>P-3 Electrical System Maintenance, No. 12</td>
</tr>
<tr>
<td>P-3 Electrical Systems Organizational Maintenance</td>
</tr>
<tr>
<td>P-3 Electrical Systems Intermediate Maintenance</td>
</tr>
<tr>
<td>P-3 Integrated Electrical System Organizational Maintenance</td>
</tr>
<tr>
<td>RA-5C Electrical and Indicating Systems (Intermediate Maintenance)</td>
</tr>
</tbody>
</table>
NV-1715-0375
NV-1715-0746
E-2B Electronic Systems Organizational Maintenance
NV-1715-0776
Electronic Fundamentals
MC-1715-0004
Electronic Hovering and Depth Control Combined Maintenance
NV-1715-0934
Electronic Hovering and Missile Compensation
NV-1715-0934
Electronics Technician, Class A—A-2 (Electronic Circuit Applications)
NV-1715-0723
Electronic Surveillance Maintenance (ESM) AN/WLR-3(V)2 Combined Maintenance
NV-1715-0469
Electronic Surveillance Maintenance (ESM) AN/WLR-6 Basic Operator
NV-1715-0500
Electronic Surveillance Maintenance (ESM) AN/WLR-6 Combined Maintenance
NV-1715-0301
Electronic Surveillance Maintenance (ESM) AN/WYQ-1, AN/BRQ-1 Combined Maintenance
NV-1715-0494
Electronic Surveillance Measures (ESM) Technician SSN 637 Class, Class C-1
NV-1715-0883
Electronic Surveillance Measures (ESM) Technician SSN 688 Class, Class C1
NV-1715-0889
Electronic Technician First Class by Correspondence
CG-1715-0038
Electronics Technician Second Class by Correspondence
CG-1715-0037
Electronic Teletype Repair
MC-1715-0064
Electronic Test Equipment Basic Operator, Class F1
NV-1715-0896
Electronic Test Equipment Operation
NV-1715-0896
Electronic Test Equipment Operation/Operational Use
NV-1715-0005
Electronic Warfare Electronic Support Measures System Maintenance
NV-1715-0780
Electronic Warfare Technician; Class A (A-2), Electronic Support Measures System Maintenance
NV-1715-0780
Electronic Warfare Technician, Class C, Radar Data Recorder-Replicorder AN/SPH-2 and Video Recorder-Replicorder 15-E-27 Maintenance
NV-1715-0296
F-14A Communications, Navigation/Displays, Electronic Warfare Organizational Maintenance Technician
NV-1704-0217
F-4J AN/AWG-10 and Electronic Counter Countermeasures Circuitry Intermediate Maintenance
NV-1715-0371
IOIC Electronic Data Processing Maintenance
NV-1715-0681
Junior Officer Electronic Indocination by Correspondence
CG-1715-0062
Miniature Electronic Repair Program, Class F-1
NV-1715-0815
Miniature/Micro miniature Electronic Repair (2M)
NV-1715-0815
Operations Officer Electronic Counter-Countermeasures (ECCM) MC-1715-0067
QH-50D Weapons System Electronic Intermediate Maintenance
NV-1715-0633
RA-SC AN/APN-120 Electronics Attenuator Intermediate Maintenance
NV-1715-0479
RA-SC Electronic Reconnaissance Line Maintenance
NV-1775-0246
RA-SC Electronic Reconnaissance Organizational Maintenance
NV-1715-0224
Solid State Theory for Electronic Equipment
NV-1715-0030
Technician Electronic Counter-Countermeasures MC-1715-0001
Electronics Air Control/Anti-aircraft Warfare Electronics Operator
MC-1704-0002
Air Control/Anti-aircraft Warfare Electronics Operator
MC-1704-0002
Air Control Electronics Operator, Automated System
MC-1704-0001
Air Traffic Control Electronics Maintenance Officers, Class O
NV-1715-0670
AN/ASQ-17B Integrated Electronics Central Intermediate Maintenance
NV-1715-0515
AN/ASQ-56A Integrated Electronics' Central and Related Systems Intermediate Maintenance
NV-1715-0515
AN/SRC-20, AN/SRC-21 Radio Sets Maintenance (Electronics Technician, Class I)
NV-1715-0088
Automated Aids-to-Navigation Electronics Maintenance CG-1715-0041
Aviation Electronics Fundamentals, Class A
NV-1715-0380
Aviation Electronics Intelligence, Class O/C
NV-1715-0504
Aviation Electronics Officers, Class O
NV-1715-0622
Aviation Electronics Technician, First Class, by Correspondence CG-1715-0032
Aviation Electronics Technician, Second Class, by Correspondence CG-1715-0031
Basic Electricity and Electronics for Torpedoman’s Mate
NV-1715-0532
Basic Electronics CG-1715-0043
MC-1715-0004
Basic Electronics (MA-40) NV-1715-0001
Basic Electronics Orientation
NV-1715-0480
Electricity, Electronics and Hydraulics, Class P
NV-1715-0445
Electronics Fundamentals CG-1715-0043
Electronics Maintenance Course NV-1715-0043
Interrogator Set AN/TPX-42(A(V) 5, Class C
NV-1715-0566
Electronics Officers Administrative NV-1715-0721
Electronics Officers, (Maintenance) NV-1715-0666
Electronics Specialized Training NV-1715-0169
Electronics Technical Officer, Class A
NV-1715-0345
Electronics Technician, AN/SRC-20, AM/SRC-21 Radio Set Maintenance NV-1715-0088
Electronics Technician, AN/UQC-9, AN/SRC-20, AN/SRC-21 Radio Sets with AN/SRA-33 Antenna Coupler Maintenance
NV-1715-0088
Electronics Technician First Class by Correspondence
CG-1715-0038
Electronics Technician Second Class by Correspondence
CG-1715-0037
Fundamentals of Electronics by Correspondence
CG-1715-0061
Ground Controlled Approach Electronics Maintenance, Radar Set AN/CPN-4A, Class C
NV-1715-0079
Ground Controlled Approach Electronics Maintenance (Radar Set AN/FPN-36), Class C
NV-1715-0217
Ground Controlled Approach/Radar Air Traffic Control Center Electronics Maintenance Officers, Class O
NV-1715-0670
Navy Nuclear Weapons Electronics, Calibration, and Maintenance (EC) (Gunner’s Mate Technician) NV-1715-0711
Photographic Electronics Systems, Class CC
NV-1715-0354
Polaris Electronics, Class A
NV-1715-0705
Prospective Electronics Material Officer—Pacific Fleet, Class C2
NV-1715-0816
QH-50C Weapons System Intermediate Electronics Maintenance
Electronics Technician

RA-5C AN/ALQ-61 Passive Electronics Countermeasures Organizational Maintenance

NV-1715-0568

RA-5C AN/ASQ-56A Systems Electronics Intermediate Maintenance

NV-1715-0366

RA-5C Flight Control and Electrical Systems Electronics Intermediate Maintenance

NV-1715-0145

RA-5C Flight Control System Electronics Intermediate Maintenance

NV-1715-0601

RA-5C Photographic Electronics Fundamentals

NV-1715-0152

RA-5C Photo Systems Electronics Sonar Maintenance

NV-1715-0543

Sonar Electronics Intermediate (SEI)

NV-1715-0867

Sonar Technician Class A-1 (Basic Electronics)

NV-1715-0580

Sonar Technician Class A-2 (Intermediate Electronics)

NV-1715-0578

Submarine Radiomian Electricity and Electronics

NV-1715-0316

Electronics Technician AIMS Mk XII IFF System Maintenance (Electronics Technician, Class C1)

NV-1715-0812

AN/SPN-40 Radio Navigation Set (Electronics Technician, Class C1)

NV-1715-0015

AN/SPS-29C Radar Set Maintenance (Electronics Technician, Class C1)

NV-1715-0756

AN/SPS-40B Radar Set Maintenance (Electronics Technician, Class C1)

NV-1715-0809

AN/SPS-43A/37A Radar Set Maintenance (Electronics Technician, Class C1)

NV-1715-0790

AN/SRN-9 Satellite Radio Navigation Set Maintenance (Electronics Technician, Class C1)

NV-1715-0099

AN/UCC-1 Series Telegraph Terminal Maintenance (Electronics Technician, Class C1)

NV-1715-0009

AN/UPN-12 Loran Receiver Set Maintenance (Electronics Technician, Class C1)

NV-1715-0814

AN/UFR-2 Inospheric Sounder Set Maintenance (Electronics Technician, Class C1)

NV-1715-0004

AN/URN-20 TACAN Maintenance (Electronics Technician, Class C1)

NV-1715-0004

AN/URT-23 Radio Transmitter With AN/URA-38 Antenna Coupler Maintenance (Electronics Technician, Class C1)

NV-1715-0193

AN/WRC-1 Radio Set Maintenance (Electronics Technician, Class C1)

NV-1715-0056

AN/WRT-2 Radio Transmitter Maintenance (Electronics Technician, Class C1)

NV-1715-0011

Aviation Electronics Technician (AT) Communications, Class A

CG-1405-0001

Aviation Electronics Technician/Aviation Fire Control Technician, Advanced Class B

NV-1715-0137

Aviation Electronics Technician, Class A

NV-1715-0001

Aviation Electronics Technician, Class A

NV-1715-0012

Aviation Electronics Technician, Class B

NV-1715-0299

Aviation Electronics Technician, Class B

NV-1715-0137

Aviation Electronics Technician Class C AN/ARC-94

CG-1405-0019

Aviation Electronics Technician N (Navigation), Class A

NV-1715-0097

Aviation Electronics Technician R (Radar), Class A

NV-1715-0295

Basic Electricity Phase of Class A Electronics Technician School

NV-1714-0009

CP-967/UYK Computer Maintenance (Electronics Technician, Class C1)

NV-1402-0016

Digital Principles and Techniques (Electronics Technician, Class C1)

NV-1402-0027

Electronics Technician A, Communications

NV-1715-0851

Electronics Technician AN/SPA-25 Indicator Group Class C Maintenance

NV-1715-0510

Electronics Technician, AN/SPA-34 Indicator Group, Class C

NV-1715-0310

Electronics Technician AN/SPS-40 Radar Set Maintenance

NV-1715-0557

Electronics Technician, AN/SRN-14, Omega Receiver Maintenance, Class C

NV-1715-0590

Electronics Technician AN/URN-20 Radio Set Class C Maintenance

NV-1715-0193

Electronics Technician, A School

CG-1715-0010

Electronics Technician, Class A

CG-1715-0010

Electronics Technician, Class A—A-1 (Electronic Fundamentals)

NV-1715-0722

Electronics Technician, Class A—A-2 (Electronic Circuit Applications)

NV-1715-0723

Electronics Technician, Class A—A-3 (Communications)

NV-1715-0724

Electronics Technician, Class A—A-3 (Radar)

NV-1715-0725

Electronics Technician, Class A (Communications)

NV-1715-0730

Electronics Technician, Class A (Communications/Radar and Sonar Specialties)

NV-1715-0727

KEYWORD INDEX

Electronics Technician, Class A, Phase SEIR (Shipboard Equipment Indocri nation, Communications)

NV-1715-0639

Electronics Technician, Class A, Phase SEIR (Shipboard Equipment Indocri nation, Radar)

NV-1715-0638

Electronics Technician, Class B

NV-1715-0731

Electronics Technician, Class C

NV-1715-0754

Electronics Technician, Class C

NV-1715-0745

Electronics Technician, Class C

NV-1715-0754

Electronics Technician, Class C, AN/FGC-60; AN/FTA-15 Multichannel Voice Frequency Telegraph Terminal Equipment

NV-1715-0019

Electronics Technician Class C, AN/FGC-73 Teletypewriter Routing Set and AN/UGR-14 Intronclic Page Printer

NV-1715-0006

Electronics Technician, Class C, AN/SPS-37 Omega Receiving Set Maintenance

NV-1715-0364

Electronics Technician, Class C, AN/SPS-29 Radar Set

NV-1715-0024

Electronics Technician, Class C, AN/SPS-37, 37A Radar Sets and AN/SPA-63 Countermeasures Receiving Group

NV-1715-0298

Electronics Technician, Class C, AN/SPS-37/A Radar Set and AN/SPA-63 Countermeasures Receiving Group

NV-1715-0298

Electronics Technician, Class C, AN/SPS-40A Radar Set Maintenance

NV-1715-0006

Electronics Technician, Class C, AN/SPS-8 Radar Maintenance

NV-1715-0305

Electronics Technician, Class C, AN/SRN-12 Omega Receiving Set Maintenance

NV-1715-0201

Electronics Technician, Class C, AN/SRN-9 Radio Navigation Set

NV-1715-0099

Electronics Technician, Class C, AN/SSM-5 Monitor Test Set Maintenance

NV-1715-0008

Electronics Technician, Class C, AN/UPN-12 Loran Receiving Set Maintenance, Class F-1

NV-1715-0814

Electronics Technician (Class C) AN/URC-58, AN/VRC-46 Radio Sets Maintenance

NV-1715-0095

Electronics Technician, Class C, AN/UHX-2B Facsimile Recording Equipment Maintenance

NV-1715-0012

Electronics Technician Class C, AN/VCC-2 Shipboard System

NV-1715-0016

Electronics Technician Class C, AN/WRT-2 and AN/WWR-2

NV-1715-0011

Electronics Technician Class C, Data Transmission Group, Transmission
<table>
<thead>
<tr>
<th>Keyword</th>
<th>Index Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronics Technician, Class C</td>
<td>NV-1715-0026</td>
</tr>
<tr>
<td>Electronics Technician, Class C, FB M Tender Navigation Maintenance</td>
<td>NV-1715-0007</td>
</tr>
<tr>
<td>Electronics Technician, Class C, SSBN</td>
<td>NV-1715-0027</td>
</tr>
<tr>
<td>Electronics Technician, Class C, Indicator Group AN/SPA-40</td>
<td>NV-1715-0013</td>
</tr>
<tr>
<td>Electronics Technician Radar Base</td>
<td>NV-1715-0854</td>
</tr>
<tr>
<td>Electronics Technician Radar, Class A</td>
<td>NV-1715-0854</td>
</tr>
<tr>
<td>Electronics Technician Radar Equipment Fundamentals, Class A</td>
<td>NV-1715-0855</td>
</tr>
<tr>
<td>Electronics Technician Radar—Nuclear Field, Class A</td>
<td>NV-1715-0856</td>
</tr>
<tr>
<td>Electronics Technician, Ship's Navigation and Aircraft Inertial Alignment System (SNAIAS), Class C Operator Maintenance</td>
<td>NV-1715-0014</td>
</tr>
<tr>
<td>Fleet Satellite Communications Fleet Broadcast Control Subsystem Maintenance (Electronics Technician, Class C1)</td>
<td>NV-1715-0874</td>
</tr>
<tr>
<td>Ground Controlled Approach Electronics Technician, AN/MPN-5, Class C</td>
<td>NV-1715-0080</td>
</tr>
<tr>
<td>Ground Controlled Approach Electronics Technician, Radar Set AN/MPN-1B, Class C</td>
<td>NV-1715-0078</td>
</tr>
<tr>
<td>Radar Repeater Systems Maintenance (Electronics Technician, Class C1)</td>
<td>NV-1715-0029</td>
</tr>
<tr>
<td>Electronic Warfare</td>
<td>NV-1715-0852</td>
</tr>
<tr>
<td>Advanced Naval Flight Officer Training, Airborne Electronic Warfare Phase</td>
<td>NV-1715-0569</td>
</tr>
<tr>
<td>Airborne Electronic Warfare, Class O</td>
<td>NV-1715-0002</td>
</tr>
<tr>
<td>Aviation Squadron Electronic Warfare (EW) Officer (EWO), Class A2</td>
<td>NV-1715-0831</td>
</tr>
<tr>
<td>Basic Electronic Warfare (EW) Equipment Operator</td>
<td>NV-1715-0017</td>
</tr>
<tr>
<td>DD-063 Class Electronic Warfare Suite</td>
<td>NV-1715-0817</td>
</tr>
<tr>
<td>Electronic Warfare Deception Repeater Systems Maintenance, AN/SLQ-22A(V)2</td>
<td>NV-1715-0781</td>
</tr>
<tr>
<td>Electronic Warfare Deception Repeater Systems Maintenance, AN/SLQ-22B(V)1</td>
<td>NV-1715-0781</td>
</tr>
<tr>
<td>Electronic Warfare Electronic Support Measures System Maintenance, Class A</td>
<td>NV-1715-0780</td>
</tr>
<tr>
<td>Electronic Warfare for Nonacoustic Operator, P3A(B/D)</td>
<td>NV-1715-0020</td>
</tr>
<tr>
<td>Electronic Warfare Fundamentals and Preventive Maintenance Technology</td>
<td>NV-1715-0779</td>
</tr>
<tr>
<td>Electronic Warfare Fundamentals/Technology, Class A</td>
<td>NV-1715-0779</td>
</tr>
<tr>
<td>Electronic Warfare Intelligence Officer</td>
<td>NV-1715-0021</td>
</tr>
<tr>
<td>Electronic Warfare Officers and Supervisors Course</td>
<td>NV-1715-0022</td>
</tr>
<tr>
<td>Electronic Warfare Technician, Class A (A-1), Fundamentals</td>
<td>NV-1715-0779</td>
</tr>
<tr>
<td>Electronic Warfare Technician, Class A (A-1), Fundamentals/Basic Operator</td>
<td>NV-1715-0779</td>
</tr>
<tr>
<td>Electronic Warfare Technician, Class A (A-2), Electronic Support Measures System Maintenance</td>
<td>NV-1715-0780</td>
</tr>
<tr>
<td>Electronic Warfare Technician, Class A (A-3), Deception Repeater Systems Maintenance</td>
<td>NV-1715-0781</td>
</tr>
<tr>
<td>Electronic Warfare Technician, Class A (A-3), Electronic Countermeasures Systems Maintenance</td>
<td>NV-1715-0781</td>
</tr>
<tr>
<td>Electronic Warfare Technician, Class A (A-4), Tactical Operations</td>
<td>NV-1715-0782</td>
</tr>
<tr>
<td>Electronic Warfare Technician, Class C, Radar Data Recorder/Reproducer AN/SPH-2 and Video Recorder-Reproducer 15-E-27 Maintenance</td>
<td>NV-17150296</td>
</tr>
<tr>
<td>F-14A Communications, Navigation/Displays, Electronic Warfare</td>
<td>NV-1715-0768</td>
</tr>
<tr>
<td>Elevator Read Only Memory (ROM) Encoder</td>
<td>NV-1715-0392</td>
</tr>
<tr>
<td>Elevator Control Maintenance, Class C1</td>
<td>NV-1715-0010</td>
</tr>
<tr>
<td>ELINT 637 Class ESM ELINT Technician</td>
<td>NV-1715-0888</td>
</tr>
<tr>
<td>Advanced Airborne ELINT Evaluation, Class C</td>
<td>NV-1715-0215</td>
</tr>
<tr>
<td>ELINT Evaluat ion Officer/Officer</td>
<td>NV-1715-0003</td>
</tr>
<tr>
<td>ESM ELINT Technician SSN 637 Class, Class C1</td>
<td>NV-1715-0888</td>
</tr>
<tr>
<td>Embarkation Amphibious Transport/Cargo Ship Embarkation</td>
<td>NV-0419-0005</td>
</tr>
<tr>
<td>Embarkation for Amphibious Operations</td>
<td>NV-0419-0004</td>
</tr>
<tr>
<td>Enlisted Basic Amphibious Embarkation</td>
<td>NV-0419-0003</td>
</tr>
<tr>
<td>Enlisted Embarkation (Basic)</td>
<td>NV-0419-0003</td>
</tr>
<tr>
<td>Officers Embarkation (Basic)</td>
<td>NV-0419-0001</td>
</tr>
<tr>
<td>Staff Embarkation</td>
<td>NV-0419-0002</td>
</tr>
<tr>
<td>Emergency Emergency Medical Technician</td>
<td>NV-1715-0788</td>
</tr>
<tr>
<td>General Electric LM100 and Solar T-1000 Emergency Gas Turbine Solar Main Propulsion Operation and Maintenance</td>
<td>NV-0710-0002</td>
</tr>
</tbody>
</table>
Encoder
A-6A OA-6672/ASA-48 Universal
*Encodor Test Console Intermediate Maintenance
NV-1715-0109
A-6 Right Hand Unit Alignment Test
Set, and Encoder Tape Dial Test Set Intermediate Maintenance
NV-1715-0335
E-2A Inertial Navigation System Semi-Automaic Check-Out Equipment (SACE) and Encoder Test Console Operation and Maintenance
NV-1715-0323
Read Only Memory (ROM) Encoder Elevator Control Maintenance, Class C1
NV-1715-0392

Enforcement
Maritime Law Enforcement
CG-1728-0003

Engine
American Locomotive (ALCO 251C) Diesel Engine, Class C1
NV-1712-0001
Aviation Support Equipment GTCP-100 Engine Intermediate Maintenance
NV-1704-0109
CH-53 T-64-GE-413 Engine Intermediate Maintenance/Complete Engine Repair
NV-1704-0032
Detroit Diesel V71 Series Engine Maintenance, Class C1
NV-1712-0019
Diesel Engine Technician, Class C1
NV-1712-0020
Engineman, Class C, American Locomotive (ALCO 251-C) Diesel Engine
NV-1712-0010
Engineman Farbanks,Morse 38D 8 1/8 DR Diesel Engine
NV-1712-0014
Enginemeo, Class C, General Motors 12-567E Diesel Engine
NV-1712-0006
Enginemen, Class C, General Motors 16-278A Diesel Engine
NV-1712-0003
Enginemen, Class C, General Motors 8-268A Diesel Engine
NV-1712-0005
Enginemen, Dieslel Engine, Class C
NV-1712-0017
F-3 J57-P-16/20 Intermediate Maintenance/Complete Engine Repair
NV-1704-0063
Fairbanks Morse 38F5 1/4 DR Diesel Engine
NV-1712-0030
FM38D8 1/8 DR Diesel Engine, Class C1
NV-1712-0014
GM-12-567E/645E Diesel Engine, Class C1
NV-1712-0014
GM-16-278A Diesel Engine, Class C1
NV-1712-0006
GM 268A Diesel Engine, Class C1
NV-1712-0005
H-43, T-64-GE-6/6A Intermediate Maintenance/Complete Engine Repair
NV-1704-0049
J52-P408 Engine Intermediate Maintenance/Complete Engine Repair
NV-1704-0049
J52-P6A/8A Engine Intermediate Maintenance/Complete Engine Repair
NV-1704-0049

J60-P-3A/6 Engine Intermediate Maintenance/Complete Engine Repair
NV-1704-0019
J60-P-3A/6 Engine Intermediate Maintenance/Complete Engine Repair
NV-1704-0037
J79-GE-8/10 Engine Intermediate Maintenance
NV-1704-0055
J85-GE-4 Engine Intermediate Maintenance/Complete Engine Repair
NV-1704-0026
NV-1704-0014
KC-130F T-56-A-7 Turboprop Engine and Related Systems Maintenance
NV-1704-0125
KC-130F T-56-A-7 Turboprop Engine and Related Systems Organizational Maintenance
NV-1704-0125

OV-10A T66-G-10/12 Engine Intermediate/Complete Engine Repair Maintenance
NV-1704-0141
P-3 T56-A-10/14 Engine and Related Systems Organizational Maintenance NV-1704-0019
P-3 T56-A-10W Engine and Related Systems Maintenance, No. 56
NV-1704-0017
P-3 T56-A-14 Engine and Related Systems Maintenance
NV-1704-0019
Pratt and Whitney FT4A Gas Turbine Engine Operation and Maintenance
NV-1704-0006
SSN/SSBN Diesel Engine (Farbanks-Morse) Maintenance
NV-1712-0002
T-53-L-13 Engine Intermediate Maintenance/Complete Engine Repair
NV-1704-0150
NV-1704-0029
T56-A-8/8A Engine and Aero/1ents A6441FN-248 Propeller Intermediate Maintenance
NV-1704-0029
T56-GE-10 Engine Intermediate Maintenance/Complete Engine Repair
NV-1704-0029
T56-GE-10 Engine Intermediate Maintenance/Complete Engine Repair
NV-1704-0027
T56-GE-8B Engine Intermediate Maintenance/Complete Engine Repair
NV-1704-0021
T56-GE-8B Engine Maintenance Class C
NV-1704-0004
T56-GE-8F Engine Intermediate Maintenance/Complete Engine Repair
NV-1704-0020
TF30-P-6 Intermediate Maintenance/Complete Engine Repair
NV-1704-0033
TF30-P-8/408 Engine Intermediate Maintenance/Complete Engine Repair
NV-1704-0016
TF30-P-8 Engine Intermediate Maintenance/Complete Engine Repair
NV-1704-0016
TF41-A-2 Engine Intermediate Maintenance/Complete Engine Repair
NV-1704-0123
UH-IE T33-L-11 Engine Intermediate Maintenance/Complete Engine Repair
NV-1704-0025

KEYWORD INDEX

UH-IE T33-L-11 Engine Organizational Maintenance
NV-1704-0018
Waukesha Diesel Engine
NV-1712-0001

Engineer
Assault Boat Engineer
NV-1712-0009
Basic Engineer Equipment Mechanic
MC-1710-0001
Basic Engineer Equipment Operator
MC-1710-0002
Civil Engineer Corps Officer Basic—Contract Administration Specialty
NV-1408-0013
Civil Engineer Corps Officer Basic—Naval Construction Battalion Operations Specialty
NV-1408-0015
Civil Engineer Corps Officer Basic—Public Works Management Specialty
NV-1408-0014
Combat Engineer (Advanced)
MC-1710-0019
Combat Engineer Basic
MC-1710-0020
Combat Engineer Basic Specialist
MC-1710-0020
Combat Engineer Officer
MC-1601-0004
Engineer Equipment Chief
MC-1710-0016
Engineer Equipment Foreman
MC-1710-0026
Engineer Equipment Mechanic
MC-1710-0001
Engineer Equipment Mechanic (Basic)
MC-1710-0001
Engineer Equipment Mechanic Foreman
MC-1710-0024
Engineer Equipment Mechanics
MC-1710-0001
Engineer Equipment Officers
MC-1601-0001
Engineer Equipment Operators
MC-1710-0002
Engineer Officer
NV-1712-0008
Engineer Officer (Amphibious Ship)
NV-1710-0059
Engineer Officer’s Orientation
MC-1601-0002
HC-130 Flight Engineer by Correspondence
CG-1704-0009
Journeyman, Engineer Equipment Mechanic
MC-1710-0025
P-3 Flight Engineer System, No. 6
NV-1704-0048
Prospective Engineer Officers
NV-1717-0006

Engineering
1200 PSI Prospective Engineering Officer
NV-1710-0022
Basic Propulsion Engineering, Class A
NV-1715-0014
Engineering Aid, Class A1 (EA"A")
NV-1601-0003
Engineering Aid, Class C, Planning and Estimating
NV-1408-0012
Engineering-Aids, Class B
SEIN (Shipboard Equipment Indoctrination, Communications) NV-1715-0639
Electronics Technician, Class A, Phase SEIN (Shipboard Equipment Indoctrination, Radar) NV-1715-0638
Electronics Technician, Class C, Shipboard Equipment Indoctrination (Communications) NV-1715-0639
Electronics Technician, Class C, Shipboard Equipment Indoctrination (Radar) NV-1715-0638
Electronics Technician Communications Equipment Fundamentals, Class A1 NV-1715-0852
Electronics Technician Radar Equipment Fundamentals, Class A1 NV-1715-0855
Engineer Equipment Chief MC-1710-0016
Engineer Equipment Foreman MC-1710-0026
Engineer Equipment Mechanic MC-1710-0001
Engineer Equipment Mechanic (Basic) MC-1710-0001
Engineer Equipment Mechanic Foreman NV-1218-0024
Engineer Equipment Mechanic NV-1715-0001
Engineer Equipment Operator NV-1601-0001
Engineer Equipment Operators MC-1710-0002
Equipment Operator, Class B (EO-B) NV-1715-0018
Equipment Operator, Class J (EO-J) NV-1715-0018
Equipment Operators/Asphalt-Paving and Plant Operation, Class C NV-1710-0062
Equipment Operators/Blasting and Quarry Operations, Class C NV-1710-0064
Equipment Operators, Class A NV-1710-0017
Equipment Operators/Crushing and Screening Plant Operations, Class C NV-1710-0043
Equipment Operators Gradework, Class C NV-1710-0037
Hydraulic Systems and Equipment Operation and Maintenance NV-1710-0002
Journeyman Engineer Equipment Mechanic CG-1704-0020
Marine Air Traffic Control Unit Auxiliary Equipment Maintenance, Class C NV-1715-0669
Meteorological Equipment Maintenance, Class C NV-1721-0009
Microwave Equipment Operator (MEOC) MC-1715-0024
Ordnance Handling Equipment Intermediate Maintenance NV-1710-0026
Oxygen Equipment (Class C) NV-1601-0007
Photographic Equipment Maintenance NV-1715-0160
Photographic Equipment Repair, Class C NV-1715-0160
Polars Target Card Computer System NV-1715-0897
Peripheral Equipment, Class C NV-1715-0042
Reproduction Equipment Repair DD-1715-0002
Sound Equipment Repair MC-1715-0014
Terminal Equipment Repair MC-1715-0015
Terminal Equipment Theory MC-1715-0007
Weapons Location Equipment Repair NV-1715-0050
Equipmentman Advanced Aircrew Survival Equipmentman NV-1704-0208
Aircrew Survival Equipmentman, Class A NV-1704-0234
Aircrew Survival Equipmentman, Class A1 NV-1704-0234
Aircrew Survival Equipmentman, Class C7 NV-1704-0208
Aircrew Survival Equipmentman School, Class B NV-1704-0208
Basic Aircrew Survival Equipmentman NV-1704-0234
ES-55A RF-4B Photographic Film Correlator Processor Set ES-55A Intermediate Maintenance NV-1715-0731
Escape NV-1704-0085
A-6A Environmental, Escape and Survival Systems Organizational Maintenance NV-1704-0085
Evasion, Escape and Survival Training NV-1704-0002
F-14A Environmental and Escape Systems Technician (Crew Member) NV-0802-0002
Organizational Maintenance NV-1704-0210
Survival, Evasion, Resistance to Interrogation and Escape (SERE) NV-0802-0002
ESM NV-1715-0494
585/594 FBM Electronic Surveillance Measures (ESM) Technician NV-1715-0883
637 Class ESM ELINT Technician NV-1715-0494
Electronic Surveillance Measures (ESM) Technician NV-1715-0883
Electronic Surveillance Measures (ESM) Technician NV-1715-0889
ESM ELINT Technician SSN 637 Class, Class C+ NV-1715-0888
Planning and Estimating Construction Group Ratings, Class C NV-1408-0012
Engineering Aid, Class C, Planning and Estimating NV-1408-0012
Planner NV-1715-0554
ELINT Evaluation Operator/Officer NV-1715-0003
Naval Tactical Data System (NTDS) NV-1402-0032
Naval Tactical Data Systems (NTDS) NV-1402-0032
Survival, Evasion, Resistance to Interrogation and Escape (SERE) MC-0802-0002
Basic Electronic Warfare (EW) Equipment Operator NV-1715-0831
Aviation Squadron Electronic Warfare (EW) Officer (EWO), Class A2 NV-1715-0017
Aviation Squadron Electronic Warfare (EW) Officer (EWO), Class A2 NV-1715-0017
Exchange NV-1408-0023
Explosive Ordnance Disposal NV-2202-0020
Explosive Ordnance Disposal—Reserve Officer Training NV-2202-0019
Surface Explosive Ordnance Disposal Basic NV-2202-0017
Surface Explosive Ordnance Disposal (EOD) Advanced Refresher NV-0802-0003
UDT-SEAL Explosive Ordnance Disposal Indoctrination NV-2202-0018
Extended NAV-1715-0494
Defense Language Institute Extended or Basic-Intermediate Courses DD-0602-0005
Eye NV-1715-0494
Eye, Ear, Nose and Throat Technician, NV-1715-0494
K-48  KEYWORD INDEX

Class C  
NV-0709-0009

F-11A  
Prospective Phase II CV (Jet) (F-11A)  
Tactical Flight Instructor  
NV-1606-0041

F-14  
F-14 Armament Systems Maintenance  
Technician(Crew Member)  
Organizational Maintenance  
NV-1704-0221

F-14 Weapons System Technician  
Organizational Maintenance  
NV-1704-0214

F-14A  
F-14A Airframe and Hydraulic Systems  
Specialist (Crew Leader)  
Organizational Maintenance  
NV-1704-0215

F-14A Airframe and Hydraulic Systems  
Technician (Crew Member)  
Organizational Maintenance  
NV-1704-0216

F-14A Communications, Navigation/ 
Displays, Electronic Warfare  
Organizational Maintenance Technician  
NV-1704-0217

F-14A Electrical Systems Technician  
(Crew Member)  
Organizational Maintenance  
NV-1704-0218

F-14A Environmental and Escape  
Systems Technician (Crew Member)  
Organizational Maintenance  
NV-1704-0219

F-14A Environmental/Escape System  
Specialist (Crew Leader)  
Organizational Maintenance  
NV-1704-0220

F-14A Organizational Maintenance  
Supervisor's Familiarization  
NV-1704-0220

F-14A Power Plant and Related System  
Organizational Maintenance Technician  
(Crew Member)  
NV-1704-0222

F-4  
F-4 Basic Electrical Systems  
Organizational Maintenance  
NV-1715-0142

F-4B  
F-4B 20 KVA and AN/AJB-3A  
Electrical Organizational Maintenance  
NV-1715-0151

F-4B Airborne Missile Control System  
AERO 1-A Organizational Maintenance  
NV-1715-0152

F-4B Aircraft Electrical System  
Organizational Maintenance  
NV-1704-0092

F-4B AN/AJB-3A Loft Bomb Release  
Computer Set  
NV-1704-0093

F-4B AN/APA-157 Radar Set Group  
Intermediate Maintenance  
NV-1715-0257

F-4B AN/APQ-72 Radar Set  
Intermediate Maintenance  
NV-1715-0430

F-4B AN/ASQ-19 TACAN System (RT- 
547 and KY-312)  
Intermediate Maintenance  
NV-1715-0394

F-4B Communication Navigation  
Identification (CNI) Line  
Troubleshooting Maintenance  
NV-1704-0097

F-4B Communication Navigation  
Identification (CNI) Line  
F-14A Environmental and Escape  
Maintenance  
Organizational Maintenance  
NV-1704-0092

F-4B Electrical Systems Organizational  
Maintenance  
NV-1715-0457

F-4B Shoehorn Organizational  
Maintenance  
NV-1715-0522

F-4B/J  
F-4B/J Advanced Electrical  
Organizational Maintenance  
NV-1715-0153

F-4B/J Aircraft Computer Set  
Intermediate Maintenance  
NV-1715-0552

F-4B/J Airframe and Hydraulic Systems  
Organizational Maintenance  
NV-1704-0056

F-4B/J Armament, Missile and Weapons  
Control System Maintenance  
NV-1715-0632

F-4B/J Armament, Missile and Weapons  
Control System Organizational  
Maintenance  
NV-1715-0632

F-4B/J Egress and Environmental  
Control Systems Maintenance  
NV-1704-0106

F-4B/J Egress and Environmental  
Control Systems Organizational Maintenance  
NV-1704-0106

F-4B/J KY-532A/ASQ IFF Transponder  
Intermediate Maintenance  
NV-1715-0309

F-4B/J Maintenance Support  
Familiarization  
NV-1704-0126

F-4B/J Power Generating System  
Intermediate Maintenance  
NV-1704-0189

F-4B/J-RF-4B AN/ALQ-88  
Countermeasures Set Intermediate Maintenance  
NV-1715-0393

F-4J  
F-4J Aircraft Electrical System  
Organizational Maintenance  
NV-1704-0094

F-4J AN/AJB-7 Loft Bomb Computer  
System and AN/ASQ-70 Vertical Flight  
Reference System Intermediate Maintenance  
NV-1715-0359

F-4J AN/ARN-86 TACAN Intermediate  
Maintenance  
NV-1715-0409

F-4J AN/AWG-10 and Electronic  
Countermeasures Set Intermediate Maintenance  
NV-1715-0371

F-4J AN/AWG-10 Antenna Control and  
Missile Control Intermediate Maintenance  
NV-1715-0611

F-4J AN/AWG-10 Missile Control  
Display and Built-In-Test (BIT)  
Intermediate Maintenance  
NV-1715-0706

F-4J AN/AWG-10 Missile Control  
System (Enlisted) Familiarization  
NV-1704-0231

F-4J AN/AWG-10 Receiver  
Intermediate Maintenance  
NV-1715-0350

F-4J Communication Navigation  
Identification (CNI) Line  
Troubleshooting Maintenance  
NV-1704-0074

F-4J Communication Navigation  
Identification (CNI) Organizational Maintenance  
NV-1715-0612

F-4J Data Link System Intermediate  
Maintenance  
NV-1715-0499

F-4J Electrical Systems Organizational  
Maintenance  
NV-1715-0949

F-4J RT-793/ASQ UHF Transceiver  
Intermediate Maintenance  
NV-1715-0701

F-4J Shoehorn Organizational  
Maintenance  
NV-1715-0395

F-4J Weapon System Specialist  
Organizational Maintenance  
NV-1715-0308

F-8  
F-8 Airframes/Hydraulic Systems  
Organizational Maintenance  
NV-1704-0120

F-8 AN/APQ-124 Radar Intermediate  
Maintenance  
NV-1715-0428

F-8 AN/APQ-83A Radar Intermediate  
Maintenance  
NV-1715-0206

F-8 AN/APQ-83B Radar Intermediate  
Maintenance  
NV-1715-0214

F-8 AN/APQ-94 Radar Intermediate  
Maintenance  
NV-1715-0365

F-8 AN/APR-30(V) Radar Set  
Intermediate Maintenance  
NV-1715-0116

F-8 AN/ARN-52 TACAN Intermediate  
Maintenance  
NV-1715-0204

F-8 Armament System Organizational  
Maintenance  
NV-1715-0181

F-8 Automatic Flight Control System  
Intermediate Maintenance  
NV-1715-0737

F-8 Communication Navigation and  
Identification (CNI) Systems  
Organizational Maintenance  
NV-1715-0688

F-8 Electrical, Instruments and  
Stabilization Systems Organizational  
Maintenance  
NV-1715-0183

F-8 J57-P-16/20 Intermediate  
Maintenance  
NV-1704-0163

F-8 J57-P-16/20 Intermediate  
Maintenance/Complete Engine Repair  
NV-1704-0163

F-8 Power Plants and Related Systems  
NV-1704-0180

Facilitator  
Intercultural Relations—Facilitator
<table>
<thead>
<tr>
<th>NV-1715-0219</th>
<th>K-50 KEYWORD INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Control Technician Class C, Gun Fire Control System Mk 56 and Target Designation System Mk 5</td>
<td>Fire Control Technician Class C, Gun Fire Control System Mk 56 and Target Designation System Mk 5</td>
</tr>
<tr>
<td>Fire Control Technician Class C, Target Designation System Mk 6</td>
<td>Fire Control Technician Class C, Target Designation System Mk 6</td>
</tr>
<tr>
<td>Fire Control Technician Class C, Target Designation System (TDS) Mk 5</td>
<td>Fire Control Technician Class C, Target Designation System (TDS) Mk 5</td>
</tr>
<tr>
<td>Fire Control Technician First Class by Correspondence</td>
<td>Fire Control Technician First Class by Correspondence</td>
</tr>
<tr>
<td>Fire Control Technician Mk 88 Replacement</td>
<td>Fire Control Technician Mk 88 Replacement</td>
</tr>
<tr>
<td>Fire Control Technician Second Class by Correspondence</td>
<td>Fire Control Technician Second Class by Correspondence</td>
</tr>
<tr>
<td>Guided Missile Fire Control Repair</td>
<td>Guided Missile Fire Control Repair</td>
</tr>
<tr>
<td>Gun Fire Control Radar Mk 25 Mod 3 Maintenance</td>
<td>Gun Fire Control Radar Mk 25 Mod 3 Maintenance</td>
</tr>
<tr>
<td>Gun Fire Control System (GFCS) Less Radar Operation and Maintenance</td>
<td>Gun Fire Control System (GFCS) Less Radar Operation and Maintenance</td>
</tr>
<tr>
<td>Gun Fire Control System (GFCS) Mk 37 Maintenance</td>
<td>Gun Fire Control System (GFCS) Mk 37 Maintenance</td>
</tr>
<tr>
<td>Gun Fire Control System (GFCS) Mk 37, Mk 68, Mk 56 Radar Signal Processing Equipment (RSPE) Maintenance</td>
<td>Gun Fire Control System (GFCS) Mk 37, Mk 68, Mk 56 Radar Signal Processing Equipment (RSPE) Maintenance</td>
</tr>
<tr>
<td>Gun Fire Control System (GFCS) Mk 37/TDS Mk 5 Maintenance Class C1</td>
<td>Gun Fire Control System (GFCS) Mk 37/TDS Mk 5 Maintenance Class C1</td>
</tr>
<tr>
<td>Gun Fire Control System (GFCS) Mk 56 Maintenance</td>
<td>Gun Fire Control System (GFCS) Mk 56 Maintenance</td>
</tr>
<tr>
<td>Gun Fire Control System (GFCS) Mk 63 Maintenance</td>
<td>Gun Fire Control System (GFCS) Mk 63 Maintenance</td>
</tr>
<tr>
<td>Gun Fire Control System (GFCS) Mk 68 Maintenance</td>
<td>Gun Fire Control System (GFCS) Mk 68 Maintenance</td>
</tr>
<tr>
<td>Gun Fire Control System (GFCS) Mk 68 Mod 4 Maintenance</td>
<td>Gun Fire Control System (GFCS) Mk 68 Mod 4 Maintenance</td>
</tr>
<tr>
<td>Gun Fire Control Systems Mk 52 and MK-56</td>
<td>Gun Fire Control Systems Mk 52 and MK-56</td>
</tr>
<tr>
<td>Intermediate Aviation Fire Control Technician, Class B</td>
<td>Intermediate Aviation Fire Control Technician, Class B</td>
</tr>
<tr>
<td>Launcher Technician MK 88 Fire Control Conversion</td>
<td>Launcher Technician MK 88 Fire Control Conversion</td>
</tr>
<tr>
<td>Light Anti-aircraft Artillery (AAA) Fire Control Repair</td>
<td>Light Anti-aircraft Artillery (AAA) Fire Control Repair</td>
</tr>
<tr>
<td>Mark 105 Underwater Fire Control System (UWFCS) Mod 28</td>
<td>Mark 105 Underwater Fire Control System (UWFCS) Mod 28</td>
</tr>
<tr>
<td>Medium Anti-aircraft Artillery (AAA) Fire Control Repair</td>
<td>Medium Anti-aircraft Artillery (AAA) Fire Control Repair</td>
</tr>
<tr>
<td>Mk 101 Mods 17 Through 20 Fire Control System (FCS) Maintenance, Class C</td>
<td>Mk 101 Mods 17 Through 20 Fire Control System (FCS) Maintenance, Class C</td>
</tr>
<tr>
<td>Mk 112 Mod 2 Fire Control System (FCS) Maintenance, Class C</td>
<td>Mk 112 Mod 2 Fire Control System (FCS) Maintenance, Class C</td>
</tr>
<tr>
<td>Mk 113 Mod 7 Fire Control System (FCS) Maintenance</td>
<td>Mk 113 Mod 7 Fire Control System (FCS) Maintenance</td>
</tr>
<tr>
<td>Mk 115 Mod 4 Fire Control System (FCS) Maintenance</td>
<td>Mk 115 Mod 4 Fire Control System (FCS) Maintenance</td>
</tr>
<tr>
<td>Mk 56 Gun Fire Control System (GFCS) Maintenance, Class C1</td>
<td>Mk 56 Gun Fire Control System (GFCS) Maintenance, Class C1</td>
</tr>
<tr>
<td>Mk 58 Gun Fire Control System (GFCS) Maintenance</td>
<td>Mk 58 Gun Fire Control System (GFCS) Maintenance</td>
</tr>
<tr>
<td>Mk 84 Fire Control System Technician</td>
<td>Mk 84 Fire Control System Technician</td>
</tr>
<tr>
<td>Mk 88 Mod 1 Fire Control Technician Conversion (Mk 80 &amp; 84 to Mk 88)</td>
<td>Mk 88 Mod 1 Fire Control Technician Conversion (Mk 80 &amp; 84 to Mk 88)</td>
</tr>
<tr>
<td>Mk 88 Mod 2 Fire Control Technician Conversion (Mk 80 &amp; 84 to Mk 88)</td>
<td>Mk 88 Mod 2 Fire Control Technician Conversion (Mk 80 &amp; 84 to Mk 88)</td>
</tr>
<tr>
<td>Shore Fire Control Party</td>
<td>Shore Fire Control Party</td>
</tr>
<tr>
<td>Shore Fire Control Party Enlisted</td>
<td>Shore Fire Control Party Enlisted</td>
</tr>
<tr>
<td>Tartar DSOI Analysis Mission Fire Control System (MFCS) Mk 74 Mod 0</td>
<td>Tartar DSOI Analysis Mission Fire Control System (MFCS) Mk 74 Mod 0</td>
</tr>
<tr>
<td>Tartar Fire Control and Missile Officer</td>
<td>Tartar Fire Control and Missile Officer</td>
</tr>
<tr>
<td>Tartar Weapons System Mission Fire Control System (MFCS) Mk 74 Mod 0</td>
<td>Tartar Weapons System Mission Fire Control System (MFCS) Mk 74 Mod 0</td>
</tr>
<tr>
<td>Tartar Weapons System Mission Fire Control System (MFCS) Mk 74 Mod 6 and 7</td>
<td>Tartar Weapons System Mission Fire Control System (MFCS) Mk 74 Mod 6 and 7</td>
</tr>
<tr>
<td>Terrier Fire Control and Missile Officer</td>
<td>Terrier Fire Control and Missile Officer</td>
</tr>
<tr>
<td>Terrier Weapons System Mission Fire Control System (MFCS) Mk 73</td>
<td>Terrier Weapons System Mission Fire Control System (MFCS) Mk 73</td>
</tr>
<tr>
<td>Terrier Weapons System Mission Fire Control System (MFCS) Mk 76</td>
<td>Terrier Weapons System Mission Fire Control System (MFCS) Mk 76</td>
</tr>
<tr>
<td>Underwater Fire Control Group Mk 111 Maintenance</td>
<td>Underwater Fire Control Group Mk 111 Maintenance</td>
</tr>
<tr>
<td>Underwater Fire Control System (FCS) Technician (Torpedoes) Mk 113 Mod 7</td>
<td>Underwater Fire Control System (FCS) Technician (Torpedoes) Mk 113 Mod 7</td>
</tr>
<tr>
<td>Underwater Fire Control Systems Technician (Mk 111 Mod 9)</td>
<td>Underwater Fire Control Systems Technician (Mk 111 Mod 9)</td>
</tr>
<tr>
<td>Underwater Fire Control Systems Technician (Target Motion Analysis Subsystem)</td>
<td>Underwater Fire Control Systems Technician (Target Motion Analysis Subsystem)</td>
</tr>
<tr>
<td>Fireman</td>
<td>Fireman</td>
</tr>
<tr>
<td>Fireman by Correspondence</td>
<td>Fireman by Correspondence</td>
</tr>
<tr>
<td>First Term</td>
<td>First Term</td>
</tr>
<tr>
<td>First Term, Advanced First Term Avionics, Class B (AFTA)</td>
<td>First Term, Advanced First Term Avionics, Class B (AFTA)</td>
</tr>
<tr>
<td>First Tour</td>
<td>First Tour</td>
</tr>
<tr>
<td>Aviation Anti-submarine Warfare (AASW) for First Tour Pilots P3A/B (D)</td>
<td>Aviation Anti-submarine Warfare (AASW) for First Tour Pilots P3A/B (D)</td>
</tr>
<tr>
<td>Aviation Anti-submarine Warfare (AASW) for First Tour Pilots, P3C</td>
<td>Aviation Anti-submarine Warfare (AASW) for First Tour Pilots, P3C</td>
</tr>
<tr>
<td>First Tour Pilot P-3C Communications Operator</td>
<td>First Tour Pilot P-3C Communications Operator</td>
</tr>
<tr>
<td>Fiscal</td>
<td>Fiscal</td>
</tr>
<tr>
<td>Fiscal Accounting Clerk</td>
<td>Fiscal Accounting Clerk</td>
</tr>
<tr>
<td>Fixed</td>
<td>Fixed</td>
</tr>
<tr>
<td>Carrier Fixed Wing Anti-submarine (AASW) Warfare Tactics</td>
<td>Carrier Fixed Wing Anti-submarine (AASW) Warfare Tactics</td>
</tr>
<tr>
<td>Fixed Wing Flight Mechanics</td>
<td>Fixed Wing Flight Mechanics</td>
</tr>
<tr>
<td>Fleet</td>
<td>Fleet</td>
</tr>
<tr>
<td>Fleet Air Intelligence Officer</td>
<td>Fleet Air Intelligence Officer</td>
</tr>
<tr>
<td>Fleet Ballistic Missile (FBM) Navigation Officer</td>
<td>Fleet Ballistic Missile (FBM) Navigation Officer</td>
</tr>
<tr>
<td>Fleet Data Processing Officers Training</td>
<td>Fleet Data Processing Officers Training</td>
</tr>
<tr>
<td>Fleet Officer and Fleet Enlisted Air Intelligence</td>
<td>Fleet Officer and Fleet Enlisted Air Intelligence</td>
</tr>
<tr>
<td>Fleet Replacement Radar Navigator</td>
<td>Fleet Replacement Radar Navigator</td>
</tr>
<tr>
<td>Fleet Satellite Communications Flight</td>
<td>Fleet Satellite Communications Flight</td>
</tr>
<tr>
<td>Broadcast Control Subsystem Maintenance (Electronics Technician, Class C1)</td>
<td>Broadcast Control Subsystem Maintenance (Electronics Technician, Class C1)</td>
</tr>
<tr>
<td>Fleet Work Study</td>
<td>Fleet Work Study</td>
</tr>
<tr>
<td>Flexscop</td>
<td>Flexscop</td>
</tr>
<tr>
<td>Cryptologic Technician M, Flexscop Maintenance, Class C3</td>
<td>Cryptologic Technician M, Flexscop Maintenance, Class C3</td>
</tr>
<tr>
<td>Cryptologic Technician M, Flexscop Maintenance, Class C3</td>
<td>Cryptologic Technician M, Flexscop Maintenance, Class C3</td>
</tr>
<tr>
<td>Cryptologic Technician T, Flexscop</td>
<td>Cryptologic Technician T, Flexscop</td>
</tr>
<tr>
<td>Cryptologic Technician T, Flexscop Operator</td>
<td>Cryptologic Technician T, Flexscop Operator</td>
</tr>
<tr>
<td>Cryptologic Technician T, Flexscop Programmer, Class C3</td>
<td>Cryptologic Technician T, Flexscop Programmer, Class C3</td>
</tr>
<tr>
<td>Flexscop Operator, Class C3</td>
<td>Flexscop Operator, Class C3</td>
</tr>
<tr>
<td>Flight</td>
<td>Flight</td>
</tr>
<tr>
<td>Advanced Naval Flight Officer Training, Airborne Electronic Warfare Phase</td>
<td>Advanced Naval Flight Officer Training, Airborne Electronic Warfare Phase</td>
</tr>
<tr>
<td>Advanced Navigation Training (Student, Naval Flight Officer)</td>
<td>Advanced Navigation Training (Student, Naval Flight Officer)</td>
</tr>
<tr>
<td>AN/Ash-20 (V) Flight Recorder-Locator System Intermediate Maintenance</td>
<td>AN/Ash-20 (V) Flight Recorder-Locator System Intermediate Maintenance</td>
</tr>
<tr>
<td>AN/Ash-20 (V) Flight Recorder-Locator System Intermediate Maintenance</td>
<td>AN/Ash-20 (V) Flight Recorder-Locator System Intermediate Maintenance</td>
</tr>
<tr>
<td>AN/Ash-20 (V) Flight Recorder-Locator System Intermediate Maintenance</td>
<td>AN/Ash-20 (V) Flight Recorder-Locator System Intermediate Maintenance</td>
</tr>
<tr>
<td>AN/AYN-2, AN/ASN-50 Flight Director and Gyrocompass Systems Class C</td>
<td>AN/AYN-2, AN/ASN-50 Flight Director and Gyrocompass Systems Class C</td>
</tr>
<tr>
<td>Basic Prop Flight Instructor</td>
<td>Basic Prop Flight Instructor</td>
</tr>
<tr>
<td>E-1B Naval Flight Officer and Aircrewman</td>
<td>E-1B Naval Flight Officer and Aircrewman</td>
</tr>
<tr>
<td>E-2A Flight Technician Organizational Level Maintenance, No. 4</td>
<td>E-2A Flight Technician Organizational Level Maintenance, No. 4</td>
</tr>
<tr>
<td>E-2B Flight Technician Organizational Level Maintenance, No. 4</td>
<td>E-2B Flight Technician Organizational Level Maintenance, No. 4</td>
</tr>
<tr>
<td>E-2B Airborne Tactical Data Systems Operator (Naval Flight Officer)</td>
<td>E-2B Airborne Tactical Data Systems Operator (Naval Flight Officer)</td>
</tr>
<tr>
<td>E-2B Airborne Tactical Data Systems Operator (Naval Flight Officer)</td>
<td>E-2B Airborne Tactical Data Systems Operator (Naval Flight Officer)</td>
</tr>
<tr>
<td>E-2B Flight Officer</td>
<td>E-2B Flight Officer</td>
</tr>
</tbody>
</table>
Flight Preparation, Naval Aviation Cadet
1) Taseal Flight Instructor
(TS-2A Type Aircraft)

Type Airdraft

Maintenance, No. 5

Training for Naval Flight Officers

Communications

Correspondence

Correspondence

Correspondence

Flight Instructor Indoctrination Group

Maintenance

Reference System Intermediate

System and ANTASN-70 Vertical Flight

Organizational Maintenance

EA-6B Hydraulics and Flight Controls

Organizational Maintenance

NV-1704-0226

P-4J AN/JBB-7 Loft Bomb Computer

System and AN/ASN-70 Vertical Flight

Reference System Intermediate

Maintenance

Fixed Wing Flight Mechanics

Flight Instructor Indocentration Group

Flight Instructor Training

Flight Mechanic HH-52A by

Correspondence

Flight Preparation, Naval Aviation Cadet

and Aviation Officer Candidate

Flight Preparation, Officer

Flight Systems

HC-130 Flight Engineer by

Correspondence

HH-3F Flight Mechanic by

Correspondence

Naval Flight Officer P3C

Communications Operator

NV-1704-0219

Naval Flight Officer Training (Flight, Academic, Flight Support)

NV-1606-0044

Navigation Flight Training, Naval

Aviator and Naval Flight Officer

NV-1606-0045

Navigation Flight Training, Pilot and

Naval Aviation Officer (Navigator)

NV-1606-0045

P3C Tatical Coordinator Positional

Training for Naval Flight Officers

NV-1606-0043

P-3 Flight Engineers Operational

Maintenance, No. 5

NV-1704-0067

P-3 Flight Engineer System, No. 6

NV-1704-0048

P-3 Hydraulics and Flight Controls

System Maintenance, No. 10

NV-1704-0050

Pilots C-121 Simulator and Advanced

Flight

NV-1606-0034

Pilots C-121 Simulator and Basic Flight

NV-1606-0035

Prospective Advanced Navigation Flight

Instructor

NV-1606-0038

Prospective ASW Flight Instructor (S-2

Type Aircraft)

NV-1606-0020

Prospective ME (Prop)-Flight Instructor

(TS-2A Type Aircraft)

NV-1606-0020

Prospective Phase I CV (Jet) (TF/AF-9J) Tactical Flight Instructor

NV-1606-0037

Prospective Phase II CV (Jet) (F11A)

Tactical Flight Instructor

NV-1606-0041

Prospective Prop Flight Instructor

NV-1606-0020

Prospective TA-4J Flight Instructor

NV-1606-0021

Prospective TF/TAF-9J Flight

Instructor

NV-1606-0039

Prospective VA (Prop) Tactical Flight

Instructor

NV-1606-0040

RA-5C Air Data and Flight Reference

Systems

NV-1715-0454

RA-5C Air Data and Flight Reference

Systems Organizational Maintenance

NV-1715-0454

RF-4B AN/AAS-88 RT-776 and KY-531

Flight Director

NV-1715-0562

Rotary Wing Flight Mechanics

NV-1606-0063

UH-2C Airframes, Hydraulic, Flight Controls

and Rotor Systems

Organizational Maintenance

NV-1704-0057

UH-34D Airframe, Hydraulics and Flight Controls

NV-1704-0064

Flight Control

A-4 Automatic Flight Control System

Intermediate Maintenance

NV-1704-0015

A-4 Automatic Flight Control System

Organizational Maintenance

NV-1704-0035

A-6A Automatic Flight Control System

Intermediate Maintenance

NV-1715-0699

A-6A Automatic Flight Control System

Organizational Maintenance

NV-1704-0022

A-7A/B/E AN/ASW-26/30 Automatic

Flight Control System Organizational

Maintenance

NV-1715-0807

A-7 AN/ASW-26/30 Automatic Flight

Control System Intermediate

Maintenance

NV-1715-0617

A-7 Automatic Flight Control System

Organizational Maintenance

NV-1715-0807

Automatic Flight Control System (AN/

ASW-15) and Air Data Computer

(560T27-1) Organizational Maintenance

NV-1715-0741

C-2A Automatic Flight Control System

AN/ASW-15) and Air Data Computer

(A/A24G-13) Intermediate Maintenance

NV-1715-0461

EIB MH-67 Automatic Flight Control

System Intermediate Maintenance

NV-1704-0034

E-2A Automatic Flight Control System

(A/NASW-15) and Air Data Computer

(A/A24G-13)

NV-1715-0460

E-2A Automatic Flight Control System

and Air Data Computer Semi-Automatic

Check-out Equipment Operation and

Maintenance

NV-1715-0478

F-8 Automatic Flight Control System

Intermediate Maintenance

NV-1715-0737

F/RF-4B/J Automatic Flight Control

Systems Intermediate Maintenance

NV-1715-0613

KEYWORD INDEX

H-53 Automatic Flight Control System

Organizational Maintenance

NV-1204-0135

OV-10A Flight Control and Hydraulic

Systems Organizational Maintenance

NV-1704-0103

P-3 Hydraulics, Flight Control Systems

and Structures, Organizational

Maintenance

NV-1704-0161

P-3 PB20N Automatic Flight Control

System Maintenance, No. 13

NV-1715-0600

RA-5C Flight Control and Electrical

Systems Electronics Intermediate.

Maintenance

NV-1715-0601

RA-5C Flight Control Intermediate

Maintenance

NV-1715-0453

RA-5C Flight Control System

Electronics (Intermediate Maintenance)

NV-1715-0732

RA-5C Flight Control System

Organizational Maintenance

NV-1715-0455

RA-5C Semi-Automatic Test Equipment

Air Data, Flight Reference, and Flight

Control Intermediate Maintenance

NV-1715-0542

Flight Controls

A-6A Hydraulics and Flight Controls

Organizational Maintenance

NV-1704-0129

H-53 Automatic Flight Controls Systems

Intermediate, Maintenance

NV-1715-0738

HH-2D/SH-2D Airframes, Hydraulic,

Flight Controls, and Rotor Systems

Organizational Maintenance

NV-1704-0058

P-3 Structures, Hydraulic Power, and

Flight Controls Organizational

Maintenance

NV-1704-0206

Food

Advanced Food Service

MC-1729-0010

Basic Food Service

MC-1729-0009

Food Service

MC-1729-0013

Food Service Management

MC-1729-0008

Food Service Noncommissioned Officer

(NCO) Leadership

MC-1729-0008

Food Service Officer

MC-1729-0015

Food Services and Disbursing

MC-1729-0001

Food Service Staff Noncommissioned

Officer (NCO) Leadership

MC-1729-0004

Foreman

Construction Foreman

MC-1710-0003

Engineer Equipment Foreman

MC-1710-0026

Engineer Equipment Mechanic Foreman

MC-1710-0024

Metalsmith Foreman

MC-1723-0003

Formal

Formal School Instructor (IAC)

MC-1723-0003
Heavy
BU C Heavy Construction NV-1710-0034

Helicopter
Aviation Machinist s Mate H (Helicopter), Class A NV-1704-0238
Basic Helicopter, Class C NV-1704-0059
H-53 Helicopter Maintenance NV-1704-0147
Helicopter Aviation Antisubmarine Warfare Air Sonar Operator (AN/AQ5-13) NV-2202-0080
Helicopter (HS) Antisubmarine Warfare Operator NV-2202-0080
Senior Officer Helicopter Training NV-1704-0196

Helium
Deep Sea Helium-Oxygen Diving Officers NV-1606-0009

HF
RT-648/698 (AN/ARC-94/102105/119/120) HF Transceiver Intermediate Maintenance NV-1715-0373
RT-648/ARC-94 and RT-698/ARC-102 HF Transceiver Intermediate Maintenance NV-1715-0369
S-2E AN/ARC-94 HF Receiver-Transmitter System Maintenance NV-1715-0244

HFDF
Communications Technician "O" Branch, HFDF Communications Technical Control NV-1715-0800
Cryptologic Technician O, High Frequency Direction Finding (HFDF), Communications Technical Control, Class C1 NV-1715-0800
Cryptologic Technician R, High Frequency Direction Finder (HFDF) Operator NV-1715-0833
High Frequency Direction Finding (HFDF) Communications Technical Control NV-1715-0800
High Impact Personnel Overseas Duty Training NV-1512-0002
High Intensity Language Training (Vietnamese) MC-0602-0001
High Pressure Pipe Welders NV-1710-0051
RF-4B AN/ARC-105 High Frequency Communication System and RO-254/ASQ Sound Recorder Maintenance NV-1715-0368

HH-2C
UH-2C, HH-2C and HH-2D Power Plants and Related Systems Organizational Maintenance NV-1704-0141
UH-2C HH-2C, HH-2D Automatic Stabilization Equipment Organizational Maintenance NV-1715-0680

HH-2D
HH-2D/SH-2D Automatic Stabilization Equipment Intermediate Maintenance NV-1704-0201
UH-2C, HH-2C and HH-2D Power Plants and Related Systems Organizational Maintenance NV-1704-0205
UH-2C, HH-2C, HH-2D Automatic Stabilization Equipment Organizational Maintenance NV-1715-0680

HH-2D/SH-2D
HH-2D/SH-2D Airframes, Hydraulic, Flight Controls, and Rotor Systems Organizational Maintenance NV-1704-0058
HH-3F
HH-3F Avionicsman by Correspondence CG-1715-0039
HH-3F Flight Mechanic by Correspondence CG-1704-0011

HH-52A
Flight Mechanic HH-52A by Correspondence CG-1704-0010
HH-52A Airframe and Powertrain, Class C CG-1704-0005

High
Cryptologic Technician O, High Frequency Direction Finding (HFDF), Communications Technical Control, Class C1 NV-1715-0800
Cryptologic Technician R, High Frequency Direction Finder (HFDF) Operator NV-1715-0833
High Frequency Direction Finder Operator, Class C3 NV-1715-0800
High Frequency Direction Finding (HFDF) Communications Technical Control NV-1715-0800
High Frequency Language Training (Vietnamese) MC-0602-0001
High Pressure Pipe Welders NV-1710-0051
RF-4B AN/ARC-105 High Frequency Communication System and RO-254/ASQ Sound Recorder Maintenance NV-1715-0368

Horizontal
A-6 Pilots Horizontal Display, Direct View Radar Indicator and Associated Test Set Intermediate Maintenance NV-1715-0297

Hospital
Advanced Hospital Corpsman NV-0709-0008
Advanced Hospital Corpsman, Class B NV-0709-0008
Basic Hospital Corpsman, Class A NV-0703-0001
Basic Hospital Corpsman, Class A NV-0703-0005
Hospital Corpsman, Advanced NV-0709-0008
Hospital Corpsman, Basic NV-0703-0005
Hospital Corpsman, Class A NV-0703-0005

Hydraulic
A-1E Hydraulic and Pneumatic Systems Organizational Maintenance NV-1704-0013
Aviation Support Equipment Technician, Class A (Hydraulic Specialty) NV-1704-0112
E-1B Airframe and Hydraulic Systems Organizational Maintenance NV-1704-0195
Electric Hydraulic Power Drive for 5/38 Caliber Dual Purpose Single Mount NV-2202-0075
F-14A Airframe and Hydraulic Systems Specialist (Crew Leader) Organizational Maintenance NV-1704-0215
F-14A Airframe and Hydraulic Systems Technician (Crew Member) Organizational Maintenance NV-1704-0216
F-4B/J Airframe and Hydraulic Systems Maintenance NV-1704-0216
KEYWORD INDEX

NV-1704-0056
F-4/B/J Airframe and Hydraulic Systems Organizational Maintenance

NV-1704-0056
F/RF-4/B/J Hydraulic Organizational Maintenance

NV-1704-0030
H-46 Hydraulic System Organizational Maintenance

NV-1704-0194
H-53 Hydraulic Systems Organizational Maintenance

NV-1704-0063
HH-2D/SH-2D Airframes, Hydraulics, Flight Controls, and Rotor Systems Organizational Maintenance

NV-1704-0058
Hydraulic Systems and Equipment Operation and Maintenance

CG-1704-0020
OV-10A Flight Control and Hydraulic Systems Organizational Maintenance

NV-1704-0103
P-3 Structures, Hydraulic Power and Flight Controls Organizational Maintenance

NV-1704-0206
RA-5C Structures and Hydraulic Sub-Systems

NV-1704-0041
RA-5C Structures and Hydraulic Sub-Systems Organizational Maintenance

NV-1704-0041
SH-3 Airframe and Hydraulic Systems Organizational Maintenance

NV-1704-0124
SH-3 Airframes and Hydraulic Systems Organizational Maintenance

NV-1704-0047
UH-2C Airframes, Hydraulic, Flight Controls and Rotor Systems Organizational Maintenance

NV-1704-0057
UNREP Hydraulic and Mechanical Component Maintenance (Sending Units)

NV-1710-0016
Hydraulics

NV-1704-0129
A-6A Hydraulics and Flight Controls Organizational Maintenance

NV-1704-0129
A-6 Hydraulics, Flight Control and Structures Organizational Level Maintenance

NV-1704-0129
A/7A/B Structures, Hydraulics and Pneumatic Systems Maintenance

NV-1704-0190
Aviation Structural Mechanic H (Hydraulics), Class A

NV-1704-0128
Aviation Structural Mechanic H (Hydraulics), Class B

NV-1704-0087
Aviation Support Equipment Technician Hydraulics and Structures, Class A

NV-1704-0138
C-2A Hydraulics/Airframes System Maintenance

NV-1704-0143
C-2A Hydraulics/Airframes System Organizational Maintenance

NV-1704-0143
E-2A Hydraulics/Airframes System Maintenance

NV-1704-0155
E-2A Hydraulics/Airframes Systems

Organizational Maintenance

NV-1704-0155
EA-6B Hydraulics and Flight Control Organizational Maintenance

NV-1704-0223
Electricity, Electronics and Hydraulics, Class P

NV-1715-0565
F/RF-4/B Structures and Hydraulics Maintenance

NV-1704-0122
Industrial Hydraulics by Correspondence

CG-1704-0014
KC-130F Airframes and Hydraulics Organizational Maintenance

NV-1704-0191
P-3 Hydraulics and Flight Controls Organizational Maintenance

NV-1704-0050
P-3 Hydraulics, Flight Control Systems and Structures Organizational Maintenance

NV-1704-0161
S-2D/E Airframes and Hydraulics Systems Maintenance

NV-1704-0066
UH34D Airframe, Hydraulics and Flight Controls

NV-1704-0064
IBM

IBM System 360 Computer System Programming (COBOL Language), Class C

NV-1402-0007
IBM System 360 Disk Operating System (DOS) Operations

MC-1402-0018
IBM System 360 (DOS) COBOL Programming

MC-1402-0011
IBM System 360 Operating System (OS) Operations

MC-1402-0023
IBM System 360 (OS) Advanced Coding

MG-1402-0037
IBM System 360 (OS) Advanced Programming Techniques

MC-1402-0024
IBM System 360 OS Assembly Language

MC-1402-0031
IBM System 360 OS COBOL Language (Entry-level)

MC-1402-0029
IBM System 360 (OS) COBOL Programming

MC-1402-0013
IBM System 360 (OS) Data Control Techniques

MC-1402-0036
IBM System 360 (OS) Data Management

MC-1402-0042
IBM System 360 (OS) Data Management

MC-1402-0039
IBM System 360 OS FORTRAN IV Language (Entry-level)

MC-1402-0043
IBM System 360 OS FORTRAN Programming

MC-1402-0034
IBM System 360 OS PL/1 Programming

MC-1402-0035
IBM System 360 OS Programming

MC-1402-0030
IBM System 360 OS System Control

MC-1402-0033
IBM System 360 OS System Control and

DIIIa Management

MC-1402-0038
IBM System 360 (OS) Systems Programmer

MC-1402-0041
IBM System 360 OS Systems Programming

MC-1402-0032
IC

IC Electrician, Class B

NV-1715-0755
IC Electricians, Class A

NV-1715-0729
Interior Communications (IC), Class A, Part II (Interior Communications Equipment)

NV-1715-0173
Interior Communications (IC) Electrician, Class B

NV-1715-0755
Interior Communications (IC)

NV-1715-0755
Electrician, Class C7

NV-1715-0542
Interior Communications (IC) Package Course for SSN/SSBN

NV-1715-0866
Submarine Interior Communications (IC) Systems

NV-1715-0642
Ice

Ice Observer by Correspondence

CG-1304-0006
Ice Observer, Class C

NV-2202-0070
ICR

Cryptologic Technician T, Field Operations Type Two, Class A3, International Commercial Radio (ICR) Non-Morse

NV-1715-0839
Identification

A-4E Communication Navigation Identification (CNI)/Weapons Systems Organizational Maintenance

NV-1715-0452
CH-53 Communication, Navigation and Identification (CNI) Systems Organizational Maintenance

NV-1715-0101
Class C Field Oil Identification Laboratory

CG-1601-0001
F-4B Communication Navigation Identification (CNI) Line Troubleshooting Maintenance

NV-1704-0076
F-4B Communication Navigation Identification (CNI) Organizational Maintenance

NV-1715-0255
F-4J Communication Navigation Identification (CNI) Line Troubleshooting Maintenance

NV-1704-0074
F-4J Communication Navigation Identification (CNI) Organizational Maintenance

NV-1715-0612
F-8 Communication Navigation and Identification (CNI) Systems Organizational Maintenance

NV-1715-0688
H-46 AN/APX-6B and AN/APA-89 Identification System Intermediate Maintenance

NV-1715-0688
IFF
AIIMS Mk XII IFF System Maintenance (Electronics Technician, Class C1)
NV-1715-0812
AN/APX-64(V) IFF Transponder Set Intermediate Maintenance
NV-1715-0563
AN/APX-72 Series IFF Transponder System Maintenance
NV-1715-0811
AN/APX-76A Air/Air IFF Interrogator Set Intermediate Maintenance
NV-1715-0434
F-4B/1 KY-532A/ASQ IFF Transponder Intermediate Maintenance
NV-1715-0309
IFF AN/APX-72 and AN/UPX-17 Combined Maintenance
NV-1715-0914
IFF Transponder AN/APX-72 and AN/UPX-17 Combined Maintenance, Class F1
NV-1715-0914
KY-532A/KY-533A IFF Transponder Intermediate Maintenance
NV-1715-0184
Mk XII IFF Systems, Class C
NV-1715-0033
P-3 Radar and IFF Systems Organizational Maintenance
NV-1715-0114
Illuminator
Continuous Wave Illuminator (CWI) Common Core
NV-1715-0163
Illustration
Medical Illustration Technician
NV-0202-0001
NV-0202-0001
Illustrative
Illustrative Photography C1
NV-1709-0017
Illustrator
Illustrator Draftsman, Class A
NV-1713-0002
Independent
AN/SQA-13 (V) Independent Variable-Depth Sonar Operation and Maintenance
NV-1715-0772
Independent Duty Technician
NV-0709-0008
Indicating
RA-SC Electrical and Indicating Systems (Intermediate Maintenance)
NV-1704-0099
RA-SC Electrical and Indicating Systems Organizational Maintenance
NV-1704-0069
Indicator
A-4E Bombing System AN/AJB-3A and Remote Standby Indicator System
NV-1704-0098
AIAMS Mk XII IFF System Maintenance
NV-1715-0159
AAP-56 Indicator Assembly
NV-1715-0707
Bright Radar Indicator Tower Equipment Maintenance, Class C
NV-1715-0276
E-2A Computer Indicator (AN/ASA-27) Intermediate Maintenance
NV-1715-0046
Electronics Technician AN/SPA-25 Indicator Group Class C Maintenance
NV-1715-0510
Electronics Technician, AN/SPA-34 Indicator Group, Class C
NV-1715-0310
Electronics Technician, Class C, Indicator Group AN/SPA-41 Maintenance
NV-1715-0018
Electronics Technician, Indicator Group AN/SPA-40, Class C
NV-1715-0013
P-3 AN/APA-125A Indicator Intermediate Maintenance
NV-1715-0172
P-3 AN/APA-125A Indicator Maintenance, No 48
NV-1715-0172
P-3 AN/AQA-1 Sono Indicator System Intermediate Maintenance
NV-1715-0120
P-3 AN/ASA-16 Indicator Group Organizational Maintenance
NV-1715-0115
S-2D/E AQA-4(V) Indicator Group System Intermediate Maintenance
NV-1715-0561
Indicators
Controls and Indicators, Fire Control System (FCS) Mk 80, Class F1
NV-1715-0892
Indocitration
General Service Indocitration School
CG-2205-0005
Junior Officer Electronic Indocitration by Correspondence
CG-1715-0062
Limited Duty Officer (LDO) Indocitration
NV-2202-0094
Loran Officers Indocitration
CG-1715-0023
Marine Safety Basic Indocitration
CG-0802-0002
Officer Candidate School (Seamanship, Orientation, Operations & Military Indocitration)
CG-2202-0001
Sea Duty Indocitration
MC-2204-0014
Special Indocitration
MC-2204-0043
Women Officers Indocitration
MC-1408-0012
Indonesian
Indonesian—Malay
DD-0602-0002
Indonesia—Malay
DD-0602-0002
Industrial
Industrial College of the Armed Forces (Resident Program)
DD-1511-0003
Industrial Hydraulics by Correspondence
CG-1704-0014
Industrial Security Specialist
DD-1728-0001
National Security Management (Correspondence Course of the Industrial College of the Armed Forces)
DD-1511-0001
Industry
Industry Financial Management
DD-1408-0003
Inertial
A-6 AN/ASN-31 Inertial Navigation System and Test Console Intermediate Maintenance
NV-1715-0475
A-6 Ship and Shore Inertial Platform Test Station Intermediate Maintenance
NV-1715-0177
A-7E AN/ASM-37 Inertial Measurement System Test Set Intermediate Maintenance
NV-1715-0146
Electronics Technician, Class C, SSBN Ships Inertial Navigation, FBM Tender Navigation Maintenance
NV-1715-0465
Electronics Technician, Class C, SSBN Ships Inertial Navigation System Mk 2 Mod 0-6 Technician
NV-1715-0066
Mk 3 Mod 6 Ships Inertial Navigation System (SINS) Maintenance
NV-1715-0426
Mk 3 Mod 6 Ships Inertial Navigation System (SINS) Maintenance (Enlisted)
NV-1715-0426
RF-4B AN/ASN-46/56 Navigational Computer and Inertial Navigation System Intermediate Maintenance
NV-1715-0426
RF-4B AN/ASN-46/56 Navigational Computer and Inertial Navigation System Intermediate Maintenance
NV-1715-0228
Ships Inertial Navigation System (SINS) Mk 2 Mod 6 Control Theory
NV-1715-0232
SSBN Ships Inertial Navigation System (SINS) Mk 2 Mod 4 Technician
NV-1715-0440
SSN Mk 3 Mod 6 Ships Inertial Navigation System (SINS) Maintenance
NV-1715-0426
Infantry
Infantry Replacement and Individual Combat Training
MC-2204-0008
Infantry Weapons Armorer
MC-1601-0006
MC-2204-0020
Infantry Weapons Armorer (Basic)
MC-2204-0052
Infantry Weapons Armormers (Advanced)
MC-2204-0044
Infantry Weapons
Infantry Weapons Armorer (Basic)
MC-2204-0052
In-Flight
E-2A AN/ASM-33A In-Flight
<table>
<thead>
<tr>
<th>K-58 KEYWORD INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Information</strong></td>
</tr>
<tr>
<td>Advanced Information Specialist</td>
</tr>
<tr>
<td>DD-0504-0002</td>
</tr>
<tr>
<td>Amphibious Support Information System Operator</td>
</tr>
<tr>
<td>NV-1402-0034</td>
</tr>
<tr>
<td>Combat Information Center (CIC) Officer, Class O</td>
</tr>
<tr>
<td>NV-2202-0069</td>
</tr>
<tr>
<td>Combat Information Center (CIC) Watch Officer, Class O</td>
</tr>
<tr>
<td>NV-2202-0074</td>
</tr>
<tr>
<td>Common User Digital Information Exchange System (CUDIXS) Maintenance</td>
</tr>
<tr>
<td>NV-1715-0872</td>
</tr>
<tr>
<td>Common User Digital Information Exchange System (CUDIXS) Operators</td>
</tr>
<tr>
<td>NV-1715-0879</td>
</tr>
<tr>
<td>Data Base Management—LCC Amphibious Support Information System Language—Operator</td>
</tr>
<tr>
<td>NV-1402-0034</td>
</tr>
<tr>
<td>Inactive Duty Reserve Combat Information Center (CIC) Class—Basic, Supervisory and Officer Team Training</td>
</tr>
<tr>
<td>NV-1715-0509</td>
</tr>
<tr>
<td>Information Enlisted Information Officer Basic</td>
</tr>
<tr>
<td>DD-0504-0004</td>
</tr>
<tr>
<td>Information Officer &amp; Information Officer (Reserve Component)</td>
</tr>
<tr>
<td>DD-0504-0009</td>
</tr>
<tr>
<td>Information Security Management</td>
</tr>
<tr>
<td>DD-1728-0002</td>
</tr>
<tr>
<td>Information Specialist Information Specialist (Broadcast)</td>
</tr>
<tr>
<td>DD-0504-0004</td>
</tr>
<tr>
<td>Information Specialist (Journalist)</td>
</tr>
<tr>
<td>DD-0504-0001</td>
</tr>
<tr>
<td>LCC Amphibious Support Information System Operator</td>
</tr>
<tr>
<td>NV-1402-0034</td>
</tr>
<tr>
<td>Public Information Enlisted Public Information Officer</td>
</tr>
<tr>
<td>DD-0504-0008</td>
</tr>
<tr>
<td>Shipboard Information, Training and Entertainment (SITE) System Operators (Television Afloat)</td>
</tr>
<tr>
<td>DD-0504-0007</td>
</tr>
<tr>
<td>Submarine Satellite Information Exchange System (SSIXS) for Shipboard Installations Maintenance</td>
</tr>
<tr>
<td>NV-1715-0873</td>
</tr>
<tr>
<td>Submarine Satellite Information Exchange System (SSIXS) Operational Control Center Maintenance</td>
</tr>
<tr>
<td>NV-1715-0871</td>
</tr>
<tr>
<td>NV-1715-0878</td>
</tr>
<tr>
<td>Troop Information and Education Enlisted Troop Information and Education Officer</td>
</tr>
<tr>
<td>DD-0504-0005</td>
</tr>
<tr>
<td>DD-0504-0006</td>
</tr>
<tr>
<td>Infrared Infrared RA-5C AN/AAS-21 Infrared Detecting System Intermediate Maintenance</td>
</tr>
<tr>
<td>NV-1715-0222</td>
</tr>
<tr>
<td>RF-4B AN/AAS-18 Infrared Reconnaissance Mapping System Intermediate Maintenance</td>
</tr>
<tr>
<td>NV-1715-0225</td>
</tr>
<tr>
<td>Infrasonic Infrasonic Electronics Technician Class C, AN/FGC-73 Teletypewriter Routing Set and AN/UGR-14 Infrasonic Page Printer</td>
</tr>
<tr>
<td>NV-1715-0019</td>
</tr>
<tr>
<td>Input Input Central Navigation Computer (Input/Output)</td>
</tr>
<tr>
<td>NV-1402-0026</td>
</tr>
<tr>
<td>Naval Tactical Data System (NTDS)—Data Input—Basic</td>
</tr>
<tr>
<td>NV-1715-0673</td>
</tr>
<tr>
<td>Inspection Inspection Aircraft Maintenance Nondestructive Inspection School, Class C</td>
</tr>
<tr>
<td>NV-1704-0156</td>
</tr>
<tr>
<td>Inspector Inspector Safety Inspector Class C</td>
</tr>
<tr>
<td>NV-1728-0007</td>
</tr>
<tr>
<td>Installation Installation Data Processing Installation Management</td>
</tr>
<tr>
<td>MC-1402-0020</td>
</tr>
<tr>
<td>Data Processing Installation Management Seminar</td>
</tr>
<tr>
<td>MC-1402-0020</td>
</tr>
<tr>
<td>Data Processing Installation Managers Seminar</td>
</tr>
<tr>
<td>MC-1402-0020</td>
</tr>
<tr>
<td>Installations Installations Submarine Satellite Information Exchange System (SSIXS) for Shipboard Installations Maintenance</td>
</tr>
<tr>
<td>NV-1715-0873</td>
</tr>
<tr>
<td>Instruction Instruction Programmed Instruction Techniques</td>
</tr>
<tr>
<td>NV-1406-0006</td>
</tr>
<tr>
<td>Programmed Instruction Writer</td>
</tr>
<tr>
<td>NV-1406-0006</td>
</tr>
<tr>
<td>Instructional Instructional Instructional Programmers (Class C)</td>
</tr>
<tr>
<td>NV-1406-0005</td>
</tr>
<tr>
<td>Instructor Instructor Academic Instructor Training</td>
</tr>
<tr>
<td>NV-1406-0003</td>
</tr>
<tr>
<td>Basic Prop-Flight Instructor</td>
</tr>
<tr>
<td>NV-1606-0018</td>
</tr>
<tr>
<td>Close Combat Instructor</td>
</tr>
<tr>
<td>MC-0803-0001</td>
</tr>
<tr>
<td>Drill Instructor</td>
</tr>
<tr>
<td>MC-2204-0001</td>
</tr>
<tr>
<td>Enlisted Instructor Orientation</td>
</tr>
<tr>
<td>MC-1406-0001</td>
</tr>
<tr>
<td>Fire Fighter Instructor Course</td>
</tr>
<tr>
<td>NV-1728-0004</td>
</tr>
<tr>
<td>Firefighting Instructor</td>
</tr>
<tr>
<td>NV-1728-0004</td>
</tr>
<tr>
<td>Flight Instructor Indocritination Group</td>
</tr>
<tr>
<td>NV-1606-0042</td>
</tr>
<tr>
<td>Flight Instructor Training</td>
</tr>
<tr>
<td>NV-1606-0019</td>
</tr>
<tr>
<td>Formal School Instructor (IAC)</td>
</tr>
<tr>
<td>MC-1406-0012</td>
</tr>
<tr>
<td>Human Resource Management Instructor</td>
</tr>
<tr>
<td>NV-1512-0006</td>
</tr>
<tr>
<td>Instructor Basic</td>
</tr>
<tr>
<td>NV-1406-0008</td>
</tr>
<tr>
<td>Instructor, Class I, Course ’Alfa’</td>
</tr>
<tr>
<td>NV-1406-0008</td>
</tr>
<tr>
<td>Instructor, Class C-1 Administration and Counseling</td>
</tr>
<tr>
<td>NV-1408-0008</td>
</tr>
<tr>
<td>Instructor, Class C (Career Information and Counseling)</td>
</tr>
<tr>
<td>NV-1406-0004</td>
</tr>
<tr>
<td>Instructor Orientation</td>
</tr>
<tr>
<td>MC-1406-0003</td>
</tr>
<tr>
<td>Instructor Training</td>
</tr>
<tr>
<td>CG-1406-0002</td>
</tr>
<tr>
<td>Instructor Training, Class C</td>
</tr>
<tr>
<td>NV-1406-0001</td>
</tr>
<tr>
<td>Instructor Training School Class C</td>
</tr>
<tr>
<td>NV-1406-0001</td>
</tr>
<tr>
<td>Officer Instructor Orientation</td>
</tr>
<tr>
<td>MC-1406-0010</td>
</tr>
<tr>
<td>Physical Training Instruction</td>
</tr>
<tr>
<td>MC-0802-0001</td>
</tr>
<tr>
<td>Physical Training Instructor (Men)</td>
</tr>
<tr>
<td>MC-0802-0001</td>
</tr>
<tr>
<td>Physical Training Instructor (Women)</td>
</tr>
<tr>
<td>MC-1406-0002</td>
</tr>
<tr>
<td>Prospective Advanced Navigation Flight Instructor</td>
</tr>
<tr>
<td>NV-1606-0038</td>
</tr>
<tr>
<td>Prospective Phase I CV (Jet) (TF/AF-9J) Tactical Flight Instructor</td>
</tr>
<tr>
<td>NV-1606-0037</td>
</tr>
<tr>
<td>Prospective Phase II CV (Jet) (F11A) Tactical Flight Instructor</td>
</tr>
<tr>
<td>NV-1606-0041</td>
</tr>
<tr>
<td>Prospective TA-4J Flight Instructor</td>
</tr>
<tr>
<td>NV-1606-0021</td>
</tr>
<tr>
<td>Prospective TF/TAF-9J Flight Instructor</td>
</tr>
<tr>
<td>NV-1606-0039</td>
</tr>
<tr>
<td>Prospective VA (Prop) Tactical Flight Instructor</td>
</tr>
<tr>
<td>NV-1606-0040</td>
</tr>
<tr>
<td>Small Arms Instructor</td>
</tr>
<tr>
<td>CG-1408-0001</td>
</tr>
<tr>
<td>CG-2205-0007</td>
</tr>
<tr>
<td>Technical Instructor—Basic</td>
</tr>
<tr>
<td>MC-1406-0011</td>
</tr>
<tr>
<td>Trademan I (Instructor) Class A</td>
</tr>
<tr>
<td>NV-1406-0002</td>
</tr>
<tr>
<td>Water Safety/Survival Instructor</td>
</tr>
<tr>
<td>MC-0803-0002</td>
</tr>
<tr>
<td>Women Physical Training Instructor</td>
</tr>
<tr>
<td>MC-1406-0002</td>
</tr>
<tr>
<td>Instructors Instructors Atomic, Biological and Chemical (ABC) Defense for Shipboard Instructors</td>
</tr>
<tr>
<td>NV-0802-0001</td>
</tr>
<tr>
<td>Television Instructors</td>
</tr>
<tr>
<td>NV-1406-0007</td>
</tr>
<tr>
<td>Instrument Instrument A-7E Electrical and Instrument Systems Organizational Maintenance</td>
</tr>
<tr>
<td>NV-1704-0080</td>
</tr>
<tr>
<td>A-7 Electrical and Instrument Systems Organizational Maintenance</td>
</tr>
<tr>
<td>NV-1704-0079</td>
</tr>
<tr>
<td>Aviation Electrician's Mate I (Instrument), Class A</td>
</tr>
<tr>
<td>NV-1704-0068</td>
</tr>
<tr>
<td>CH-46A Electrical and Instrument Systems Organizational Maintenance</td>
</tr>
<tr>
<td>NV-1704-0077</td>
</tr>
<tr>
<td>E-1B Electrical and Instrument Systems Organizational Maintenance</td>
</tr>
<tr>
<td>NV-1714-0013</td>
</tr>
<tr>
<td>H-46 Electrical and Instrument Systems Organizational Maintenance</td>
</tr>
<tr>
<td>NV-1714-0011</td>
</tr>
</tbody>
</table>
H-53 Electrical and Instrument Systems
Organizational Maintenance
Instrument Repair Officer
MC-1721-0003
Optical Instrument Repairman
MC-1721-0001
Optical Instrument Repairman
(Advanced)
MC-1721-0004
Optical Instrument Repairman
MC-1721-0002
Optical Survey Instrument Repair
DD-1721-0001
RADIAC Instrument Maintenance
NV-1715-0545
Test Instrument Repairman
MC-1715-0027
Instrumentalist
Band Instrumentalist (Army)
NV-1205-0001
Instrumentman
Instrumentman (Calculator Repair), Class C
NV-1706-0001
Instrumentmen
Instrumentmen, Class A
NV-1721-0004
Instrumentmen—Watch Repair
NV-1721-0005
Instruments
C-2A Electrical and Instruments
Organizational Maintenance
NV-1715-0150
F-8 Electrical, Instruments and Stabilization Systems Organizational Maintenance
NV-1715-0183
H-53 Electrical and Instruments
Intermediate Maintenance
NV-1704-0236
KA-3A/KA-3B Electrical and Instruments Organizational Maintenance
NV-1714-0014
S-2D/E Electrical and Instruments Maintenance, No. 6
NV-1704-0086
Insulation
Shipboard Thermal Insulation (Lagging)
NV-1710-0039
Integrated
A-4 Integrated Electrical Systems
Organizational Maintenance
NV-1704-0185
A-7A/B Integrated Avionics Weapons System Technician Organizational Maintenance
NV-1715-0450
AN/ASQ-17B Integrated Electronics
Central Intermediate Maintenance
NV-1715-0015
AN/ASQ-56A Integrated Electronics
Central and Related Systems Intermediate Maintenance
NV-1715-0540
E-1B Integrated Electrical System
Organizational Maintenance
NV-1715-0498
NV-1715-0746
Integrated Announcing System AN/WIC-2 Combined Maintenance
NV-1715-0319
Integrated Avionics Radar System Technician
NV-1715-0035
Integrated Avionics Weapons System Specialist
NV-1715-0266
Integrated Avionics Weapons System Technician
NV-1715-0267
Marine Corps Integrated Maintenance Management Officer
MC-1402-0028
P-3C Integrated Avionics System Technician
NV-1715-0329
P-3C Integrated Electrical Systems Organizational Maintenance
NV-1704-0089
P-3 Integrated Electrical System Organizational Maintenance
NV-1704-0101
Intelligence
Amphibious Intelligence Staff Officer
NV-1606-0004
Amphibious Staff Intelligence Officer (ASIO)
NV-1606-0059
Aviation Electronics Intelligence, Class O/C
NV-1715-0504
Command Intelligence Officer (CIO)
NV-1606-0024
Defense Intelligence Course
DD-1511-0004
Electronic Warfare Intelligence Operator
NV-1715-0021
Fleet Air Intelligence Officer
NV-2202-0023
Fleet Officer and Fleet Enlisted Air Intelligence
NV-2202-0022
Intelligence Advisor Vietnam
NV-1606-0001
Intelligence/Electronic Warfare Officer
NV-1715-0332
Intelligence Man (Air/Ground)
NV-1606-0006
Intelligence Officer, Vietnam
NV-1606-0033
IOC Intelligence Data System (Storage and Retrieval) Maintenance
NV-1715-0030
Marine Enlisted Basic Combat Intelligence
NV-1606-0005
National Senior Intelligence
NV-1606-0001
Naval Field Intelligence Officer, Vietnam
NV-1606-0003
Postgraduate Intelligence Course
DD-1511-0004
Radar (Target) Intelligence
NV-1709-0015
Reserve Air Intelligence (RAI)
NV-1606-0055
Reserve Basic Intelligence Training Subjects (BITCS)
NV-1606-0056
Intelligenceman
Photographic Intelligenceman (PT)
NV-1606-0030
Inter-American
Inter-American Defense College
DD-1511-0005
KEYWORD INDEX

Intercept
Air Intercept Control, Class O
NV-1704-0001
Air Intercept Controller
NV-1704-0002
Air Intercept Controller Supervisor
NV-1704-0005
AII Intercept Control (Requalification), Class O/C
NV-1704-0115
Air Intercept Control (Supervisor), Class C/O
NV-1704-0117
Basic Naval Tactical Data System (NTDS) Air Intercept Controller
NV-1715-0674
Intercultural
Intercultural Relations—Facilitator Training
NV-1512-0003
Intercultural Relations—Human Resources Development
NV-1512-0004
Intercultural Relations—Overseas Duty Training
NV-1512-0002
Intercultural Relations—Race Relations Specialist Training
NV-1512-0001
Intercultural Relations—Vietnam Advisor Training
NV-1513-0003
Interior
Interior Communications (IC), Class A, Part II (Interior Communications Equipment)
NV-1715-0173
Interior Communications (IC)
Electrician, Class B
NV-1715-0755
Interior Communications (IC)
Electrician, Class C7
NV-1715-0755
Interior Communications (IC) Package Course for SSN/SSBN
NV-1715-0886
Submarine Interior Communications (IC) Systems
NV-1715-0642
Intermediate
Avionics Intermediate, Class B
NV-1715-0102
Defense Language Institute Intermediate Courses
DD-0602-0006
Intermediate Avionics, Class B
NV-1715-0102
Intermediate Maintenance Level Data Analysis, Class C
NV-1175-0001
Intermediate Welding
NV-1710-0054
Music Intermediate, Class C
NV-1205-0003
Music Intermediate, Class C-I
NV-1205-0003
Reserve Cryptologic Technician—Intermediate Cryptanalysis
NV-1715-0820
NV-1715-0820
International
Cryptologic Technician T, Field Operations Type Two, Class A3,
K-60  KEYWORD INDEX

International Commercial Radio (ICR)  
Non-Morse  DD-0602-0001  NV-1715-0039

Interpretation  
IOIC Photo Interpretation Officer  NV-1709-0006  DD-0602-0002  DD-0602-0004  DD-0602-0009
IOIC Photo Interpretation Operator  NV-1709-0007  Italian—Italian  DD-0602-0002  DD-0602-0004  DD-0602-0009
Metrical Photographic Interpretation  NV-1709-0014  Italian—Italian  DD-0602-0002  DD-0602-0004  DD-0602-0009
Photographic Interpretation/Radar  NV-1709-0014  Strategic Photographic Interpretation  NV-1709-0012  NV-1709-0011
Target Analysis  NV-1606-0030  Tactical Photographic Interpretation  NV-1709-0011

Interviewing  
Interviewing of Prisoners of War  MC-1728-0000  Italian—Italian  DD-0602-0002  DD-0602-0004  DD-0602-0009

Interrogator  
AN/APX-76A Air/Army IFF Interrogator Set Intermediate Maintenance  NV-1715-0434
Electronics Maintenance Course  NV-1715-0434
Interrogator Set AN/TPX-42A(V) 5, Class C  NV-1715-0566

Interviewing and Classification  
Interviewing and Classification  NV-1406-0018
Personnelman, Class C-1, Interviewing and Classification  NV-1406-0018

IOIC  
CVA IOIC Storage and Retrieval Officer  NV-1402-0043  NV-1709-0581
IOIC Electronic Data Processing  NV-1715-0581
IOIC Intelligence Data System (Storage and Retrieval) Maintenance  NV-1715-0030
IOIC Maintenance Officer  NV-1402-0029
IOIC Photographic Processing/ Maintenance  NV-1709-0008
IOIC Photographic Processing Officer  NV-1709-0013
IOIC Photo Interpretation Officer  NV-1709-0006
IOIC Photo Interpretation Operator  NV-1709-0007
IOIC Storage and Retrieval Operator/ Officer Course  NV-1402-0035
IQIC Supervisor  NV-1606-0002
IOIC Systems Maintenance  NV-1715-0084

Ionospheric  
AN/UPR-2 Ionospheric Sounder Set Maintenance (Electronics Technician, Class C1)  NV-1715-0004

Isotope  
Radioactive Isotope Technician  NV-0705-0002
Radioactive Isotope Technician, Class C  NV-0705-0002
Italian  Italian  DD-0602-0001

J52-P408  
J52-P408 Engine Intermediate Maintenance/Complete Engine Repair  NV-1704-0024

J52-P6/6A/8A  
J52-P6/6A/8A Intermediate Maintenance  NV-1704-0018

J52-P6A/8A  
J52-P6A/8A Engine Intermediate Maintenance  NV-1704-0017

J57-P16/20  
F-8 J57-P16/20 Intermediate Maintenance  NV-1704-0163
F-8 J57-P16/20 Intermediate Maintenance/Complete Engine Repair  NV-1704-0163

J60-P3A/6  
J60-P3A/6 Engine Intermediate Maintenance/Complete Engine Repair  NV-1704-0037

J79-GE-8/10  
J79-GE-8/10 Engine Intermediate Maintenance  NV-1704-0055
J79-GE-8/10 Intermediate Maintenance  NV-1704-0055

J79-GE-8/8A  
J79-GE-8/8A Cold Section Repair  NV-1704-0201
J79-GE-8/8A Hot Section and Related Systems Intermediate Maintenance  NV-1704-0202

J85-GE-4  
J85-GE-4 Engine Intermediate Maintenance/Complete Engine Repair  NV-1704-0026

Jamming  
AN/ALQ-99 Jamming Transmitters and AN/ALM-107 Countermeasures Test Station Intermediate Maintenance  NV-1715-0053


Jet  
Aviation Machinist’s Mate J (Jet Engine), Class A  NV-1704-0148
Aviation Machinist’s Mate J (Jet Engine), Class B  NV-1704-0159
Aviation Machinist’s Mate J (Turbo-Jet), (Class A)  NV-1704-0148

Basic Jet Navigation, Class O  NV-1704-0148
Prospective Phase II CV (Jet) (F11A)  NV-1704-0023
Tactical Flight Instructor  NV-1606-0041
TA-4J Advanced Jet  NV-1704-0025

Jezebel  
Advanced Jezebel (VP)  NV-1704-0025
Jezebel Gram Analysis for AWs P3A/B (DIFAR Retrofit)  NV-1715-0704
S-2D/E AN/AKT-19A Multi-Channel Jezebel Relay Intermediate Maintenance  NV-1715-0243

Joint  
Joint Aviation Supply and Maintenance Material Management  NV-1704-0025

Journalism  
Electronic Journalism  DD-0505-0003
Recruiters Journalism, Class C-1  NV-0504-0002

Journalist  
Basic Military Journalist  DD-0504-0001
Information Specialist (Journalist)  DD-0504-0001

Journalists  
Journalists, Class A  NV-0504-0003
Journalists, Class B  NV-0504-0004

Journeyman  
Journeyman Electrician  MC-1714-0001
Journeyman Engineer Equipment Mechanic  MC-1710-0025
Journeyman Plumbing and Water Supply Man  MC-1710-0012
Journeyman Refrigeration Mechanic  MC-1710-0004
Loran-C Journeyman  CG-1715-0039
Plumbing and Water Supply Journeyman  MC-1710-0012

Judge  
Judge Advocate General’s Corps Indocatination  NV-2202-0051

Jumpmaster  
Jumpmaster Naval Parachutist, Class C1  NV-2202-0026
Naval Jumpmaster Class C  NV-2202-0026

Junior  
Amphibious Junior Division Officer  NV-2202-0026
Indocatination  NV-2202-0026
Amphibious Junior Officer Indocatination  NV-2202-0046
Junior Course  MC-1408-0010
MC-2204-0021
Junor Officer Electronic Indocatination by Correspondence  CG-1715-0062
Junior Officer Leadership and Man...
Central IFF—KY-308/ASQ and Power Supply—AM-2310/ASQ Intermediate Maintenance

KY-309

KY-309

KY-312
F-4B AN/ASQ-19 TACAN System (RT-541 and KY-312) Intermediate Maintenance

KY-312
RT-736 and KY-312 TACAN (Tactical Air Navigation) Intermediate Maintenance

KY-352A/ASQ
F-4B/1 KY-532A/ASQ IF/Transponder Intermediate Maintenance

KY-532A/KY-533A
KY-532A/KY-533A IF/Transponder Intermediate Maintenance

Laboratory
Blood Bank and Clinical Laboratory Technicians

Class 2 Field Oil Identification Laboratory

Clinical Laboratory Assistant Technicians

Clinical Laboratory Technicians, Class C

Medical Laboratory Technicians, Class C

Optician Laboratory Technicians, Class C

Optician Technicians

Photographic Laboratory Technicians

LAMPS
Light Airborne Multipurpose System (LAMPS) Operators

Light Airborne Multipurpose System (LAMPS) Sensor Operators

Light Airborne Multipurpose System (LAMPS) Tactics

KEYWORD INDEX

K-61

SH-2D Light Airborne Multipurpose Systems (LAMPS) Avionics Equipment Organizational Maintenance

Landing
All Weather Carrier Landing System Equipment Maintenance, AN/SPN-42, Class C

Automatic Carrier Landing System Equipment Maintenance AN/SPN-42 (ET), Class C

Landing Craft Beach and Surf Salvage

Optical Landing Systems Maintenance, Class C

Ship Landing Party Indoctrination

Language
Defense Language Institute Advanced Courses

Defense Language Institute Aural Comprehension Courses

Defense Language Institute Basic Courses (1954-1956)

Defense Language Institute Basic Courses (After 1956)

Defense Language Institute Short Basic Courses

Defense Language Institute Special Courses

Defense Language Institute Support Command Courses

High Intensity Language Training (Vietnamese)

National Cryptologic School Resident Language Courses

Launch
Aircraft Launch and Recovery Equipment (C-13 and C-13 Mod 1 Catapults), Class C

Aircraft Launch and Recovery Equipment (C-13 Catapult, Class C

Aircraft Launch and Recovery Equipment (C-7/11 Catapult), Class C

Aircraft Launch and Recovery Equipment Maintenance Officer (C-13 Catapult), Class C

Aircraft Launch and Recovery Equipment Officer (C-13 Catapult), Class O

Aircraft Launch and Recovery Equipment Maintenance Officer (C-13 Catapult), Class O
**Leadership**

- Advanced Automotive Mechanic/Maintenance Noncommissioned Officer (NCO) Leadership
- Advanced Disbursing Man Leadership
- Bakery Noncommissioned Officer (NCO) Leadership
- Chief Petty Officer Leadership, Class C
- Disbursing Officer Leadership
- Food Service Noncommissioned Officer (NCO) Leadership
- Food Service Staff Noncommissioned Officer (NCO) Leadership
- Ground Supply Officer Leadership
- Junior Officer Leadership and Management
- Leadership and Management (for Junior and Senior Petty Officers, and Reserve Petty Officers and Chiefs)
- Leadership and Management for Officers (LMT)
- Leadership and Management for Petty Officers (LMT)
- Leadership Schools Class C-1
- Motor Transport Staff Noncommissioned Officer (NCO) Leadership
- Mountain Leadership Training, Summer
- Mountain Leadership Training, Winter
- Noncommissioned Officers (NCO) Leadership (Junior)
- Noncommissioned Officers (NCO) Leadership (Senior)
- PHIBLANT Petty Officer Leadership
- Reserve Officer, Chief Leadership and Management
- Reserve Petty Officer, Leadership and Management
- Senior Petty Officer Leadership and Management
- Special Mess Leadership Training
- Special Mess Training Leadership
- Supply Chief Leadership
- Supply Noncommissioned Officer (NCO) Leadership
- Warehousing NCO Leadership
- Warehousing Noncommissioned Officer (NCO) Leadership

**Legal**

- Advanced Legal Services
- Basic Legal Administration
- Basic Legal Clerk and Reporter
- Legal Clerk and Court Reporting
- Legal Clerk/Court Reporter
- Legal Services Man
- Legal Services Man/Reporter, Phase I
- Legal Services Man/Reporter, Phase II
- Legal Services Man/Reporter, Phase III
- Legal Services Reporter SPCM (Closed Microphone)

**Liaison**

- Naval Gunfire Liaison Officer
- Light Airborne Multipurpose System (LAMPS) Operator
- Light Airborne Multi-System (LAMPS) Sensor Operator
- Light Airborne Multipurpose System (LAMPS) Tactics
- Light Anti-Aircraft Artillery (AAA) Fire Control Repair
- P-3C AN/AAR-13 Low Light Level Television Camera Intermediate Maintenance
- SH-2D Light Airborne Multipurpose System (LAMPS) Avionic Equipment Organizational Maintenance

**Limited**

- Aviation Indoctrination, Limited Duty Officer (LDO)
- Aviation Limited Duty Officer (LDO) Indoctrination
- Limited Duty Officer (LDO) Indoctrination
- Limited Duty Officer Supply (LOS)
- Warehousing Staff Noncommissioned Officer (NCO) Leadership
- Woman Maritime Noncommissioned Officer (NCO) Leadership

**Law**

- Maritime Law Enforcement
- Military Justice (Lawyer)
- Military Justice: Lawyer (Lawyer)
Lithium
Lithium Bromide Air Conditioner

Lithographic
Lithographic Photography
Lithographic Stripping and Platemaking

Lithuanian
Lithuanian

LM2500
LM2500 Gas Turbine Module

LMT
Leadership and Management for Officers (LMT)
Leadership and Management for Petty Officers (LMT)

Locator
AN/ASH-20 (V) Flight Recorder, Locator System Intermediate Maintenance

Locomotive
American Locomotive (ALCO 251C) Diesel Engine, Class C1
Engineer, Class C, American Locomotive (ALCO 251-C) Diesel Engine

Logic
Fundamentals of Digital Logic

Logistics
Missile Technician Poseidon Logics

LORA
Sonar AN/SQS-23 D-G Series TRAM, MIP, LORA Maintenance

Loran
AN/APN-180 Loran A Navigation System Class C
AN/APN-70B Loran System Intermediate Maintenance
AN/ARN-81 Loran Intermediate Maintenance
AN/UPN-12 Loran Receiver Set Maintenance (Electronics Technician, Class C1)
AN/UPN-23 Loran A Receiver, Class A
C-2A AN/ARN-81 Loran Intermediate Maintenance
Electronics Technician, Class C, AN/SPN-38 Loran Receiving Set Maintenance

Loram Enlisted, Class C

Loram AN/WPN-5 Combined Maintenance
Loran ‘C’ Advanced Maintenance
Loran ‘C’ AN/WPN Refresher Maintenance, Class F1
Loran Maintenance (Enlisted)
Loran Officers Induction Training
Loran Receiving Set AN/WPN-5 Operation and Maintenance
Loran Receiving Sets AN/WPN-38 and AN/WPN-5 Operation, Maintenance and Functional Checkout
P-3 AN/APN-70 Loran System Intermediate Maintenance
Polaris Loran ‘C’ Advanced Training
Loran-A
Loran-A Apprentice, Class A
Loran-C
Loran-C Journeyman

LOS
Line Officer Supply (LOS)

LST 1179
Engineer, Class C, LST 1179 Class Controllable Pitch Propeller and Propulsion Control System
LST 1179/1182 Class Controllable Pitch Propeller and Propulsion Control System, Class C1

LST 1182
LST 1182 Propulsion Technician, Class C1

LVT3C
Amphibian Tractor Crewman Training LVT3C, LVTP5

LVTAS
Armed Amphibian Crewman Training, LVTAS; LVTP5

LVTP5
Amphibian Tractor Crewman Training LVT3C, LVTP5

M61A1
A-7 M61A1 Gun and Associated Systems Intermediate Maintenance

MA-40
Basic Electronics (MA-40)

Machine
Advanced Office Machine Repair, Class C

AN/USQ-20 Machine Language

Machinegunner
Machinegunner

Machinery
Class A Machinery Technician
Machinery Repairman, Class A
Machinery Repairmen, Class B
Machinery Technician First Class by Correspondence
Machinery Technician Second Class by Correspondence
Submarine (SSN/SSBN) Auxiliary Machinery Operation and Maintenance

Machinist
Aviation Machinist Mate, First Class, by Correspondence
Aviation Machinist Mate, Second Class, by Correspondence
Aviation Machinist’s Mate, First Class, by Correspondence
Aviation Machinist’s Mate, Second Class, by Correspondence
Repair Shop Machinist
Weapons Repair Shop Machinist

Machinist’s Mate
Aviation Machinist’s Mate
Aviation Machinist’s Mate Class A
Aviation Machinist’s Mate, First Class, by Correspondence
Aviation Machinist’s Mate H (Helicopter), Class A
Aviation Machinist’s Mate J (Jet Engine), Class A
Aviation Machinist’s Mate J (Jet Engine), Class B
Aviation Machinist’s Mate J (Turbo-Jet), (Class A)
Aviation Machinist’s Mate R (Reciprocating), Class A
Aviation Machinist’s Mate R (Reciprocating), Class B
Aviation Machinist’s Mate, Second Class, by Correspondence

Programming
Programming, Digital Computer CP-642A&B/USQ-80 (Machine Language and CS-1 Assembly Language)

Machine Tool Operations
Machine Tool Operator

Machine Tool
Machine Tool Operator

Machine Tool Operations
Machine Tool Operator

Machine Tool Operations
<table>
<thead>
<tr>
<th>Keyword</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATC Machinist's Mate Maintenance</td>
<td>NV-1732-0005</td>
</tr>
<tr>
<td>Machinist's Mate Enlisted Maintenance</td>
<td>NV-1710-0006</td>
</tr>
<tr>
<td>MAGNETIC</td>
<td>NV-1303-0001</td>
</tr>
<tr>
<td>AN/ASQ-10A Magnetic Anomaly Detector Systems Intermediate Maintenance</td>
<td>NV-1715-0178</td>
</tr>
<tr>
<td>Data Systems Technician, Class C</td>
<td>NV-1715-0178</td>
</tr>
<tr>
<td>AN/ASQ-10 Magnetic Anomaly Detector Intermediate Maintenance</td>
<td>NV-1715-0178</td>
</tr>
<tr>
<td>Data Systems Technician, Class C</td>
<td>NV-1715-0178</td>
</tr>
<tr>
<td>AN/SPG-25(A) Magnetic Anomaly Detector</td>
<td>NV-1715-0178</td>
</tr>
<tr>
<td>RD-358 Magnetic Tape Subsystem Accelerated</td>
<td>MC-1715-0084</td>
</tr>
<tr>
<td>Maintenance</td>
<td>NV-1704-0078</td>
</tr>
<tr>
<td>A-6A Maintenance Supervisors Familiarization</td>
<td>NV-1704-0078</td>
</tr>
<tr>
<td>A-6 Maintenance Supervisors Familiarization</td>
<td>NV-1704-0078</td>
</tr>
<tr>
<td>AIMS Mk XII IFP System Maintenance</td>
<td>NV-1704-0165</td>
</tr>
<tr>
<td>AN/AJM-32(V) Intermediate Maintenance</td>
<td>NV-1715-0812</td>
</tr>
<tr>
<td>AN/ALQ-76 Intermediate Maintenance</td>
<td>NV-1715-0069</td>
</tr>
<tr>
<td>AN/APX-72 Maintenance, Class C</td>
<td>NV-1715-0057</td>
</tr>
<tr>
<td>AN/APX-72 Series IFP Transponder System Maintenance</td>
<td>NV-1715-0811</td>
</tr>
<tr>
<td>AN/MK-101 Intermediate Maintenance</td>
<td>NV-1715-0811</td>
</tr>
<tr>
<td>AN/BRD-7 Combined Maintenance, Class Cl</td>
<td>NV-1715-0077</td>
</tr>
<tr>
<td>AN/SPG-50 Maintenance</td>
<td>NV-1715-0049</td>
</tr>
<tr>
<td>AN/SQQ-14 Maintenance (Enlisted)</td>
<td>NV-1715-0306</td>
</tr>
<tr>
<td>AN/UQA-3A Maintenance</td>
<td>NV-1715-0107</td>
</tr>
<tr>
<td>AN/WPS-4 Maintenance</td>
<td>NV-1715-0107</td>
</tr>
<tr>
<td>Automotive Maintenance Officer</td>
<td>MC-1703-0014</td>
</tr>
<tr>
<td>Automotive Organizational Maintenance</td>
<td>MC-1703-0014</td>
</tr>
<tr>
<td>Automotive Preventive Maintenance</td>
<td>MC-1703-0008</td>
</tr>
<tr>
<td>Aviation Maintenance Control Administration</td>
<td>NV-1717-0008</td>
</tr>
<tr>
<td>Basic Refrigeration Theory and Maintenance</td>
<td>NV-1730-0001</td>
</tr>
<tr>
<td>Cryptologic Technician Maintenance</td>
<td>NV-1715-0829</td>
</tr>
<tr>
<td>F-14A Organizational Maintenance Supervisor, Familiarization</td>
<td>NV-1704-0211</td>
</tr>
<tr>
<td>F-4B/J Maintenance Supervisor, Familiarization</td>
<td>NV-1704-0126</td>
</tr>
<tr>
<td>IOIC Maintenance Officer</td>
<td>NV-1402-0029</td>
</tr>
<tr>
<td>IOIC Systems Maintenance</td>
<td>NV-1715-0084</td>
</tr>
<tr>
<td>Marine Corps Integrated Maintenance Management (Officer)</td>
<td>MC-1710-0028</td>
</tr>
<tr>
<td>Motor Transport Maintenance Management</td>
<td>NV-0419-0002</td>
</tr>
<tr>
<td>Naval Aircraft Maintenance Management</td>
<td>NV-1717-0011</td>
</tr>
<tr>
<td>Outboard Engines Operation and Maintenance</td>
<td>CG-1731-0001</td>
</tr>
<tr>
<td>Outboard Motors, Motor Maintenance and Overhaul, Class C</td>
<td>CG-1731-0001</td>
</tr>
<tr>
<td>RA-SC Maintenance Supervisors Familiarization</td>
<td>NV-1717-0005</td>
</tr>
<tr>
<td>Tracked Vehicle Maintenance Management</td>
<td>MC-1703-0013</td>
</tr>
<tr>
<td>Tracked Vehicle Maintenance Officer/Staff Noncommissioned Officer Management</td>
<td>MC-1710-0022</td>
</tr>
<tr>
<td>Malay</td>
<td>NV-1408-0006</td>
</tr>
<tr>
<td>Indonesian—Malay</td>
<td>NV-1408-0006</td>
</tr>
<tr>
<td>Malay</td>
<td>NV-1408-0006</td>
</tr>
<tr>
<td>Management</td>
<td>NV-1408-0006</td>
</tr>
<tr>
<td>Air Traffic Control Equipment Maintenance Management</td>
<td>NV-1717-0292</td>
</tr>
<tr>
<td>Air Traffic Management</td>
<td>NV-0419-0013</td>
</tr>
<tr>
<td>Aviation Management</td>
<td>NV-1717-0001</td>
</tr>
<tr>
<td>Aviation Ordinance Officers (Management), Class O (AOM(0))</td>
<td>NV-1405-0010</td>
</tr>
<tr>
<td>Bakery Management</td>
<td>MC-1729-0011</td>
</tr>
<tr>
<td>Basic Programming Orientation for Middle Management</td>
<td>NV-1402-0015</td>
</tr>
<tr>
<td>Civil Engineer Corps Officer Basic—Public Works Management Specialty</td>
<td>NV-1408-0014</td>
</tr>
<tr>
<td>Commissaryman-Steward Management Principles, Class C</td>
<td>NV-1729-0002</td>
</tr>
<tr>
<td>Commissioned Officers' Mess Closed Mess Management</td>
<td>NV-1729-0008</td>
</tr>
<tr>
<td>Construction Contract Administration and Management</td>
<td>NV-1408-0009</td>
</tr>
<tr>
<td>Cryptologic Technician O, Tactical</td>
<td>NV-1715-0849</td>
</tr>
<tr>
<td>Communications Systems Operations and Management, Class C</td>
<td>NV-1715-0849</td>
</tr>
<tr>
<td>Data Base Management—LCC</td>
<td>NV-1715-0849</td>
</tr>
<tr>
<td>Ambush Support Information System Language—Operator</td>
<td>NV-1402-0034</td>
</tr>
<tr>
<td>Data Processing Installation Management Seminar</td>
<td>MC-1402-0020</td>
</tr>
<tr>
<td>Data Processing Installation Management Seminar</td>
<td>MC-1402-0020</td>
</tr>
<tr>
<td>Defense Equal Opportunity Management Institute</td>
<td>DD-1512-0001</td>
</tr>
<tr>
<td>Defense Management Systems</td>
<td>NV-1408-0003</td>
</tr>
<tr>
<td>Defense Security Assistance Management Core</td>
<td>DD-1408-0001</td>
</tr>
<tr>
<td>Defense Security Assistance Management Overseas</td>
<td>DD-0327-0001</td>
</tr>
<tr>
<td>Food Service Management</td>
<td>MC-1729-0008</td>
</tr>
<tr>
<td>Freight Transportation and Traffic Management</td>
<td>NV-0419-0008</td>
</tr>
<tr>
<td>Group VIII E-6/E-7 Management</td>
<td>NV-1408-0006</td>
</tr>
<tr>
<td>Group VIII E6/E9 Advanced Management</td>
<td>NV-1408-0006</td>
</tr>
<tr>
<td>Human Resource Management Instructor</td>
<td>NV-1512-0006</td>
</tr>
<tr>
<td>Human Resource Management Specialist</td>
<td>NV-1512-0005</td>
</tr>
<tr>
<td>IBM System 360 (OS) Data Management</td>
<td>MC-1402-0039</td>
</tr>
<tr>
<td>IBM System 360 OS System Control and Data Management</td>
<td>MC-1402-0038</td>
</tr>
<tr>
<td>Industry Financial Management</td>
<td>DD-1408-0003</td>
</tr>
<tr>
<td>Information Security Management</td>
<td>DD-1408-0003</td>
</tr>
<tr>
<td>Intermediate Transportation Management</td>
<td>NV-0419-0010</td>
</tr>
<tr>
<td>Introduction to Traffic and Terminal Management</td>
<td>NV-0419-0014</td>
</tr>
<tr>
<td>Joint Aviation Supply and Maintenance Material Management</td>
<td>NV-0419-0006</td>
</tr>
<tr>
<td>Junior Officer Leadership and Management</td>
<td>NV-1405-0009</td>
</tr>
<tr>
<td>Leadership and Management (for Junior and Senior Petty Officers, and Reserve Petty Officers and Chiefs)</td>
<td>NV-1405-0009</td>
</tr>
<tr>
<td>Leadership and Management for Officers (LMT)</td>
<td>NV-1405-0009</td>
</tr>
<tr>
<td>Leadership and Management for Petty Officers (LMT)</td>
<td>NV-1405-0009</td>
</tr>
<tr>
<td>Management Analysis, Class C</td>
<td>NV-1717-0013</td>
</tr>
<tr>
<td>Management Analysis, Class O</td>
<td>NV-1115-0002</td>
</tr>
<tr>
<td>Management and Supervision of Naval Personnel</td>
<td>NV-1115-0002</td>
</tr>
</tbody>
</table>
Management, Class B
Naval Aircraft Maintenance Management
Officers’ Messes
Management of Navy OPEN messes
Management of Marine Corps Clubs
National Security Management.
Management (Officer)
Marine Corps Integrated Maintenance
Maintenance Management, Class C
Marine Air Traffic Control Unit
Management of Officers and, Petty
Operating Room Technician and
Navy Schools Management
Navy Exchange Management
Navy Advanced Management
Navy Management
Naval Aviation Maintenance/Material
Management, Class B
Naval Exchange Management
Naval Aircraft Maintenance
Management
Naval Aviation Maintenance/Material
Management
Personal Property Traffic Management
Personnelman, Class C, Naval
Management Analysis
Program Management
Program Management for Contract
Administration
Program Management for Functional
Managers
Recreation Management
Reserve Officer, Chief Leadership and
Management
Reserve Petty Officer Leadership and
Management
Senior Petty Officer Leadership and
Management
Station Management Systems
Supervision and Management, Class C
Transportation Management
Transportation Management,
Advanced
Warehouse Operations Management
Map
A/N/ASM-398 Projected Map Display
Set (PMDS) Intermediate Maintenance
A/N/ASN-99 Projected Map Display Set
Intermediate Maintenance
Map Compilation
DD-713-0001
Mapping
Mardan
Mardan Computer Theory and
Maintenance I
Mardan Computer Theory and
Maintenance II
Mardan/Verdan Computer Theory
Marine
Class A Marine Science Technician
Engineering, Class C, Marine Gas Turbine
Basic
Management of Marine Corps Clubs
Marine Aircraft Launch and Recovery
Equipment, Class A
Marine Air Traffic Control Navigational
Aids Maintenance
Marine Air Traffic Control Navigational
Aids Repairman, Class C
Marine Air Traffic Control Unit
Equipment Maintenance, Class C
Marine Air Traffic Control Unit
Maintenance Management, Class C
Marine Air Traffic Control Unit
Maintenance Management, Class O
Marine Air Traffic Control Unit
Radar Maintenance, Class C
Marine Air Traffic Control Unit Radar
Repairman, Class C
Marine Assembler Language
Programming
Marine Aviation Operations Climax;
Class C
Marine Aviation Supply, Class C
Marine Aviation Supply (Manual), Class C
Marine Aviation Supply (Mechanized),
Class C
Marine Enlisted Basic Combat
Intelligence
Marine Environmental Protection
Marine Environment and Systems
Officer, Class C
Marine Environment and Systems Petty
Officer (Class C)
Marine Gas Turbine Basic, Class C1
Marine Mechanical School, Class P
KEYWORD INDEX ~ K-65
Marine Safety Basic Indoctration
Marine Science Technician
Marine Science Technician by
Correspondence
Marine Terminal Management
Marine Warrant Officer, Basic
Merchant Marine Safety
Mark 10/IFF
Class C Mark 10/IFF Maintenance and
Repair
Mark IV
Advanced Mark IV
Advanced Mark IV File Management
System
Masonry
BU/C’ Masonry
Master
Master Diver Qualification
Material
Electronics Technician, Class C,
Electronics Material Officer
Prospective Electronics Material
Officer—Pacific Fleet, Class C2
MATS
Maintenance Analysis Test Set (MATS)
Mk 352, Class F1
Maxillofacial
Dental Technician, Maxillofacial
Prosthetic
Dental Technician, Maxillofacial
Prosthetic, Class C
Measurement
A-7 AN/ASN-90 Inertial Measurement
Set Intermediate Maintenance
AN/ASN-90 Inertial Measurement Set
Intermediate Maintenance
Missile Test and Readiness Equipment
(MTRE) Mk 3 Measurement, Display
and Simulation Groups Advanced
Training
Missile Test and Readiness Equipment
(MTRE) Mk 3 Mods 4 and 5
Measurement, Display and Simulation
Groups Advanced Training, Class F1
Mechanic
Advanced Automotive Mechanic/
Maintenance Noncommissioned Officer
(NCO) Leadership
Aviation Structural Mechanic, Second,
Class, by Correspondence
Construction Mechanic, Class A1
**K-68 KEYWORD INDEX**

- **Target Motion Analysis (TMA)**
  - Operator/Familiarization
    - NV-2202-0099
  - Fire Control System (FCS) Mk 113 Mod 9 (Torpedoes and Target Motion Analysis)
    - NV-1715-0412
  - Mk 113 Mod 7 Fire Control System (FCS) Maintenance
    - NV-1715-0760
  - Underwater Fire Control System (FCS) Technician (Torpedoes) Mk 113 Mod 7
    - NV-1715-0760

- **Computer MK IA Maintenance**

- **MK 114**
  - Relay Transmitter Mk 60 Mod 0
    - Maintenance—UFCG Mk 114 Mods 9-12
      - NV-1715-0389
    - Underwater Fire Control Group Mk 114 Maintenance
      - NV-1715-0113

- **MK 118**
  - Tartar Computer Mk 118
    - NV-1715-0343
  - Tartar Computer Mk 118 Mod 0
    - NV-1715-0343

- **MK 14**
  - Torpedoes Mk 14 Mod 5 and Mk 16 Mod 8 Intermediate Maintenance
    - NV-1601-0011
  - Polaris Target Card Computer System
    - Mk 148 Mod 0 Maintenance, Class F1
      - NV-1715-0093
  - Polaris Target Card Computer System
    - Mk 148 Mod 0 Theory, Class C1
      - NV-1715-0894

- **MK 152**
  - Mk 152 Computer and Peripheral Equipment/Common Core
    - NV-1715-0586
  - Mk 152 Computer Common Core
    - NV-1715-0136
  - Tartar Mk 152 Computer Complex
    - NV-1715-0792

- **MK 16**
  - ASROC Launching Group Mk 16
    - NV-1715-0770

- **MK 17**
  - Missile Launcher Mk 12 Mod 1
    - Advanced Training, Class C1
      - NV-1715-0910

- **MK 1A**
  - Computer Mk 1A Maintenance
    - NV-1715-0086

- **MK 2**
  - Electronics Technician, Class C, SSBN
    - Ships Inertial Navigation System (SINS) Maintenance
      - NV-1402-0039
  - Mk 2 Mod 2/3 Technician
    - NV-1715-0130
  - Mk 2 Mod 1 Ships Inertial Navigation System (SINS) Maintenance
    - NV-1715-0916
  - Mk 2 Mod 3 Theory and Maintenance
    - NV-1715-0922
  - Ships Inertial Navigation System (SINS)
    - Mk 2 Mod 6 Selectric Typewriter, Class F1
      - NV-1715-0916

- **MK 21**
  - Launcher Mk 21 Mod 2 Advanced Training, Class F1
    - NV-1715-0917
  - Missile Launcher Mk 21 Mod 2 Theory and Operation
    - NV-1715-0575

- **MK 25**
  - Gun Fire Control Radar Mk 25 Mod 3 Maintenance
    - NV-1715-0127
  - Radar Mk 25 Mod 3 Maintenance
    - NV-1715-0129

- **MK 27**
  - MK 27 Gyrocompass Maintenance, Class C
    - NV-1715-0762

- **MK 28**
  - Shipboard Decoy System (CHAFFROC) Launcher Operation and Maintenance
    - Mk 28 Mod 1-5
      - NV-1715-0684
  - SUBROC Missile Mk 28 Mod 0 Test Equipment Intermediate Maintenance
    - NV-1715-0795
  - SUBROC Missile Mk 28 Mod 1 Intermediate Maintenance
    - NV-1715-0794

- **MK 3**
  - Guidance System, Mk 3 Mod 0, Operation and Maintenance
    - NV-1715-0245

- **MK 4**
  - Tartar Weapon Direction Systems (WDS) Mk 4 Mod 0, Class C
    - NV-1715-0437
  - Tartar Weapon Direction System (WDS) Mk 4, Class C
    - NV-1715-0436

- **MK 42**
  - 5/34 Gun Mount Mk 42 Mod 7/9
    - NV-1715-0426
  - Maker 3 Mod 6 Ships Inertial Navigation System (SINS) Maintenance
    - NV-1715-0916
  - Maker 3 Mod 6 Ships Inertial Navigation System (SINS) Maintenance (Enlisted)
    - NV-1715-0426
  - Maker 3 Mod 6 Ships Inertial Navigation System (SINS) Operations (Enlisted)
    - NV-1715-0339
  - SSBN Navigation Data Assemblage Computer Mk 2 Mod 4, Stabilization Data Computer Mk 3 Mod 1
    - NV-1715-0427
  - SSN Mk 3 Mod 6 Ships Inertial Navigation System (SINS) Maintenance
    - NV-1715-0426
  - Terrier Weapon Direction System Mk 3
    - DE Mk 9
      - NV-1715-0649
  - Terrier Weapon Direction System Mk 3
    - DE Mk 9
      - NV-1715-0426
  - Torpedo Mk 46 Mod 1, Mk 44 Mod 1, and AWTT Mk 32 Organizational Maintenance
    - NV-1715-0785
  - Torpedo Mk 35
    - NV-1715-0575
    - NV-1715-0047
  - Torpedo Mk 32
    - NV-1715-0381
  - Torpedo Mk 35
    - NV-1715-0655
  - Torpedo Mk 35 Power Drive Maintenance for 3'/50 Caliber Rapid Fire Gun Mount
    - NV-1715-0147
  - Torpedo Mk 35
    - NV-1715-0902
  - Gun Fire Control System (GFCS) Mk 37, Mk 68, Mk 56 Radar Signal Processing Equipment (RSPE) Maintenance
    - NV-1715-0728
  - Gun Fire Control System (GFCS) Mk 37/TDS Mk 5 Maintenance, Class C1
    - NV-1715-0221
  - Torpedo Mk 37 Mod 0, 1, 2, and 3 Organizational Maintenance
    - NV-1715-0787
  - Torpedo Mk 37 Mod 0, 2, and 3 Intermediate Maintenance
    - NV-1715-0789
  - Torpedo Mk 37 Mod 0, 2, and 3 Test Equipment Intermediate Maintenance
    - NV-1715-0788
  - Tartar Weapon Direction Systems (WDS) Mk 4 Mod 0, Class C
    - NV-1715-0437
  - Tartar Weapon Direction System (WDS) Mk 4, Class C
    - NV-1715-0436
  - 5'/34 Gun Mount Mk 42 Mod 7/9
    - NV-1715-0426
  - 5'/34 Gun Mount Rapid Fire Mk 42 Mod 7
    - NV-1715-0668
  - Gun Maintenance 5'/34 Caliber Rapid Fire Gun Mount
    - NV-1715-0179
  - Gun Mount 5'/34 Mk 42 Mod 9 and 10, Class C1
    - NV-2202-0104
| MK 44 | Torpedoes Mk 46 Mod 1, Mk 44 Mod 1, and AWTT Mk 32 Organizational Maintenance | NV-1715-0785 |
| MK 45 | Torpedo Mk 45 Mods 1 and 2 Test Equipment Intermediate Maintenance | NV-1715-0786 |
| MK 46 | Torpedoes Mk 46 Mod 1, Mk 44 Mod 1, and AWTT Mk 32 Organizational Maintenance | NV-1715-0785 |
| MK 47 | Mk 68 Director and Computer Mk 47 Mods 8 and 11 Difference Maintenance | NV-1715-0271 |
| MK 474 | Tartar Radar Test Set Mk 474 Mod 2 | NV-1715-0396 |
| MK 5 | Fire Control Technician Class C, Gun Fire Control System (GFCS) Mk 37 and Target Designation System (TDS) Mk 5 | NV-1715-0221 |
| MK 55 | Fire Control Technician Class C, Gun Fire Control System Mk 56 and Target Designation System Mk 5 | NV-1715-0216 |
| MK 56 | Fire Control Technician Class C, Target Designation System (TDS) Mk 5 | NV-1715-0212 |
| MK 564 | Gun Fire Control System (GFCS) Mk 37/TDS Mk 5 Maintenance, Class C1 | NV-1715-0221 |
| MK 565 | Target Designation System Mk 5 Maintenance | NV-1715-0264 |
| MK-52 | Gun Fire Control Systems Mk 52 and Mk-56 | CG-1715-0016 |
| MK 56 | Fire Control Technician Class C, Gun Fire Control System (GFCS) Mk 56 | NV-1715-0218 |
| MK 566 | Gun Fire Control System (GFCS), Mk 37, Mk 68, Mk 56 Radar Signal Processing Equipment (RSPE) Maintenance | NV-1715-0728 |
| MK 567 | Gun Fire Control System (GFCS) Mk 56 Maintenance | NV-1715-0207 |
| MK 568 | Gun Fire Control Systems Mk-52 and Mk-56 | CG-1715-0016 |
| MK 569 | Mk 56 Gun Fire Control System (GFCS) Maintenance, Class C1 | NV-1715-0218 |
| MK 57 | Fire Control Technician Class C, Target Designation System Mk 5 | NV-1715-0213 |
| MK 59 | Mk 9 Mod 4 Dead Reckoning Analyzer Indicator (DRAI) and Mk 6 Mod 4B Dead Reckoning Tracer (DRT), Class C | NV-1715-0344 |
| MK 60 | Relay Transmitter Mk 60 Mod 6 Maintenance—UFCG Mk 114 Mods 9-12 | NV-1715-0089 |
| MK 63 | Gun Fire Control System (GFCS) Mk 63 Maintenance | NV-1715-0208 |
| MK 68 | Fire Control Technician Class C, Gun Fire Control System (GFCS) Mk 58 | NV-1715-0219 |
| MK 683 | Gun Fire Control System (GFCS), Mk 37, Mk 68, Mk 56 Radar Signal Processing Equipment (RSPE) Maintenance | NV-1715-0728 |
| MK 7  | Tartar Radar Test Set AN/SPG-51F and MS948 Mod 4 Maintenance | NV-1715-0239 |
| MK 73 | Tartar Radar Test Set AN/SPG-51F and Director Mk 73 Mod 1 | NV-1715-0512 |
| MK 74 | Tartar DSOT Analytical Missile Fire Control System (MFCS) Mk 73 | NV-1715-0442 |
| MK 743 | Tartar DSOT Analytical Missile Fire Control System (MFCS) Mk 74 Mod 0 | NV-1715-0072 |
| MK 744 | Tartar Weapons System Missle Fire Control System (MFCS) Mk 74 Mod 0 | NV-1715-0681 |
| MK 745 | Tartar Weapons System Missle Fire Control System (MFCS) Mk 74 Mod 6 and 7 | NV-1715-0805 |
| MK 76 | Terrier Weapons System Missle Fire Control System (MFCS) Mk 76 | NV-1715-0043 |
| MK 77 | Terrier Weapons System with Digital Fire Control Systems (MFCS Mk 76/6/AFCS) | NV-1715-0658 |
| MK 773 | Talos Weapons System Mk 77 Mod 2 (Class C) | NV-1715-0444 |
| MK 774 | Talos Weapons System Mk 77 Mod 2 | NV-1715-0444 |
| MK 78 | Terrier Weapon Direction System Mk 7 (WDE Mk 8) | NV-1715-0259 |
| MK 80 | Controls and Indicators, Fire Control System (FCS) Mk 80, Class F1 | NV-1715-0473 |
| MK 81 | Data Computation and Transmission Loops Fire Control System (FCS) Mk 80, Class C1 | NV-1715-0892 |
| MK 82 | Fire Control System (FCS) Technician Mk 80 | NV-1715-0895 |
| MK 83 | Fire Control System Technician Mk 80 | NV-1715-0211 |
| MK 84 | Weapons Officer | NV-1715-0211 |
| MK 84 | Missle Technician Mk 84 Polars (A-J) | NV-1715-0606 |
| MK 88 | SSBN Mk 84 Polaris Weapons Officer | NV-1715-0577 |
| MK 88 | Fire Control System (FCS) Mk 88 Mod 1 Digital Control Computer | NV-1715-0353 |
| MK 88 | Fire Control System Technician Mk 88 Conversion (Mod 0 to Mod 1) | NV-1715-0203 |
| MK 88 | Fire Control System Technician Mk 88 Mod 1 Ténder Maintenance | NV-1715-0205 |
| MK 88 | Fire Control Technician Mk 88 Replacement | NV-1715-0341 |
| MK 88 | Launcher Technician Mk 88 Fire Control Conversion | NV-1715-0623 |
| MK 88 | Mk 88 Mod 1 Fire Control Technician Conversion (Mk 80 & 84 to Mk 88) | NV-1715-0585 |
| MK 9 | Fire Control System Technician Mk 9 and Mk 10 5/38 Caliber TWIN Gun Mount Power Drive Maintenance | NV-1715-0654 |
| MK 9 | Mk 9 and Mk 10 5/38 Caliber TWIN Gun Mount Power Drive Maintenance | NV-1715-0654 |
| MK 9 | Dead Reckoning Analyzer Indica (DRAI) and Mk 6 Mod 4B Dead Reckoning Tracer (DRT), Class C | NV-1715-0344 |
| MK 9 | Terrier Weapon Direction System Mk 3 (DE Mk 9) | NV-1715-0649 |
| MK 9 | Terrier Weapon Direction System Mk 3 (DE Mk 9) | NV-1715-0649 |
| MK 9 | Data Systems Technician, Class C, Weapon Direction System Mk XI Mod 0/1 Maintenance Training | NV-1715-0385 |
| MK 9 | Mk NC-2 Plotter Mod 0 Maintenance, Class C | NV-1715-0082 |
| MK 9 | Mk NC-2 Plotter Mod 2/2A Maintenance, Class C | NV-1715-0076 |
| MK 9 | Mk NC-2 Plotter Mod IA (Sperry) Maintenance, Class C | NV-1715-0075 |
| MK V | Mk V Atmosphere Analyzers | NV-1715-0551 |
| MK XI | Data Systems Technician, Class C, Weapon Identification System Mk XI Mod 0/1 Maintenance Training | NV-1715-0385 |
| MK XII | AIMS Mk XII IFF System Maintenance | NV-1715-0066 |
NAV-DAC
National Data Automated Computer (NAV-DAC) Advanced Training
NV-1715-0926
SSBN NAV-DAC Mk 2 Mod 4, SDC Mk 2 Mod 1
NV-1715-0342

Navigation
A-4E Communication Navigation, Identification (CNI)/Weapons System Organizational Maintenance
NV-1715-0452
A-4F/L/T-AF Communication, Navigation, Identification (CNI)/Weapons Systems Organizational Maintenance
NV-1715-0383
A-4 Tactical Air Navigation (TACAN) AN/ARN-52(V)
NV-1715-0388
A-6A AN/ASN-31 Inertial Navigation Organizational Level Maintenance
NV-1715-0476
NV-1715-0475
A-6 AN/ASN-31 Inertial Navigation System and Tels/Console Intermediate Maintenance
NV-1715-0370
A-7 AN/APN-190 Doppler Radar Navigation System Intermediate Maintenance
NV-1715-0200
Advanced Minor Aids to Navigation, Class C
CG-1715-0046
Advanced Navigation Training (Postgraduate Coast Guard Aviator)
NV-1606-0033
Advanced Navigation Training (Postgraduate Naval Aviator)
NV-1606-0032
Advanced Navigation Training (Student Naval Flight Officer)
NV-1606-0031
Aerial Navigation
MC-1606-0002
Aids to Navigation Construction
CG-1722-0004
Aids to Navigation Mechanic
CG-1715-0015
Aids to Navigation Officer Advanced
CG-2205-0008
Aids to Navigation Officer Basic
CG-2205-0009
Aids to Navigation School (Short Course for Officers)
CG-2205-0003
Air Navigation
MC-1606-0002
AN/APN-122 Doppler Navigation System Maintenance
NV-1715-0483
AN/APN-130 Radar Navigation Set Intermediate Maintenance
NV-1715-0553
AN/APN-153(V) Doppler Radar Navigation System Intermediate Maintenance
NV-1715-0507
AN/APN-175 Doppler Radar, Navigation
CG-1715-0027
AN/APN-180 Loran A Navigation System Class C
CG-1715-0028
AN/ARN-21D TACAN Navigation Set Maintenance
NV-1715-0487
AN/AYN-1 Navigation Computer Systems Class C
CG-1715-0024
AN/SPN-40 Radio Navigation Set (Electronics Technician, Class C)
NV-1715-0015
AN/SRN-18 Radio Satellite Navigation Set Maintenance, Class C
NV-1715-0810
AN/SRN-9A, Radio Navigation Set, Operation and Maintenance
NV-1715-0441
AN/SRN-9 Satellite Radio Navigation
NV-1715-0442

KEYWORD INDEX

Set Maintenance (Electronics Technician, Class C)
NV-1715-0099
Automated Aids to Navigation Electronics-Maintenance
CG-1715-0041
Aviation Electronics Technician N (Navigation), Class A
NV-1715-0097
Basic Jet Navigation, Class D
NV-1606-0023
Basic Minor Aids To Navigation
CG-1715-0042
Basic Navigation Watchstander
NV-1715-0125
Celestial Navigation by Correspondence
CG-1304-0004
Central Navigation Computer (Input/Output)
NV-1402-0026
Central Navigation Computer (Processor I)
NV-1402-0025
Central Navigation Computer (Processor II)
NV-1402-0024
CH-33 Communication, Navigation and Identification (CNI) Systems Organizational Maintenance
NV-1715-0101
E-2A Inertial Navigation System AN/ASN-36 Maintenance
NV-1715-0709
E-2A Inertial Navigation System Semi-Automatic Check-Out Equipment (SACE) and Encoder Test Console Operation and Maintenance
NV-1715-0323
EA-6B Communications, Navigation and Radar System Organizational Maintenance
NV-1715-0323
Electronics Technician, Class C, AN/SRN-3 Radio Navigation Set
NV-1715-0099
Electronics Technician, Class C, FBM Tender Navigation Maintenance
NV-1715-0182
Electronics Technician, Class C, SSBN NAVDAG FBM Tender Navigation Maintenance
NV-1715-0168
Electronics Technician, Class C, SSBN Navigation Aids, FBM Tender Navigation Maintenance
NV-1715-0064
Electronics Technician, Class C, SSBN Navigation Aids Technician Maintenance
NV-1715-0063
Electronics Technician, Class C, SSBN Ships Inertial Navigation, FBM Tender Navigation Maintenance
NV-1715-0065
Electronics Technician, Class C, SSBN Ships Inertial Navigation System Mk 2 Mod 0-6 Technician
NV-1715-0066
Electronics Technician, Class C, SSBN Ships Inertial Navigation System (SINS) Mk 2 Mod 2/3 Technician
NV-1715-0130
Electronics Technician, Ship's Navigation and Aircraft Inertial Alignment System (SN/ADAS), Class C Operator Maintenance
NV-1715-0014
F-14A Communications, Navigation/Displays, Electronic Warfare Organizational Maintenance Technician NV-1704-0217
F-4B Communication Navigation Identification (CNI) Line Troubleshooting Maintenance NV-1704-0076
F-4B Communication Navigation Identification (CNI) Organizational Maintenance
F-4J Communication Navigation Identification (CNI) Line Troubleshooting Maintenance NV-1704-0074
F-4J Communication Navigation Identification (CNI) Organizational Maintenance NV-1715-0039
F-8 Communication Navigation and Identification (CNI) Systems Organizational Maintenance NV-1715-0612
Fleet Ballistic Missile (FBM) Navigation Officer NV-1715-0456
Minor Aids to Navigation
Mk 2 Mod 1 Ships Inertial Navigation System (SINS) Maintenance NV-1402-0039
Mk 3 Mod 6 Ships Inertial Navigation System (SINS) Maintenance NV-1715-0426
Mk 3 Mod 6 Ships Inertial Navigation System (SINS) Maintenance (Enlisted) NV-1715-0426
Mk 3 Mod 6 Ships Inertial Navigation System (SINS) Operations (Enlisted) NV-1715-0339
Navigation Flight Training: Naval Aviator and Naval Flight Officer NV-1606-0045
Navigation Flight Training, Pilot and Naval Aviation Officer (Navigator) NV-1606-0045
Navigation Operational Checkout Console (NOCC) Mk 1 Mod 1 Advanced Maintenance NV-1715-0128
Navigation Rules by Correspondence CG-1708-0005
Navigation Set Operation and Maintenance NV-1715-0913
Navigation Technician SSN 688 Class NV-1715-0881
Officers Advanced Aids to Navigation CG-2205-0008
Officers Basic Aids to Navigation CG-2205-0009
Officers Basic Aids to Navigation, Class O CG-2205-0009
P-3A/B Communication Navigation (COMM/NAV) Organizational Maintenance NV-1715-0096
Polaris/Poseidon Radio Navigation Set AN/BRN-3, Data Processor Advanced Training, Class F1 NV-1715-0915
Polaris/Poseidon Radio Navigation Set AN/BRN-3 Receiver Advanced Training, Class F1
Prospective Advanced Navigation Flight Instructor NV-1715-0911
RA-5C Communication Navigation Identification (CNI) and DECM Organizational Maintenance NV-1704-0075
RF-4B AN/ASN-88 and AN/ASQ-108 Communication Navigation Identification (CNI) Line Troubleshooting Maintenance NV-1715-0357
RF-4B Inertial Navigation System Intermediate Maintenance NV-1715-0465
RF-4B Inertial Navigation System Organizational Maintenance NV-1715-0614
RT-736 and KY-531 TACAN (Tactical Air Navigation) Intermediate Maintenance NV-1715-0796
S-2D/E AN/APN-122 Doppler Radar Navigation System Maintenance NV-1715-0422
Satellite Navigation System AN/WRN-5 NV-1715-0913
SH-3A AN/APN-130 Doppler Radar Navigation NV-1715-0237
SH-3A AN/ASA-13A Navigation System Maintenance NV-1715-0241
SH-3 AN/ASA-13A Navigation System Intermediate Maintenance NV-1715-0241
SH-3 AN/AHK-2 Navigation System Intermediate Maintenance NV-1715-0227
S-2D/E AN/APN-52(V) Navigational TACAN Maintenance NV-1715-0915
SH-3A AN/APN-52(V) Navigational TACAN Maintenance NV-1715-0916
CH-46A AN/ALQ-52(V) Navigational TACAN Maintenance NV-1715-0255
EKA-3B AN/ASN-66B Navigational Computer Set Intermediate Maintenance NV-1715-0505
Marine Air Traffic Control Navigational Aids Maintenance NV-1715-0037
Marine Air Traffic Control Navigational Aids Repairman, Class C NV-1715-0037
Navigational Technician Watchstander (Enlisted) NV-1715-0245
P-3AN/ASN-42 Navigational Computer Set Intermediate Level Maintenance, No. 16 NV-1715-0327
P-3 AN/ASN-42 Navigational Computer Set Intermediate Maintenance NV-1715-0327
P-3 AN/ASN-42 Navigational Computer Set Organizational Level Maintenance, No. 15 NV-1715-0324
S-2D/E AN/APN-52(V) Navigational TACAN Maintenance NV-1715-0637
S-2D/E AN/ASN-30 Navigational Computer Display Unit and AN/ASQ-80 Coordinate Data Set System Maintenance NV-1715-0331
SH-3A AN/ASA-13A Navigational Computer Maintenance NV-1715-0333
UH-2A/B AN/ASA-13A Navigational Computer Group Intermediate Maintenance NV-1715-0326
Navigational
AN/APN-182(V) Radar Navigational Set Intermediate Maintenance NV-1715-0583
AN/ASA-13A Navigational Computer Group Intermediate Maintenance NV-1715-0326
AN/ASA-47 Doppler/Airmass Navigation Computer System Intermediate Maintenance NV-1715-0582
CH-46A AN/ALQ-52(V) Navigational TACAN Maintenance NV-1715-0071
EKA-3B AN/ASN-66B Navigational Computer Set Intermediate Maintenance NV-1715-0505
Marine Air Traffic Control Navigational Aids Maintenance NV-1715-0037
Marine Air Traffic Control Navigational Aids Repairman, Class C NV-1715-0037
Navigational Technician Watchstander (Enlisted) NV-1715-0245
P-3AN/ASN-42 Navigational Computer Set Intermediate Level Maintenance, No. 16 NV-1715-0327
P-3 AN/ASN-42 Navigational Computer Set Intermediate Maintenance NV-1715-0327
P-3 AN/ASN-42 Navigational Computer Set Organizational Level Maintenance, No. 15 NV-1715-0324
S-2D/E AN/APN-52(V) Navigational TACAN Maintenance NV-1715-0637
S-2D/E AN/ASN-30 Navigational Computer Display Unit and AN/ASQ-80 Coordinate Data Set System Maintenance NV-1715-0331
SH-3A AN/ASA-13A Navigational Computer Maintenance NV-1715-0333
UH-2A/B AN/ASA-13A Navigational Computer Group Intermediate Maintenance NV-1715-0326
Navigational
AN/APN-182(V) Radar Navigational Set Intermediate Maintenance NV-1715-0583
AN/ASA-13A Navigational Computer Group Intermediate Maintenance NV-1715-0326
AN/ASA-47 Doppler/Airmass Navigation Computer System Intermediate Maintenance NV-1715-0582
CH-46A AN/ALQ-52(V) Navigational TACAN Maintenance NV-1715-0071
EKA-3B AN/ASN-66B Navigational Computer Set Intermediate Maintenance NV-1715-0505
Marine Air Traffic Control Navigational Aids Maintenance NV-1715-0037
Marine Air Traffic Control Navigational Aids Repairman, Class C NV-1715-0037
Navigational Technician Watchstander (Enlisted) NV-1715-0245
P-3AN/ASN-42 Navigational Computer Set Intermediate Level Maintenance, No. 16 NV-1715-0327
P-3 AN/ASN-42 Navigational Computer Set Intermediate Maintenance NV-1715-0327
P-3 AN/ASN-42 Navigational Computer Set Organizational Level Maintenance, No. 15 NV-1715-0324
S-2D/E AN/APN-52(V) Navigational TACAN Maintenance NV-1715-0637
S-2D/E AN/ASN-30 Navigational Computer Display Unit and AN/ASQ-80 Coordinate Data Set System Maintenance NV-1715-0331
SH-3A AN/ASA-13A Navigational Computer Maintenance NV-1715-0333
UH-2A/B AN/ASA-13A Navigational Computer Group Intermediate Maintenance NV-1715-0326
Navigational
AN/APN-182(V) Radar Navigational Set Intermediate Maintenance NV-1715-0583
AN/ASA-13A Navigational Computer Group Intermediate Maintenance NV-1715-0326
AN/ASA-47 Doppler/Airmass Navigation Computer System Intermediate Maintenance NV-1715-0582
CH-46A AN/ALQ-52(V) Navigational TACAN Maintenance NV-1715-0071
EKA-3B AN/ASN-66B Navigational Computer Set Intermediate Maintenance NV-1715-0505
Marine Air Traffic Control Navigational Aids Maintenance NV-1715-0037
Marine Air Traffic Control Navigational Aids Repairman, Class C NV-1715-0037
Navigational Technician Watchstander (Enlisted) NV-1715-0245
P-3AN/ASN-42 Navigational Computer Set Intermediate Level Maintenance, No. 16 NV-1715-0327
P-3 AN/ASN-42 Navigational Computer Set Intermediate Maintenance NV-1715-0327
P-3 AN/ASN-42 Navigational Computer Set Organizational Level Maintenance, No. 15 NV-1715-0324
S-2D/E AN/APN-52(V) Navigational TACAN Maintenance NV-1715-0637
S-2D/E AN/ASN-30 Navigational Computer Display Unit and AN/ASQ-80 Coordinate Data Set System Maintenance NV-1715-0331
SH-3A AN/ASA-13A Navigational Computer Maintenance NV-1715-0333
UH-2A/B AN/ASA-13A Navigational Computer Group Intermediate Maintenance NV-1715-0326
Navigational
A-6 Bombardier Navigator Control Box and Associated Test Set, Intermediate Maintenance NV-1715-0051
Bombardier Navigator NV-1606-0036
Fleet Replacement Radar Navigator NV-1606-0036
KEYWORD INDEX

Training, Class F1  NV-1715-0911
Polaris Target Card Computer System  NV-1715-0893
Mk 148 Mod 0 Maintenance, Class F1  NV-1715-0894
Polaris Target Card Computer System  NV-1715-0894
Mk 148 Mod 0 Theory, Class C1  
Polaris Target Card Computer System  NV-1715-0897
Peripheral Equipment, Class C1  
SSBN Command Weapons System  NV-1715-0573
Orientation—Polars  NV-1715-0573
SSBN Mk 84 Polars Weapons Officer  NV-1715-0573
SWS (Strategic Weapons System)  NV-1715-0573
Command Polars  
SWS (Strategic Weapons System)  NV-1710-0046
Weapons Officer Polars  
Policy  
Naval War College Correspondence  NV-1715-0004
Course in Strategy and Policy  
Strategy and Policy Off-Campus  NV-1711-0007
Graduate Seminar  
Strategy and Policy Self-Administered  NV-1511-0009
Seminar (Naval War College)  

Polish

Polish  DD-0602-0001
DD-0602-0002
DD-0602-0003
DD-0602-0004
DD-0602-0005

Port

Port Security/Law Enforcement Enlisted  CG-1728-0002
Port Security/Law Enforcement Officer  CG-1728-0001
Port Security School  

Portuguese

Portuguese  DD-0602-0001
DD-0602-0002
DD-0602-0003
DD-0602-0004
DD-0602-0005

Poseidon

Missile Technician Poseidon Logistics  NV-1715-0470
Poseidon Missile Technician  NV-1715-0604
Poseidon Missile Technician Conversion  NV-1715-0576
A-2/A-3 to C-3  

Postal

Postal Clerk, Class A  NV-1404-0001

Postgraduate

Advanced Navigation/Training  NV-1606-0033
(Postgraduate Coast Guard Aviator)  
Advanced Navigation Training  NV-1606-0322
(Postgraduate Naval Aviator)  
Basic Course, Postgraduate  MC-1408-0009
Postgraduate Intelligence Course  

465
### Power
- 60/400 Hz Power Converter Maintenance, Class C1 NV-1715-0301
- A-4(J52-P-6A/8A) Power Plant and Related Systems Organizational Maintenance NV-1704-0170
- A-6A Power Plants and Related Systems Organizational Level Maintenance NV-1704-0164
- A-7A/B TF30-P-6/408 Power Plants and Related Systems Organizational Maintenance NV-1704-0135
- Advanced Nuclear Power NV-1715-0541
- AH-1J Power Plant and Related Systems Organizational Maintenance NV-1715-0541
- Alternating Current Power Systems NV-1715-0490
- Aviation Support Equipment Mobile Electric Power Plant Intermediate Maintenance NV-1715-0645
- Aviation Support Equipment NC-10B Mobile Electric Power Plant Systems Intermediate Maintenance NV-1715-0698
- Basic Nuclear Power NV-1715-0700
- C-2A Power Plant and Related Systems Organizational Maintenance NV-1715-0127
- Construction Electrician-Power and Communications Cable Splicing NV-1714-0015
- E-1B Power Plants and Related Systems Organizational Maintenance NV-1715-0277
- E-2A Power Plant and Related Systems Maintenance No. 8 NV-1704-0152
- E-2A Power Plant and Related Systems Organizational Maintenance NV-1715-0151
- EA-6B J-52-P-408 Power Plants and Related Systems Organizational Maintenance NV-1704-0151
- Electric Hydraulic Power Drive for 5/38 Caliber Dual Purpose Single Mount NV-1710-0170
- Electrician’s Mates, Class A, Part II Power and Lighting Equipment NV-1714-0012
- F-14A Power Plant and Related System Organizational Maintenance Technician (Crew Member) NV-1704-0212
- F-4B/J Power Generating System Intermediate Maintenance NV-1704-0112
- F-8 Power Plants and Related Systems NV-1704-0112
- F-4B/J Power Plant and Related Systems Organizational Maintenance NV-1704-0185
- F-4B/J Power Plant and Related Systems NV-1704-0182
- F-14B Power Generating System Maintenance NV-1704-0182
- H-53 Power Plants and Related Systems Organizational Maintenance NV-1704-0168
- M-9 and M-10 5/38 Caliber Twin Gun Power Drive Maintenance NV-1715-0654
- Nuclear Power Plant Components Welder, Class C NV-1710-0069
- P-3 Power Generating System and AVQ-2 Searchlight Intermediate Maintenance NV-1715-0659
- RA-5C Power Plants and Related Systems NV-1704-0045
- RA-5C Power Plants and Related Systems Organizational Maintenance NV-1704-0045
- SH-3A/G Power Plants and Related Systems Organizational Level Maintenance NV-1704-0171
- SH-3A Power Plants and Related Systems NV-1715-0146
- SH-3D/H Power Plants and Related Systems Organizational Maintenance Course NV-1704-0171
- SH-3D/H Power Plants and Related Systems Organizational Maintenance NV-1704-0134
- SH/HH-2D Power Plant and Related Systems Organizational Maintenance NV-1704-0171
- T-2C Power Plants and Related Systems Maintenance NV-1704-0174
- UH-1N Power Package Organizational Maintenance NV-1704-0174
- UH-2 Power Plants, Fuel, Transmissions and Related Systems Organizational Maintenance NV-1704-0176
- Welding for Nuclear Power Plant Operators, Course V NV-1710-0046
- Powerplant A-7E Powerplant and Related Systems Organizational Maintenance NV-1704-0140
- QH-3D Airframe, Powerplant and Related Systems Organizational Maintenance NV-1704-0052
- Powertrain AH-1J Powertrain and Rotors Organizational Maintenance NV-1704-0153
- HH-52A Airframe and Powertrain, Class C NV-1704-0005
- UH-1N Powertrain and Rotors Organizational Maintenance NV-1704-0175
- Pre-flight Pre-flight, Naval Aviation Cadets and Aviation Officer Candidates NV-1606-0046
- Pre-flight, Officer NV-1606-0047
- Preparation Flight Preparation, Officer NV-1606-0047
- Preparatory Aviation Fleet Preparatory Course I and II NV-1606-0038
- Aviation Fleet Preparatory Course I and II, Class P NV-1606-0051
- Communications Technician T and R Basic Preparatory, Class A NV-1404-0004
- Cryptologic Technician T, Class A3 Preparatory NV-1715-0837
- Cryptologic Technician Technical Basic Preparatory, Class A NV-1715-0837
- Naval Preparatory School NV-2202-0007
- Preparedness Staff Disaster Preparedness Officer NV-0801-0002
- Pressure Pressure Fired Boiler, Class C NV-1710-0003
- Pressure Hull Welders NV-1710-0003
- Submarine Low Pressure and Vapor Compression Distilling Units, Enlisted NV-1710-0025
- Pressurization P-3 Air Conditioning, Pressurization and Utilities Organizational Maintenance NV-1701-0001
- Preventive Preventive Medicine Technician Class A NV-0707-0001
- Preventive Medicine Technician, Class C NV-0707-0001
- Radarman, Class A, Basic Preventive Maintenance and Operators NV-1715-0401
- Primary Primary Phase, Basic Pilot Trainging NV-1606-0048
Printing
Offset Printing
Topography and Printing Staff
Noncommissioned Officer (NCO)
Prisoners
Interrogation of Prisoners of War
Processing
DD-963 Facilities Control Quality
Monitoring and Message Processing (FQOM) Operators, Class F-I
DD-963 Facilities Control Quality
Monitoring Processing Unit Operators
IOIC Photographic Processing/Maintenance
IOIC Photographic Processing Officer
Processing and Reporting
Reserve Cryptologic Technician
Processing and Reporting, Phase I
Reserve Cryptologic Technician
Processing and Reporting, Phase II
Procurement
Recruit Procurement, Class C
Program
Program Management
Program Management for Contract Administration
Program Management for Functional Managers
Programmed
Programmed Instructional Techniques
Programmed Instruction Writer
Programmer
A6A Programmer, Semi-Automatic Test Equipment, Intermediate Maintenance
IBM System 360 (OS) Systems Programmer
MC-1402-0041
Missile Test and Readiness Equipment (MTRE) Mk 3 Programmer/Timer Digital Multimeter-Advanced Training, Class C1
Naval Tactical Data System (NTDS) Basic Programmer (Operational)
Naval Tactical Data Systems (NTDS), Intermediate Programmer Course (CS-N)
RA-SC Semi-Automatic Test Equipment, Programmer and System Analyzer Intermediate Maintenance
RA-SC Semi-Automatic Test Equipment, Programmer, System Analyzer and Countermeasures Test Bench AN/ULM-1 Intermediate Maintenance
Sforaga and Retrieval DP Operator and Programmer
Programmers
Instructional Programmers (Class C)
Programming
Advanced Programming Techniques
AN/USQ-20 Basic Programming
AN/USQ-20 Machine Language Programming
AN/UYK-7 CMS-2 (Y) Compiler Language Programming
CMS-2 Compiler Language Programming
CMS-2 Programming (CP-642 A/B/USQ-20)
Computer Programming Orientation
Disk Operating System Programming
IBM System 360 Computer System Programming (COBOL Language), Class C
IBM System 360 (DOS) COBOL Programming
IBM System 360 (OS) Advanced Programming Techniques
IBM System 360 (OS) COBOL Programming
IBM System 360 (OS) FORTRAN Programming
IBM System 360 OS FORTRAN Programming
IBM System 360 OS PL/1 Programming
IBM System 360 OS Programming
IBM System 360 OS Systems Programming
Marine Assembler Language Programming
Operating System Programming
Programming, Digital Computer CP-642A/B/USQ-20 (Machine Language and CS-I Assembly Language)
Programming for Optical Character Recognition (OCR) System
Programming, Naval Tactical Data System (NTDS) Operational, (Officer and
K-82  KEYWORD INDEX

General Electric LM100 and Solar T-1000 Emergency Gas Turbine Solar Main Propulsion Operation and Maintenance CG-1710-0007
LST 1179/1182 Class Controllable Pitch Propeller and Propulsion Control System, Class CI NV-1710-0023
LST 1182 Propulsion Technician, Class CI NV-1703-0007
Propulsion Shaft Components NV-1710-0007

Prospective

1200 PSI Prospective Engineering Officer NV-1710-0022
Prospective Advanced Navigation Flight Instructor NV-1960-0038
Prospective ASW Flight Instructor (S-2 Type Aircraft) NV-1960-0020
Prospective Electronics Material Officer—Pacific Fleet, Class C2 NV-1715-0816
Prospective Engineering Officer Orientation NV-1710-0013
Prospective Engineer Officers NV-1717-0006
Prospective ME (Prop) Flight Instructor (T5-2A Type Aircraft) NV-1960-0020
Prospective Officer of the Deck NV-1722-0008
Prospective Phase I CV (Jet) (TF/AF-5) Tactical Flight Instructor NV-1960-0037
Prospective Phase II CV (Jet) (F11A) Tactical Flight Instructor NV-1960-0041
Prospective Prop Flight Instructor NV-1960-0020
Prospective TA-4J Flight Instructor NV-1960-0021
Prospective TF/TAF-9J Flight Instructor NV-1960-0039
Prospective VA (Prop) Tactical Flight Instructor NV-1960-0040

Prosthetic

Dental Prosthetic Technician School, Class C NV-0701-0007
Dental Technician, Advanced Prosthetic, Class B NV-0701-0003
Dental Technician, Maxillofacial Prosthetic NV-0701-0001
Dental Technician, Maxillofacial Prosthetic, Class C NV-0701-0001
Dental Technician, Prosthetic, Advanced, Class B NV-0701-0003
Dental Technician, Prosthetic, Class C NV-0701-0007

PT-396/AS P-3 PT-396/AS and OA-1768A/ASA-13 Plotter Group Intermediate Maintenance NV-1715-0117

Public

Civil Engineer Corps Officer Basic—Public Works Management Specialty NV-1408-0014
Public Information Enlisted NV-0604-0008
Public Information Officer NV-0604-0007

PUPS
Sonar Receiving Set AN/BQG-4/4A (PUPS) Combined Maintenance NV-1715-0261
Sonar Receiving Set AN/BQG/PUPS Maintenance NV-1715-0261

Pulse

Pump
General Pump Maintenance NV-1710-0070

Purchase
Navy Purchase NV-1405-0005

QH-50C
QH-50C Airframe and Related Systems Intermediate Maintenance NV-1704-0051
QH-50C Target Control System AN/ SRW-4B Intermediate Maintenance NV-1715-0418
QH-50C Weapon System Intermediate Electronics Maintenance NV-1715-0568

QH-50D
QH-50D Airframe and Related System Intermediate Maintenance NV-1704-0052
QH-50D Airframe, Powerplant and Related Systems Organizational Maintenance NV-1704-0052
QH-50D Operational Telemetry Maintenance NV-1715-0592
QH-50D Target Control System AN/ SRW-4B Intermediate Maintenance NV-1715-0417
QH-50D Weapon System Electronic Intermediate Maintenance NV-1715-0633

Quality
Communications Quality Monitoring System Operator NV-1715-0690
HD-963 Facilites, Control Quality Monitoring and Messaged Processing (FQM) Operators, Class F1 NV-1715-0869
DD-963 Facilities Control Quality Monitoring Processing Unit Operators NV-1715-0869

Quarry
EO"C" Blasting and Quarry Operations NV-1710-0064
Equipment Operators/Blasting and Quarry Operations, Class C NV-1710-0064

Quartermaster
Advanced Submarine Quartermaster NV-1708-0003
Basic Quartermaster NV-1708-0005
Basic Quartermaster, Enlisted NV-2202-0076
Basic Submarine Quartermaster, Class A NV-1722-0007
Quartermaster First Class by Correspondence NV-1304-0007
Quartermaster Second Class by Correspondence NV-1722-0002
Quartermaster Third Class by Correspondence NV-1722-0003

R-11
R-11 Centrifugal 110 Ton Air Conditioning Combined Maintenance NV-1701-0004

R-1524(P)/WRR
Electronics Technician Class C, R-1524(P)/WRR Countermeasures Receiver Maintenance NV-1715-0028

RA3B
A3B, RA3B, EA3B AN/ALQ-35 DECM System Maintenance NV-1715-0525

RA-5C
A-SA RA-5C AN/ASB-12 Line and Shop Maintenance NV-1715-0521
A-SA RA-5C AN/ASB-12 Verdan and Digital Test Equipment NV-1402-0044
RA-5C Aircraft Familiarization NV-1606-0022
RA-5C Aircraft Familiarization (Pilot/ RAN) NV-1606-0022
RA-5C Air Data and Flight Reference Systems NV-1715-0454
RA-5C Air Data and Flight Reference Systems Organizational Maintenance NV-1715-0454
RA-5C AN/AAS-21 Infrared Detecting Set Intermediate Maintenance NV-1715-0222
RA-5C AN/ALQ-55 DECM System NV-1715-0687
RA-5C AN/ALQ-61 Countermeasures Set Shop Maintenance NV-1715-0367
RA-5C AN/ALQ-61 Countermeasures Set Special Support Equipment NV-1715-0666
RA-5C AN/ALQ-61 Passive Electronics Countermeasures Organizational Maintenance NV-1715-0366
RA-5C AN/APD-7 Side Looking Radar (SLR) Intermediate Maintenance NV-1715-0248
RA-5C AN/APN-120 Electronic Altimeter Intermediate Maintenance NV-1715-0479
RA-5C AN/ASB-12 Bomb Directing Set Organizational Maintenance NV-1715-0579
RA-5C AN/ASB-12 Verdan and Digital Test Equipment Intermediate
K-84 KEYWORD INDEX

Maintenance NV-1715-0287
AN/APX-72 Radar Indentification System Intermediate Maintenance NV-1715-0591
AN/ASB-1A Radar Sub-System Intermediate Maintenance NV-1715-0226
AN/ASB-7 Radar Sub-System Intermediate Maintenance NV-1715-0235
AN/BPS-12, 13, 14 Radar System Maintenance NV-1715-0312
AN/BPS-15 Radar Combined Maintenance NV-1715-0491
AN/SPA-17/37A Radar Sets, AN/SPA-63 Countermeasures Receiving Group, and AN/SPS-43/43A Radar Sets Differences NV-1715-0790
AN/SPS-29C Radar Set Maintenance (Electronics Technician, Class C) NV-1715-0283
AN/SPS-2E Radar Set Maintenance (Electronics Technician, Class C) NV-1715-0756
AN/SPS-39A Radar Set NV-1715-0233
AN/SPS-39 Radar Set NV-1715-0233
AN/SPS-40B/C/D Radar Set Difference Maintenance NV-1715-0745
AN/SPS-40B/C/D Radar Set Maintenance NV-1715-0809
AN/SPS-40 Radar Set Maintenance (Electronics Technician, Class C) NV-1715-0809
AN/SPS-40 Radar System NV-1715-0557
AN/SPS-43A/37A Radar Set Maintenance (Electronics Technician, Class C) NV-1715-0790
AN/SPS-48 Radar Set NV-1715-0304
AN/SPS-52 Radar Set NV-1715-0524
AN/SPS-64(V)-1.2.3,4 Radar NV-1715-0551
AN/SPA-7 Radar Trainer Class C Maintenance NV-1715-0199
Aviation Electronics Technician R (Radar), Class A NV-1715-0295
Aviation Radar Repair MC-1715-0055
Aviation Radar Repair (A) MC-1715-0055
Aviation Radar Repair (B) MC-1715-0052
Aviation Radar Repair (C) MC-1715-0059
Aviation Radar Repair (D) MC-1715-0054
Aviation Radar Repairman (B) MC-1715-0052
Aviation Radar Technician MC-1715-0058
Basic Radar MC-1715-0061
Bright Radar Indicator Tower Equipment Maintenance, Class C NV-1715-0276
Carrier Air Traffic Control Center Equipment Maintenance, Radar Set AN/SPS-43, Class C NV-1715-0236
E-1B AN/APS-82 Radar System Maintenance NV-1715-0287
E-2A AN/APS-96 Search Radar Intermediate Maintenance NV-1715-0672
EA-6B Communications, Navigation and Radar System Organizational Maintenance NV-1715-0131
Electronics Technician AN/SPS-40 Radar Set Maintenance NV-1715-0557
Electronics Technician, Class A—A-3 (Radar) NV-1715-0725
Electronics Technician, Class A (Communications, Radar and Sonar Specialists) NV-1715-0727
Electronics Technician, Class A, Phase SEIR (Shipboard Equipment Indocitation, Radar) NV-1715-0638
Electronics Technician, Class A (Radar) NV-1715-0731
Electronics Technician, Class C, AN/SPS-29 Radar Set NV-1715-0024
Electronics Technician, Class C, AN/SPS-37, 37A Radar Sets and AN/SPA-63 Countermeasures Receiving Group NV-1715-0298
Electronics Technician, Class C, AN/SPS-37/A Radar Set and AN/SPA-63 Countermeasures Receiving Group NV-1715-0298
Electronics Technician Class C, AN/SPS-40A Radar Set Maintenance NV-1715-0006
Electronics Technician, Class C, AN/SPS-8 Radar Maintenance NV-1715-0968
Electronics Technician, Class C, Shipboard Equipment Indocitation (Radar) NV-1715-0638
Electronics Technician Radar Base NV-1715-0854
Electronics Technician Radar, Class A NV-1715-0854
Electronics Technician Radar Equipment Fundamentals, Class A NV-1715-0055
Electronics Technician Radar—Nuclear Field, Class A NV-1715-0856
Electronics Technician Radar—Nuclear Field, Class A NV-1715-0856
Electronic Warfare Technician, Class C, Radar Data Recorder-Reproducer AN/SPH-2 and Video Recorder- Reproductor 15-E-27 Maintenance NV-1715-0296
F-4B AN/APA-157 Radar Set Group Intermediate Maintenance NV-1715-0257
F-4B AN/APQ-72 Radar Set Intermediate Maintenance NV-1715-0430
F-8 AN/APQ-124 Radar Intermediate Maintenance NV-1715-0842
F-8 AN/APQ-83A Radar Intermediate Maintenance NV-1715-0020
F-8 AN/APQ-83B Radar Intermediate Maintenance NV-1715-0214
F-8 AN/APQ-94 Radar Intermediate Maintenance NV-1715-0065
F-8 AN/APR-30(V) Radar Set Intermediate Maintenance NV-1715-0116
Fleet Replacement Radar Navigator NV-1606-0036
Ground Controlled Approach Electronics Maintenance, Radar Set AN/CPN-4A, Class C NV-1715-0079
Ground Controlled Approach Electronics Maintenance (Radar Set AN/FPN-36), Class C NV-1715-0217
Ground Controlled Approach Electronics Maintenance, Radar Set AN/MPN-5, Class C NV-1715-0080
Ground Controlled Approach Electronics Technician Radar Set AN/MPN-1B, Class C NV-1715-0078
Ground Controlled Approach Maintenance (Engineman). Radar Sets AN/CPN-4A and AN/MPN-5, Class C NV-1715-0081
Ground Radar Repair MC-1715-0062
Ground Radar Technician MC-1715-0051
Gun Fire Control Radar Mk 25 Mod 3 Maintenance NV-1715-0127
Gun Fire Control System (GFCS) (Lgss Radar) Operation and Maintenance NV-1715-0210
Gun Fire Control System (GFCS) Mk 37 Maintenance (Less Mk 25 Mod 3 Radar) NV-1715-0210
Gun Fire Control System (GFCS), Mk 37, Mk 68, Mk 56 Radar Signal Processing Equipment (RSPE) Maintenance NV-1715-0728
Integrated Avionics Radar System Technician NV-1715-0035
KC-130F AN/APN-59B Radar Intermediate Maintenance NV-1715-0041
KC-130F AN/APN-59 Radar Maintenance NV-1715-0036
Marine Air Traffic Control Unit Radar Maintenance, Class C NV-1715-0038
Marine Air Traffic Control Unit Radar Repairman, Class C NV-1715-0038
Radar Fundamentals NV-1715-0312

Radar Mk 25 Mod 3 Maintenance NV-1715-0114

Radar Repeater Systems Maintenance NV-1715-0129

Radar Signal Processing Equipment NV-1715-0029

Radar (Target) Intelligence NV-1715-0403

Radar Theory and Maintenance by NV-1709-0015

Correspondence

RF-4B AN/APN-159 Radar Altimeter NV-1715-0223

Radio AN/AP-102 Side Looking NV-1715-0223

Radar Intermediate Maintenance NV-1715-0399

RF-4B AN/AP-99 Forward Looking NV-1715-0415

Radio Intermediate Maintenance NV-1715-0145

S-2D/E AN/AP-122 Doppler Radar NV-1715-0422

Navigation System Maintenance NV-1715-0248

S-2D/E AN/AP-88/ASA Radar Set NV-1715-0438

Maintenance NV-1715-0237

SH-3A AN/APN-130 Doppler Radar NV-1715-0561

Navigation Maintenance NV-1715-0061

Submarine Radar Maintenance (Enlisted) NV-1715-0282

Talos Radar AN/SPG-49B, Class C NV-1715-0793

Talos Radar AN/SPW-2B, Class C NV-1715-0728

Tartar Radar AN/SPG-51B or Radar AN/SPG-51C, Class C NV-1715-0421

Tartar Radar AN/SPG-55B and NV-1715-0592

Director Mk 73 Mod 1

Tartar Radar Test Set Mk 474 Mod 2 NV-1715-0396

Terrier AN/SPG-55B ASMD 70 Radar NV-1715-0591

Update NV-1715-0581

Terrier ASMD-70 55B Radar Update NV-1715-0501

Terrier Radar AN/SPQ-5A NV-1715-0501

Terrier Radar AN/SPG-55B NV-1715-0291

Continuous Wave Acquisition and Tracking (CWAT)

Terrier Radar Set AN/SPG-55B NV-1715-0412

Radar/MAD RADAR/MAD for Nonacoustic NV-1715-0678

Operator P3A/B (D)

Radarman Class A Radarman School (Operational NV-1715-0643

Course)

Radarman, Class A Class C

Radarman, Class A Basic Preventive NV-1715-0401

Maintenance and Operators

Radarman, Class B NV-1715-0593

Radarman, Class B, Maintenance Phase NV-1715-0593

Radarman, Class B, Operational Phase NV-1715-0593

RADIAC RADIAC Instrument Maintenance NV-1715-0554

Radio Airborne Radio Communications NV-1715-0481

Operator (ARCO)

Airborne Radio Operator/Loadmaster MC-2204-0019

International Commercial Radio (ICR)

Non-Morse NV-1715-0839

E-1B ARC-97 Radio Repeater System NV-1715-0195

E-2A AN/ARC-80 Radio Set Intermediate Maintenance NV-1715-0195

E-2A Radio Set AN/ARC-80 Intermediate Maintenance NV-1715-0190

Electronics Technician, AN/SRC-20, AN/SRC-21 Radio Sets NV-1715-0615

AN/URC-9, AN/SRC-21 Radio Sets NV-1715-0615
Radioisotope Technician, Class C AN/URC-38, AN/URC-46 Radio Sets Maintenance

Field Radio Operator MC-1369-0002 Ground Radio Repair MC-1369-0009

Polaris/Poseidon Radio Navigation Set AN/BRN-3, Data Processor Intermediate Maintenance

Rapid 3/50 Caliber Rapid Fire Gun Mount

S-2E AN/ARC-94 HF Receiver Transmitter System Maintenance

Rawin-Radiosonde Set Operator, Class C

Satellite Receiver AN/WRN-5 Combined Maintenance, Class C-1

AN/ALM-109 Test Console and AN/ALQ-99 Receivers Intermediate Maintenance

Receivers AN/ALR-45 Countermeasures Receiver

An/ALR-54 Countermeasures Receiver

An/ALR-54 Countermeasures Receiver

An/ALR-54 Countermeasures Receiver

An/ALR-54 Countermeasures Receiver

An/ALQ-99 Receivers Intermediate Maintenance

An/ARC-131 Receiver Transmitter Intermediate Maintenance

An/ARC-131 Receiver Transmitter Intermediate Maintenance

An/ARC-528V TACAN Receiver Intermediate Maintenance

An/AWG-10 Receiver, Intermediate Maintenance

An/SPN-29 Receiver

An/SPN-30 Receiver

An/SPN-12 Loran Receiver Set Maintenance (Electronics Technician, Class C-1)

Communications Receiver Site Systems Maintenance, Class C-1

Electronics Technician, AN/URQ-N-14, Omega Receiver Maintenance, Class C-1

Electronics Technician Class C, R-1524/IV) WRR Countermeasures Receiver Maintenance

Electronics Technician, Class C, Wideband Synthesized Independent Sideband Receiver

F-4J AN/ALQ-10 Receiver Intermediate Maintenance

Polars/Poseidon Radio Navigation Set AN/BRN-3 Receiver Advanced Training, Class F1

RT-54/AS0 Receiver/Transmitter and KY-309/ASQ Pulse Decoder and RT-527/ASQ-19 Receiver/Transmitter and KY-312/ASQ-19 Pulse Decoder Intermediate Maintenance

S-2E AN/ARC-94 HF Receiver-Transmitter System Maintenance

An/ALR-45 Countermeasures Receiver
SRN-12 Omega Receiving Set Maintenance  NV-1715-0201
Electronics Technician, Class C, AN/UPN-12 Loran Receiving Set Maintenance, Class F-1 NV-1715-0814
Loran Receiving AN/WPN-5 Operation and Maintenance NV-1715-0131
Loran Receiving Sets AN/SPN-38 and AN/WPN-5 Operation, Maintenance and Functional Checkout NV-1715-0431
Sonar Receiving Set AN/BGQ-4/4A (PUFS) Combined Maintenance NV-1715-0261
Sonar Receiving Set AN/BGQ PUFS Maintenance NV-1715-0261
Sonar Receiving Set AN/BQR-15 Mod 0 Advanced Maintenance, Class F1 NV-1715-0912
Sonar Receiving Set AN/BQR-15 Mod 0 Operator and Maintenance NV-1715-0912
Sonar Receiving Set AN/WLR-9A/12 Combined Maintenance NV-1715-0265
Reciprocating Aviation Machinist's Mate R(Reciprocating), Class A NV-1704-0149
Aviation Machinist's Mate R (Reciprocating), Class B NV-1704-0158
Reckoning MK-9 Mod 4 Dead Reckoning Analyzer Indicator (DRAI) and Mk 6 Mod 4B Dead Reckoning Tracer (DRT), Class C NV-1715-0344
Recognition P-3 AN/APK-7 Radar Recognition System Intermediate Maintenance NV-1715-0511
Reconnaissance Amphibious Reconnaissance NV-0803-0001
Photographic Reconnaissance (Class O) NV-1709-0004
Photographic Reconnaissance Officers, Class O NV-1709-0004
RA-SC Electronic Reconnaissance Line Maintenance NV-1715-0246
RA-SC Electronic Reconnaissance Organizational Maintenance NV-1715-0224
RA-SC Photo Reconnaissance Line Maintenance NV-1715-0748
RA-SC Photo Reconnaissance System Organizational Maintenance NV-1715-0748
RF-4B AN/AAS-18 Infrared Reconnaissance Mapping System Intermediate Maintenance NV-1715-0225
Reconnaissance AN/AHL-6 Recorder/Reproducer Intermediate Maintenance NV-1715-0073
AN/AQH-7 (V) Sonar/Computer-Recorder Group Intermediate

Maintenance NV-1715-0774
AN/AQH-1 Recorder/Reproducer Intermediate Maintenance NV-1715-0191
AN/AQH-4 Sound Recorder/Reproducer Set Intermediate Maintenance NV-1715-0093
AN/ASH-20 (V) Flight Recorder-Locator System Intermediate Maintenance NV-1715-0230
Electronic Warfare Technician, Class C, Radar Data Recorder-Reproducer AN/SPH-2 and Video Recorder-Reproducer 15-E-27 Maintenance NV-1715-0296
RF-4B AN/ARC-105 High Frequency Communication System and RO-254/ASQ Sound Recorder Maintenance NV-1715-0368
Recording Electronic Technician, Class C, AN/UHXH-2B Facsimile Recording Equipment Maintenance NV-1715-0012
P-3 AN/AQA-5 Sonar Data Recording System Maintenance, No 46 NV-1715-0121
Records Debursing Clerk (Pay Records Maintenance) Class C NV-1401-0001
Recordskeeper Ship's Servicemen Recordskeeper NV-1405-0001
Recovery Aircraft Launch and Recovery Equipment (C-13 and C-13 Mod 1 Catapults), Class C NV-1704-0187
Air Aircraft Launch and Recovery Equipment (C-13 Catapult, Class C NV-1704-0187
Air Aircraft Launch and Recovery Equipment (C-7/11 Catapult), Class C NV-1710-0071
Air Aircraft Launch and Recovery Equipment, Class O NV-1704-0184
Air Aircraft Launch and Recovery Equipment Maintenance Officer (C-13 Catapult), Class O NV-1704-0200
Air Aircraft Launch and Recovery Equipment Maintenance Officer (C-7/11 Catapult), Class O NV-1704-0183
Aviation Boatswain's Mate E (Aircraft Launch and Recovery Equipment), Class A NV-1704-0183
Disaster Recovery Training I and II NV-0801-0003
Marine Aircraft Launch and Recovery Equipment, Class A NV-1710-0061
Recreation Recreation Management NV-0902-0002
Recruit Recruit Procurement, Class C NV-4406-0010
Recruit Training

KEYWORD INDEX

Recruit Training (Women) NV-2205-0011
Recruit Training NV-2204-0038
Recruit Training NV-2202-0014
Recruiters NV-2204-0046
Recruiter Marine Corps Recruiter NV-1406-0009
Recruiter NV-1406-0009
Recruiters NV-1406-0009
Recruiter NV-2204-0046
Redeye Redeye Gunner/Operator NV-2204-0012
Redeye Gunner—Platoon Training NV-2204-0012
Redeye Gunner—Platoon Training (Abbreviated Course) NV-2204-0011
Refrigerant Air Conditioning Refrigerant 11 NV-1730-0006
Refrigerant 11 Air Conditioning NV-1730-0006
Refrigeration Air Conditioning and Refrigeration, Class C NV-1701-0005
Air Conditioning and Refrigeration, Class C NV-1701-0005
Basic Refrigeration Mechanic NV-1730-0002
Basic Refrigeration Theory and Maintenance NV-1730-0001
Journeymen Refrigeration Mechanic NV-1730-0004
Refrigeration and Air Conditioning (Operation and Maintenance) NV-1701-0001
Refrigeration Mechanic NV-1730-0002
Refrigeration Specialist NV-1730-0001
Submarine Refrigeration and Air Conditioning R-12 NV-1730-0003
Regulators Generator Regulators, Class F-1 NV-1315-0901
Relay Radio Relay Repair NV-1315-0901
Relay Transmitter Mk 60 Mod 0 Maintenance—UFCG Mk114 Mods 9-12 NV-1715-0389
Relay Transmitter Relay Transmitter Mk 60 Mod 0 Maintenance—UFCG Mk114 Mods 9-12 NV-1715-0389
Remote A-4/C/E Bombing System AN/AJB-3 NV-1715-0615 and Remote Standby Attitude Indicator

473
KEYWORD INDEX

A-4E Bombing System AN/AJB-3A and Remote Standby Indicator System (Organizational)  
NV-1704-0098
Remote Control System Repairman  
MC-1715-0072
Remote Sensor System for Physical Security, Class CI  
NV-1721-0001
Repair  
MC-1723-0006
Repeater  
E-1B ARC-97 Radio Repeater System Maintenance  
NV-1715-0195
Electronic Warfare Deception Repeater Systems Maintenance, AN/SLQ-22A(V2  
NV-1715-0761
Electronic Warfare Deception Repeater Systems Maintenance, AN/SLQ-22B(V3  
NV-1715-0761
Electronic Warfare Technician, Class A (A-3), Deception Repeater Systems Maintenance  
NV-1715-0761
Radar Repeater Systems Maintenance (Electronics Technician, Class CI)  
NV-1715-0029
Reperforator  
Teletype Reperforator TT-253/UGC Combined Maintenance  
NV-1715-0664
Teletypewriter Reperforator TT-253/UG  
NV-1715-0664
Teletypewriter Reperforator TT-253/UG Series and Teletypewriters Distributor TT187/UG Series  
NV-1715-0664
Teletypewriter Reperforator TT-253/UG Series and Transmitter Distributor TT-187/UG Series Teletype machines  
NV-1715-0664
Reporter  
Basic Legal Clerk and Reporter  
MC-1407-0001
Legal Clerk/Court Reporter  
MC-1407-0001
Legal Services Reporter SPCM (Closed Microphone)  
MC-1728-0005
Reporting  
Processing and Reporting  
NV-1715-0821
NV-1715-0822
Reserve Cryptologic Technician Processing and Reporting, Phase I  
NV-1715-0821
Reserve Cryptologic Technician Processing and Reporting, Phase II  
NV-1715-0822
Reproduction  
Reproduction Equipment Repair  
DD-1706-0002
Rescue  
Rescue Coordination Center for Reservists  
CG-0802-0005
Search and Rescue  
CG-0802-0003
Search and Rescue Class C  
CG-0802-0003
Research  
Dental Technician Research Assistant  
Class C  
NV-0701-0004
Reserve  
Aviation Reserve Officer Candidate (AVROC)  
NV-2202-0088
Information Officer (Reserve Component)  
DD-0504-0011
Leadership and Management (for Junior and Senior Petty Officers, and Reserve Petty Officers and Chiefs)  
CG-1717-0003
Reserve Air Intelligence (RAI)  
NV-1606-0055
Reserve Basic Intelligence Training Subjects (BITCS)  
NV-1606-0056
Reserve Components National Security Seminar  
DD-1511-0006
Reserve Cryptologic Technician, Basic Cryptanalysis  
NV-1715-0824
Reserve Cryptologic Technician Communications Technical Control, Class F1  
NV-1715-0848
Reserve Cryptologic Technician Direct Support  
NV-1715-0834
Reserve Cryptologic Technician—Intermediate Cryptanalysis  
NV-1715-0820
Reserve Cryptologic Technician Naval Security Group Orientation  
NV-1715-0823
Reserve Cryptologic Technician Processing and Reporting, Phase I  
NV-1715-0821
Reserve Cryptologic Technician Processing and Reporting, Phase II  
NV-1715-0822
Reserve Cryptologic Technician Signal Analysis, Class E2  
NV-1715-0845
Reserve Cryptologic Technician Simulated Operational Training Phase I  
NV-1715-0825
Reserve Cryptologic Technician Simulated Operational Training Phase II  
NV-1715-0826
Reserve Cryptologic Technician Simulated Operational Training Phase III  
NV-1715-0827
Reserve Cryptologic Technician T, Advanced, Class F1  
NV-1715-0844
Reserve Naval Security Group 1  
NV-1715-0823
Reserve Naval Security Group 10-T  
NV-1715-0844
Reserve Naval Security Group 13  
NV-1715-0824
Reserve Naval Security Group 13 I Intermediate Cryptanalysis  
NV-1715-0820
Reserve Naval Security Group 3  
NV-1715-0821
Reserve Naval Security Group 4  
NV-1715-0822
Reserve Naval Security Group 5 Signal Analysis  
NV-1715-0845
Reserve National Security Group 7 Communications Technical Control  
NV-1715-0846
Reserve Naval Security Group Simulated Operational Training Phase I  
NV-1715-0848
Reserve Naval Security Group Simulated Operational Training Phase II  
NV-1715-0825
Reserve Naval Security Group Simulated Operations Training Phase III  
NV-1715-0826
Reserve Officer Candidate (ROC II and ROC I)  
NV-2202-0103
Reserve Officer, Chief Leadership and Management  
CG-1717-0004
Reserve Petty Officer Leadership and Management  
CG-1717-0002
Reserve Training Officer Direct Support Operations, Class F1  
NV-1715-0834
Reserve Training Officer Direct Support (Organized)  
NV-1715-0834
RCC Reservists  
MC-0803-0003
Retrieval  
CVA 106 Storage and Retrieval Officer  
NV-1402-0043
Retirement  
Sonar AN/SQS-26AX Retire  
NV-1715-0806
RF-4B  
F-4B/J-RF-4B AN/ALQ-88 Countermeasures Set Intermediate Maintenance  
NV-1715-0393
RF-4B AN/AAS-18 Infrared Reconnaissance Mapping System Intermediate Maintenance  
NV-1715-0225
RF-4B AN/APN-159 Radar Altimeter Maintenance  
NV-1715-0223
RF-4B AN/APQ-102 Side Looking Radar Intermediate Maintenance  
NV-1715-0699
RF-4B AN/APQ-99 Forward Looking Radar Intermediate Maintenance  
NV-1715-0415
RF-4B AN/ARC-105 High Frequency Communication System and RD-254/ASQ Sound Recorder Maintenance  
NV-1715-0168
RF-4B AN/ASQ-46/50 Navigational Computer and Inertial Navigation System Intermediate Maintenance  
NV-1715-0228
RF-4B AN/ASQ-46/74 Navigation Computer and Inertial Navigation System Intermediate Maintenance  
NV-1715-0465
RF-4B AN/ASQ-55 Attitude Heading Reference System Maintenance  
NV-1715-0468
Reservists  
Cold Weather Field Indocu Emation Training for FMF Cadets and Reservists  
NV-1402-0043
RCC Reservists  
MC-0803-0003
Rescue Coordination Center for Reservists  
CG-0802-0005
Retrofit  
Sonar AN/SQS-26AX Retrofit Maintenance  
NV-1715-0806
Retrieval  
CVA 106 Storage and Retrieval Officer  
NV-1402-0043
Retirement  
Sonar AN/SQS-26AX Retirement  
NV-1715-0806
RF-4B  
F-4B/J-RF-4B AN/ALQ-88 Countermeasures Set Intermediate Maintenance  
NV-1715-0393
RF-4B AN/AAS-18 Infrared Reconnaissance Mapping System Intermediate Maintenance  
NV-1715-0225
RF-4B AN/APN-159 Radar Altimeter Maintenance  
NV-1715-0223
RF-4B AN/APQ-102 Side Looking Radar Intermediate Maintenance  
NV-1715-0699
RF-4B AN/APQ-99 Forward Looking Radar Intermediate Maintenance  
NV-1715-0415
RF-4B AN/ARC-105 High Frequency Communication System and RD-254/ASQ Sound Recorder Maintenance  
NV-1715-0168
RF-4B AN/ASQ-46/50 Navigational Computer and Inertial Navigation System Intermediate Maintenance  
NV-1715-0228
RF-4B AN/ASQ-46/74 Navigation Computer and Inertial Navigation System Intermediate Maintenance  
NV-1715-0465
RF-4B AN/ASQ-55 Attitude Heading Reference System Maintenance  
NV-1715-0468
Reservists  
Cold Weather Field Indocu Emation Training for FMF Cadets and Reservists  
NV-1402-0043
RCC Reservists  
MC-0803-0003
Rescue Coordination Center for Reservists  
CG-0802-0005
Retrofit  
Sonar AN/SQS-26AX Retrofit Maintenance  
NV-1715-0806
RF-4B  
F-4B/J-RF-4B AN/ALQ-88 Countermeasures Set Intermediate Maintenance  
NV-1715-0393
RF-4B AN/AAS-18 Infrared Reconnaissance Mapping System Intermediate Maintenance  
NV-1715-0225
RF-4B AN/APN-159 Radar Altimeter Maintenance  
NV-1715-0223
RF-4B AN/APQ-102 Side Looking Radar Intermediate Maintenance  
NV-1715-0699
RF-4B AN/APQ-99 Forward Looking Radar Intermediate Maintenance  
NV-1715-0415
RF-4B AN/ARC-105 High Frequency Communication System and RD-254/ASQ Sound Recorder Maintenance  
NV-1715-0168
RF-4B AN/ASQ-46/50 Navigational Computer and Inertial Navigation System Intermediate Maintenance  
NV-1715-0228
RF-4B AN/ASQ-46/74 Navigation Computer and Inertial Navigation System Intermediate Maintenance  
NV-1715-0465
RF-4B AN/ASQ-55 Attitude Heading Reference System Maintenance  
NV-1715-0468
RF-4B AN/ASQ-88 and AN/ASQ-108 Communication Navigation Identification (CNI) Line Troubleshooting, Maintenance  
RF-4B AN/ASQ-88 RT-736 and KY-531 Flight Director  
RF-4B AN/ASQ-90 Airborne Data Annotation System Maintenance  
RF-4B Camera Control System Intermediate Maintenance  
RF-4B Camera Control System Organizational Maintenance  
RF-4B Inertial Navigation System Intermediate Maintenance  
RF-4B Inertial Navigation System Organizational Maintenance  
RF-4B Photograph Film Correlator-Processing Set ES-55A Intermediate Maintenance  
RF-4B Shochorn Organizational Maintenance  
Rigging Standard Tensioned Replacement Alongside Methods (STREAM) Rigging and Passing  
UNREP Rigging Procedures  
Right A-6 Right Hand Unit Alignment Test Set, and Encoder Tape/Dial Test Set Intermediate Maintenance  
River River Assault Craft Training  
Riverine Mobile Riverine Force Staff Officer Training  
Riverine/Coastal Advisor Training  
RO-254/ASQ RF-4B AN/ARC-105 High Frequency Communication System and RO-254/ASQ Sound Recorder Maintenance  
ROC Reserve Officer Candidate (ROC II and ROC I)  
Rock Mountain Operations (Rock Climbing)  
Rocket Gunner's Mate Class C Rocket Launcher Mk 108  
ROM Read Only Memory (ROM) Encoder Elevator Control Maintenance, Class C1  
Romanian Romanian  
Rotary Rotary Wing Antisubmarine Warfare Tactics  
Rotor H-53 Rotor and Related Systems Organizational Maintenance  
HH-2D/SH-2D Airframes, Hydraulics, Flight Controls, and Rotor Systems Organizational Maintenance  
UH2-A/B Power Plant, Transmission, Fuel, Rotor and Related Systems Maintenance  
UH-2C Airframes, Hydraulics, Flight Controls and Rotor Systems Organizational Maintenance  
Rotors AH-1J Powertrain and Rotors Organizational Maintenance  
CH-46A Rotor and Related Systems Maintenance  
H-46 Rotor and Related Systems Organizational Maintenance Course  
UH-1N Powertrain and Rotor Organizational Maintenance  
RSPE Gun Fire Control System (GFCS), Mk 37, Mk 68, Mk 56 Radar Signal Processing Equipment (RSPE) Maintenance  
Radars Signal Processing Equipment (RSPE) Maintenance  
RT-547 F-4B AN/ASQ-19 TACAN System (RT-547 and KY-312) Intermediate Maintenance  
RT-648/698 RF-648/698 (AN/ARC-94/102/105/119/120) HF Transceiver Intermediate Maintenance  
RT-648/ARC-94 RF-648/ARC-94 and RT-698/ARC-102 HF Transceiver Intermediate Maintenance  
RT-698/ARC-102 RF-648/ARC-94 and RT-698/ARC-102 HF Transceiver Intermediate Maintenance  
RT-736 RF-4B AN/ASQ-88 RT-736 and KY-531 Flight Director  
RT-736 and KY-531 TACAN (Tactical Air Navigation) Intermediate Maintenance  
RT-793/ASQ F-4J RT-793/ASQ UHF Transceiver Intermediate Maintenance  
Russian Basic Russian—Refresher  
Russian Refresher  
Russian Stenotype  
Scientific Russian  
S-2 Prospective ASW Flight Instructor (S-2 Type Aircraft)  
S-2D VS CARG Pilot ASW Indoctrination, Equipments, and Tactics—S-2D Aircraft  
S-2D/E S-2D/E Airframes and Hydraulics Systems Maintenance
Aviation Structural/Mechanical E (Safety Equipment), Class A  
NV-1704-0130

Aviation Structural/Mechanical E (Safety Equipment), Class B  
NV-1704-0116

Boating Safety by Correspondence  
CG-0802-0001

Marine Safety Basic Indocentination  
CG-0802-0002

Merchant Marine Safety  
CG-0802-0002

Merchant Marine Safety Indocentination School  
CG-0419-0001

National Boating Safety  
CG-0802-0004

Navy Alcohol Safety Action Program (NASAP)  
NV-0799-0002

Radiographic Safety Officer  
NV-0802-0004

Safety Inspector Class C  
NV-1728-0007

Water Safety/Survival Instructor  
MC-0803-0002

Sanitation  
NV-0707-0001

Environmental Sanitation Technician  
NV-0707-0001

Sargent-Fletcher  
NV-0799-0002

Douglas Model D-704 and Sargent-Fletcher Model 31-300 Air Refueling Stores Organizational Maintenance  
NV-1704-0171

Satellite  
NV-1704-0066

AN/SCM-18 Radio Satellite Navigation Set Maintenance, Class C-1  
NV-1715-0810

AN/SCM-9 Satellite Radio Navigation Set Maintenance (Electronics Technician, Class C1)  
NV-1715-0099

AN/WSC-3 Satellite Communications Set and OE-82B/WSC-1(V) Antenna Group  
NV-1715-0876

AN/WSC-5 Tactical Satellite Communications System Maintenance  
NV-1715-0877

Fleet Satellite Communications Fleet Broadcast Control Subsystem Maintenance (Electronics Technician, Class C1)  
NV-1715-0874

Meteorological Satellite, Class C  
NV-1304-0006

Satellite Navigation System AN/WRN-5  
NV-1715-0913

Satellite Receiver AN/SCM-9A, BRN-6 Combined Maintenance, Class F1  
NV-1715-0492

Satellite Receiver AN/SCM-9A Combined Maintenance  
NV-1715-0492

Satellite Receiver AN/WRN-5 Combined Maintenance, Class C-1  
NV-1715-0913

Submarine Satellite Information Exchange System (SSIXS) for Shipboard Installations Maintenance  
NV-1715-0873

Submarine Satellite Information Exchange System (SSIXS) Operational Control Center Maintenance  
NV-1715-0871

Tactical Satellite Communications Equipment Maintenance AN/WSC-5(V)  
NV-1715-0877

Saturn  
NV-1710-0067

Engine, Class C, Solar T-10205-11A  
NV-1710-0067

Solar T-10205-11A Saturn Engine, Class C  
NV-1710-0067

SCATMOD  
NV-1715-0927

SCATMOD 1  
NV-1715-0927

SCATMOD 2  
NV-1715-0928

SCATMOD 3  
NV-1715-0929

SCATMOD 4  
NV-1715-0930

SCATMOD 5  
NV-1715-0931

SCATMOD 6  
NV-1715-0932

School  
NV-1704-0116

School Administration, Class C1, Course "Golf"  
NV-0326-0002

Science  
NV-0707-0001

Class A Marine Science Technician  
CG-1304-0001

Marine Science Technician  
CG-1304-0001

Marine Science Technician by Correspondence  
CG-1304-0003

Scientific  
NV-2202-0101

Naval Enlisted Scientific Education Program (NESEP)  
NV-2202-0101

Scientific Russian  
DD-0602-0008

Scientific Russian'  
MC-2204-0032

Scout  
NV-1710-0067

Artillery Scout Observer  
NV-1710-0067

Screening  
NV-1715-0878

EO"C" Crushing and Screening Operations  
NV-1715-0913

Equipment Operators/Crushing and Screening Plant Operations, Class C  
NV-1715-0914

Scuba  
NV-1715-0915

Closed and Semi-closed Scuba  
NV-1606-0012

Scuba Diver  
NV-1606-0011

Sea  
NV-1715-0916

Sea Duty Indocentination  
MC-2204-0014

Sea School  
MC-2204-0014

Seamanship  
NV-1715-0917

Officer Candidate School (Seamanship, Orientation, Operations & Military Indocentination)  
CG-2202-0001

Search  
NV-1715-0918

A-6A AN/AFQ-92 Search Radar and
Maintenance
F-4J Shoehorn Organizational Maintenance
NV-1715-0457
F/RF-8 Shoehorn Organizational Maintenance
NV-1715-0395
RA-5C Shoehorn Organizational Maintenance
NV-1715-0644
RA-4B Shoehorn Organizational Maintenance
NV-1715-0269
Shop
A-5R RA-5C AN/ASB-12 Line and Shop Maintenance
NV-1715-0521
RA-5C AN/ALQ-61 Countermeasure Set Shop Maintenance
NV-1715-0357
RA-5C Still Picture Camera Shop Maintenance
NV-1715-0439
Shop Stores Procedures, Class C
NV-1405-0003
Shore
Basic Shore Party Man
NV-292-0029
Shore Facilities Planning
NV-1408-0017
Shore Fire Control Party
NV-2202-0037
Shore Fire Control Party Enlisted
NV-2202-0062
Shore Fire Control Party Enlisted (Modified for U S Marine Corps Reserve)
NV-2202-0061
Shore Party Basic Specialist
NV-292-0029
Shore Structure Maintenance by Correspondence
NV-1710-0017
Utilitiesman, Shore Based Boiler Controls, Class C
NV-1710-0027
Short
Defense Language Institute Short Basic Courses
NV-1710-0014
Marine Corps Short Airfield For Tactical Support, Class C
NV-1710-0014
Shrike
Sparrow III, Sidewinder, Shrike and Walleye Guided Missile Test Equipment (CVA/CVS) Intermediate Maintenance
NV-1715-0619
Sparrow III, Sidewinder, Shrike, and Walleye Guided Missile Test Equipment, Intermediate Maintenance (Shore)
NV-1715-0702
Sidewinder
Electronics Technician, Class C
NV-1715-0702
Wideband Synthesized-Independent Sideband Receiver
NV-1715-0523
Single
AN/ARC-38A Single Side Band Transceiver Intermediate Maintenance
NV-1715-0091
AN/ARC-94 Single Side Band Transceiver Maintenance
NV-1715-0549
Slovenian
NV-1715-0027
Skyline
RA-5C AN/APD-7 Side Looking Radar (SLR) Intermediate Maintenance
NV-1715-0248
SISN
Electronics Technician, Class C
NV-1715-0027
Maintenance
NV-1715-0013
NV-1715-0248
K-94 KEYWORD INDEX

Small
- Small Arms Instructor: CG-2203-0007
- Sniper: Navy Sniper Training: NV-2202-0002

Software
- Central Computer Complex Combined Maintenance and Software: NV-1402-0047
- SSN Central Computer Complex System Level Maintenance and Software: NV-1402-0047

Solar
- Engineer, Class C, Solar T-10205-11A Saturn Engine: NV-1710-0067
- General Electric LM100 and Solar T-1000 Emergency Gas Turbine Solar Main Propulsion Operation and Maintenance: CG-1710-0007
- Solar T-10205-11A Saturn Engine, Class C: NV-1710-0067

Solid State
- Electronics Technician, Class C, Solid State Fundamentals: NV-1715-0103
- Solid State Circuit Troubleshooting Techniques: NV-1715-0149
- Solid State Theory: NV-1715-0103
- Solid State Theory for Electronic Equipment: NV-1715-0103

Sonar
- Advanced Sonar, 557: NV-1715-0667
- Advanced Sonar, 567: NV-1715-0667
- Advanced Sonar Course: NV-1715-0667
- Advanced Sonar Maintenance, 561: NV-1715-0665
- AN/AQA-7(V) Sonar Computer-Recorder Group Intermediate Maintenance: NV-1715-0774
- AN/BQR-3A Sonar Maintenance: NV-1715-0307
- AN/BQS-4 Sonar Maintenance: NV-1715-0303
- AN/BQS-8, 10A, 14A Sonar System Maintenance: NV-1715-0303
- AN/BQS-8 (Series) Sonar Maintenance: NV-1715-0124
- AN/SQA-13(V) Independent Variable Depth Sonar Operation and Maintenance: NV-1715-0772
- AN/UQN-4 Sonar Sounding Set Maintenance: NV-1715-0425
- Basic Surface Sonar Technician, Class A Core Phase: NV-1715-0423
- Electronics Technician, Class A (Communications, Radar and Sonar Specialties): NV-1715-0727
- General Submarine Sonar Maintenance: NV-1715-0126
- Mine Hunting Sonar Familiarization (Reserve): NV-1715-0126
- P-1 AN/AQA-5 Sonar Data Recording System Maintenance, No 46: NV-1715-0126
- S-2G AN/AQA-7(V) Sonar Computer Recorder Group Organizational Maintenance: NV-1715-0126
- SH-3A AN/AQS-10 Sonar Intermediate Maintenance: NV-1715-0126
- SH-3A AN/AQS-10 Sonar Maintenance: NV-1715-0126
- SH-3 AN/AQS-13 Sonar Maintenance: NV-1715-0126
- Sonar AN/BQS-11/12/13 Maintenance: NV-1715-0126
- Sonar AN/SQS-23A (PAIR) Organizational Maintenance: NV-1715-0126
- Sonar AN/SQS-23 (PAIR) Operator Basic: NV-1715-0126
- Sonar AN/SQR-17 and AN/SKR-4 Organizational Maintenance: NV-1715-0126
- Sonar AN/SQR-17 Organizational Maintenance: NV-1715-0126
- Sonar AN/SQS-23 D-G Series (TRAM) Maintenance: NV-1715-0126
- Sonar AN/SQS-23 D-G Series TRAM, MIP, LORA Maintenance: NV-1715-0126
- Sonar AN/SQS-23 Operator Maintenance: NV-1715-0126
- Sonar AN/SQS-23 Series (Sonar) Operator Basic: NV-1715-0126
- Sonar AN/SQS-26 (Series) AX(R) and CX Operations Basic: NV-1715-0126
- Sonar AN/SQS-26 AX(R) and CX Operations Intermediate Maintenance: NV-1715-0126
- Sonar AN/SQS-26 BX Maintenance: NV-1715-0126
- Sonar AN/SQS-26CX and AN/SQS-53 Maintenance: NV-1715-0126
- Sonar AN/SQS-26CX Maintenance: NV-1715-0126
- Sonar AN/SQS-26 Sonar Operator Basic: NV-1715-0126
- Sonar AN/SQS-35 (IVDS) Operator Basic: NV-1715-0126
- Sonar AN/SQS-35 (V) AN/SQS-35 (V) Maintenance: NV-1715-0126
- Sonar AN/SQS-38 Maintenance (USCG): NV-1715-0126
- Sonar AN/SQS-39 Through 46 and Aspect Maintenance: NV-1715-0126
- Sonar AN/SQS-53 Sonar Operator Basic: NV-1715-0126
- Sonar AN/SQS-54B Organizational Maintenance: NV-1715-0126
- Sonar AN/SQS-54B/SKR-4 Maintenance: NV-1715-0126
- Sonar Classification Set AN/BQH-2D/E Combined Maintenance: NV-1715-0126
- Sonar Detecting Ranging Set AN/BQS-11/12/13 Combined Maintenance: NV-1715-0126
- Sonar Detecting Ranging Set AN/BQS-11/12/13 Maintenance: NV-1715-0126
- Sonar Detecting Ranging Set AN/BQS-11/12/13 Combined Maintenance: NV-1715-0126
- Sonar Detecting Ranging Set AN/BQS-126CX Combined Maintenance: NV-1715-0126
- Sonar Detecting-Ranging Set AN/SQS-26 (Series) Maintenance: NV-1715-0126
- Sonar Electronics Intermediate (SIE) Maintenance: NV-1715-0126
- Sonar Receiving Set AN/BQQ-4/4A (PUFS) Combined Maintenance: NV-1715-0126
- Sonar Receiving Set AN/BQQ PUFS Maintenance: NV-1715-0126
- Sonar Receiving Set AN/BQQ-15 Mod 0 Advanced Maintenance, Class F1: NV-1715-0126
- Sonar Receiving Set AN/BQQ-15 Mod 0 Operator and Maintenance: NV-1715-0126
- Sonar Receiving Set AN/WLR-9A/12 Combined Maintenance: NV-1715-0126
- Sonar Sounding Set AN/UQN-4 Maintenance: NV-1715-0126
- Sonar Technician Class A-1 (Basic Electronics): NV-1715-0126
- Sonar Technician Class A-1 (Surface): NV-1715-0126
- Sonar Technician, Class B: NV-1715-0126
- Sonar Technician First Class by Correspondence: NV-1715-0126
- Sonar Technician Second Class by Correspondence: NV-1715-0126
- Sonar Watch Supervisor and Advanced Watchstander Training: NV-2202-0012
- Submarine Sonar AN/BQS-11/12/13 System Maintenance: NV-1715-0126
- Submarine Sonar Subjective Analysis (SSA): NV-1715-0126
- Sonarman Advanced Sonarman: NV-1715-0126
- Basic Sonarman: NV-1715-0126
- Class B Sonarman: NV-1715-0126
SSSA

Submarine Sonar Subjective Analysis (SSSA)  
NV-1715-0689

Stabilization  
A3B AB7 Radar Stabilization and Auxiliary Subsystems Maintenance (Less  
CP-209 and AN/AFN-122)  
NV-1715-0363

F-8 Electrical, Instruments, and  
Stabilization Systems Organizational  
Maintenance  
NV-1715-0183

H-46 Stabilization Systems Intermediate  
Maintenance  
NV-1704-0136

HH-2D/SH-2D Automatic Stabilization  
Equipment Intermediate Maintenance  
NV-1704-0205

SH-3A Automatic Stabilization  
Equipment Maintenance  
NV-1715-0616

SH-3 Automatic Stabilization Equipment  
Intermediate Maintenance  
NV-1715-0621

SH-3A Automatic Stabilization Equipment  
Organizational Maintenance  
NV-1704-0096

SSBN Navigation Data Assimilation  
Computer Mk 2 Mod A, Stabilization  
Data Computer Mk 3 Mod A  
NV-1715-0027

UH-2A/B Automatic Stabilization  
Equipment Intermediate Maintenance  
NV-1715-0464

UH-2A/B Automatic Stabilization  
Equipment Maintenance  
NV-1715-0464

UH-2C Automatic Stabilization  
Equipment Organizational-Maintenance  
NV-1715-0464

UH-2C, HH-2C, HH-2D Automatic  
Stabilization Equipment Intermediate  
Maintenance  
NV-1715-0610

UH-2C, HH-2C, HH-2D Automatic  
Stabilization Equipment Organizational  
Maintenance  
NV-1715-0683

Stabilizer  
Fin Stabilizer System (Sperry  
& Ledgewood Controls) Maintenance, Class  
C1  
NV-1722-0004

Staff  

Armed Forces Staff College  
DD-0326-0001

Course Command and Staff  
College  
MC-1408-0008

Mobile Riverine Force Staff Officer  
Training  
NV-2202-0048

Naval Gunnery Staff Officer  
NV-2202-0067

Naval Staff Advisor  
NV-1513-0001

Staff Noncommissioned Officers (NCO)  
Resident Course  
MC-1408-0014

Stainless  
Stainless Steel Welding (Requalification)  
NV-1710-0047

Stainless Steel Welding Requalification—  
Phase I (Enlisted)  
NV-1710-0045

Stainless Steel Welding Requalification—  
Phase III (Enlisted)  
NV-1710-0048

Stand-Alone  
ANWS-C Stand-Alone Maintenance  
NV-1715-0876

Standard  

Standard Tensioned Replenishment  
Alongside Methods (STREAM) Rigging and  
Passing  
NV-1710-0015

Station  
Station Management Systems  
NV-1408-0004

Steam  
1200 PSI Steam Generating Plant  
Operator  
NV-1710-0075

CVA Catapult and Drain System,  
Class C  
NV-1710-0008

Steam Components (Enlisted)  
NV-1710-0024

Steam Generating Plant Inspector  
NV-1712-0001

Steam Plant Automatic Controls  
Maintenance (General Regulator)  
NV-1710-0072

Steam Plant Automatic Controls  
Maintenance (Hagan)  
NV-1710-0073

Steelworker  

Steelworker, Class 1 (SW-1),  
NV-1723-0008

Steelworker, Maintenance Welding  
Techniques, Class C  
NV-1710-0068

Steelworker/Sheetsmetal, Class C  
NV-1723-0007

Steelworker/Welding Certification, Class  
C  
NV-1710-0053

Steelworkers,  
Steelworkers, Class A  
NV-1723-0009

Still  

Still 5-C Still Picture Camera Shop  
Maintenance  
NV-1715-0439

Still Documentary Photography C1  
NV-1709-0010

Stock  
Basic Supply Stock Control  
MC-1405-0012

Storage  

CVA IOIC Storage and Retrieval Officer  
NV-1402-0043

IOIC Intelligence Data System (Storage  
and Retrieval) Maintenance  
NV-1715-0030

IOIC Storage and Retrieval-Operator/  
Officer Course  
NV-1402-0035

Storage and Retrieval DP Operator and  
Programmer  
NV-1402-0035

Transportation and Storage of Hazardous  
Materials  
NV-0419-0007

Storekeeper  

Aviation Storekeeper, Class A  
NV-1405-0004

Aviation Storekeeper, Class B  
NV-1408-0019

Storekeeper, Class A  
CG-1409-0002

Storekeeper, Class C (Uniform  
Automated Procedures for Tenders  
and Repair Ships)  
NV-1402-0045

Storekeeper School, Class A  
NV-1409-0006

Storekeeper Supply Afloat (Dependent  
Duty) Class C  
NV-1405-0002

Storekeeper Supply Afloat (Independent  
Duty), Class C  
NV-1405-0017

Storekeepers  

Storekeepers (Independent Duty), Class  
C  
NV-1405-0001

Storekeepers (Repair Parts), Class C  
NV-1405-0013

Supply Storekeepers (Repair Parts), Class  
C-1  
NV-1405-0013

Stores  

Shop Stores Procedures, Class C  
NV-1405-0003

Stowage  

Shiploading and Stowage  
NV-1708-0007

Strategic  

Strategic Photographic Interpretation  
NV-1709-0012

Strategy  

Naval War College Correspondence  
Course in Strategy and Policy  
NV-1511-0004

Strategy and Policy Off-Campus  
Graduate Seminar  
NV-1511-0007

Strategic and Policy Self-Administered  
Seminar (Naval War College)  
NV-1511-0009

STREAM  
Standard Tensioned Replenishment  
Alongside Methods (STREAM) Rigging
Strike
Strike Armament Intermediate
Maintenance Repair
NV-1715-0061

Stripping
Lithographic Stripping and Platemaking
DD-1719-0001

Stromberg Carlson
Stromberg Carlson Automatic Telephone
XY-Switching System Maintenance
Class C1
NV-1715-0735

Structural
Aviation Structural Mechanic, Class B
NV-1704-0023

Aviation Structural Mechanic E (Safety Equipment), Class A
NV-1704-0130

Aviation Structural Mechanic E (Safety Equipment), Class B
NV-1704-0116

Aviation Structural Mechanic, First Class, by Correspondence
CG-1704-0015

Aviation Structural Mechanic H (Hydraulics), Class A
NV-1704-0128

Aviation Structural Mechanic H (Hydraulics), Class B
NV-1704-0087

Aviation Structural Mechanic, Second Class, by Correspondence
CG-1704-0013

Aviation Structural Mechanic S (Structures), Class A
NV-1704-0132

Aviation Structural Mechanic S (Structures), Class B
NV-1704-0177

Aviation Structural Mechanic S (Structures), Class C7
NV-1704-0177

Structure
Shore Structure Maintenance by Correspondence
CG-1710-0005

Structures
A-6 Hydraulics, Flight Control and Structures Organizational Level Maintenance
NV-1704-0129

ATA/B Structures, Hydraulics and Pneumatic Systems Maintenance
NV-1704-0190

Aviation Structural Mechanic S (Structures), Class A
NV-1704-0132

Aviation Structural Mechanic S (Structures), Class B
NV-1704-0177

Aviation Structural Mechanic S (Structures), Class C7
NV-1704-0177

Aviation Support Equipment Technician Hydraulics and Structures, Class A
NV-1704-0138

F/RF-4B Structures and Hydraulics
NV-1704-0122

Submarine
Advanced Submarine Quartermaster School
NV-1708-0003

Air/Space/Communication Systems (SECT) Maintenance
NV-1715-0002

Basic Enlisted Submarine Officer
NV-2202-0029

Basic Submarine Officer
NV-1408-0022

Basic Submarine Quartermaster, Class A
NV-1722-0007

Enlisted Submarine Indocitation
NV-2202-0092

General Submarine Sonar Maintenance
NV-1715-0126

Nuclear Submarine Medicine Technician
NV-0709-0001

Nuclear Submarine Medicine Technician, Class C
NV-0709-0001

Radio Equipment Submarine Maintenance
NV-1715-0885

Submarine Communication Equipment and Theory Module 1
NV-1715-0927

Submarine Communication Equipment and Theory Module 2
NV-1715-0928

Submarine Communication Equipment and Theory Module 3, Class A-1
NV-1715-0929

Submarine Communication Equipment and Theory Module 4
NV-1715-0930

Submarine Communication Equipment and Theory Module 5
NV-1715-0931

Submarine Communication Equipment and Theory Module 6
NV-1715-0932

Submarine Communication Equipment Combined Maintenance
NV-1715-0885

Submarine Emergency Communications Transmitter (SECT) Dvay AN/BST-1 Maintenance
NV-1715-0900

Submarine Gyrocompass Mk 19 Mod 3
NV-1715-0062

Submarine Intercooler Communications (IC) Systems
NV-1715-0642

Submarine Low Pressure and Vapor Compression Distilling Units, Enlisted
NV-1716-0025

Submarine Medical Officer (Candidates)
NV-0705-0001

Submarine Medicine Technician
NV-0709-0001

Submarine Medicine Technician, Class C
NV-0709-0001

Supervision
Management and Supervision of Naval Personnel
NV-1406-0007

Supervision and Management, Class C
NV-1406-0011

Supervisor
IQIC Supervisor
NV-1606-0002

Supply
Advanced Supply Administration
MC-1405-0005

Automated Supply and Accounting Systems Affoat (AN/UYK-S(V))
NV-1401-0003

Aviation Supply Enlisted Course
<table>
<thead>
<tr>
<th>Target Designation System (TDS) Mk 5</th>
<th>NV-1715-0793</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talos Radar AN/SPW-2B, Class C</td>
<td>NV-1715-0278</td>
</tr>
<tr>
<td>Talos Telemetering Data Reduction</td>
<td>NV-2202-0082</td>
</tr>
<tr>
<td>Talos Weapon Direction System Mk 6</td>
<td>NV-1715-0259</td>
</tr>
<tr>
<td>(WDE Mk 2) Class C</td>
<td></td>
</tr>
<tr>
<td>Talos Weapons/Fire Control/Missle</td>
<td></td>
</tr>
<tr>
<td>Battery</td>
<td></td>
</tr>
<tr>
<td>Talos Weapons System Mk 77 Mod 2</td>
<td>NV-1715-0608</td>
</tr>
<tr>
<td>(Class C)</td>
<td></td>
</tr>
</tbody>
</table>

| Tank Base Tank Crewman              | MC-1710-0006 |
| Tank/Amphibian Vehicle Officer      | MC-2204-0026 |
| (Reserve)                           |              |
| Tank/Amphibous Vehicle Officer      | MC-2204-0028 |
| Tank Officers Orientation           | MC-2204-0027 |
| Tank Unit Leaders (Enlisted)        | ME-1710-0009 |
| Tank Vehicle Repairman              | MC-1703-0001 |
| Tracked Vehicle Repairman, Tank     | MC-1703-0001 |
| Tracked Vehicle Repairman, Basic    | MC-1703-0001 |

| TAOC Tactical Air Operations Central (TAOC) | Analog Repair | MC-1715-0023 |
| Data Handling Repair                  | MC-1215-0053 |
| Tactical Air Operations Central (TAOC) |              |
| Conrol (TAOC)                         | MC-1715-0019 |
| Tactical Air Operations Central (TAOC) | Digital Repair | MC-1715-0018 |
| Weapons Controller/Operator           | MC-2204-0013 |
| TAOC (AN/TYQ-2) Technician            | MC-1715-0082 |

| Tape Data Systems Technician R-294/UYK | NV-1715-0110 |
| Magnetic Tape Unit Maintenance, Class C |              |
| RD-358. Magnetic Tape Subsystem Accelerated | MC-1715-0084 |

| Target Fire Control System (FCS) Mk 113 Mod 9 Target Motion Analysis (TMA) | NV-1715-0913 |
| Operator Familiarization            |              |
| Fire Control System (FCS) Mk 113 Mod 9 (Torpedoes and Target Motion Analysis) | NV-1715-0914 |
| Fire Control Technician Class C, Gun Fire Control System (GFCS) Mk 37 and Target Designation System (TDS) Mk 5 | NV-1715-0216 |
| Fire Control Technician Class C, Gun Fire Control System Mk 56 and Target Designation System Mk 5 |              |

| Fire Control Technician Class C, Target Designation System Mk 6 | NV-1715-0213 |
| Fire Control Technician Class C, Target Designation System (TDS) Mk 5 | NV-1715-0212 |

| Photographic Interpretation/Radar Target Analysis | NV-1606-0030 |
| Polaris Target Card Computer System Mk 148 Mod 0 Maintenance, Class F1 | NV-1715-0893 |
| Polaris Target Card Computer System Mk 148 Mod 0 Theory, Class C1 | NV-1715-0894 |
| Polaris Target Card Computer System Peripheral Equipment, Class C1 |              |
| QH-50C Control System AN/ SRW-4B Intermediate Maintenance | NV-1715-0897 |
| QH-50D Target Control System AN/ SRW-4B Intermediate Maintenance | NV-1715-0418 |
| Radar (Target) Intelligence | NV-1709-0015 |
| Target Designation System Mk 5 Maintenance | NV-1715-0264 |
| Target Designation System Mk 5 Shipboard Maintenance |              |
| Target Drone, Class C | NV-1704-0044 |
| Underwater Fire Control Systems Technician (Target Motion Analysis Subsystem) | NV-1715-0313 |

| Tartar Tartar Computer Mk 118 | NV-1715-0343 |
| Tartar Computer Mk 118 Mod 0 | NV-1715-0343 |
| Tartar DSOT Analysis Missile Fire Control System (MFCS) Mk 74 Mod 0 | NV-1715-0072 |
| Tartar Fire Control and Missile Officer | NV-1715-0703 |
| Tartar Mk 152 Computer Complex | NV-1719-0792 |
| Tartar Radar AN/SPG-51B or Radar AN/SPG-51C, Class C | NV-1715-0421 |
| Tartar Radar Test Set AN/SPG-51C and Director Mk 73 Mod 1 | NV-1715-0512 |
| Tartar Radar Test Set Mk 474 Mod 2 | NV-1715-0396 |
| Tartar Weapon Direction Systems (WDS) Mk 4 Mod 0, Class C | NV-1715-0437 |
| Tartar Weapon Direction System (WDS) Mk 4, Class C | NV-1715-0436 |
| Tartar Weapons Control System | NV-1715-0466 |
| Tartar Weapons Officer | NV-1215-0572 |
| Tartar Weapons System Missle Fire Control System (MFCS) Mk 74 Mod 0 | NV-1715-0881 |
| Tartar Weapons System Missle Fire Control System (MFCS) Mk 74 Mods 6 and 7 | NV-1715-0805 |

| KEYWORD INDEX | K-101 |
| TDCC Tactical Data Communications Central (TDCC AN/TYQ-3) Technician | MG-1715-0026 |
| TDS Fire Control Technician Class C, Gun Fire Control System (GFCS) Mk 37 and Target Designation System (TDS) Mk 5 | NV-1715-0212 |
| Technical Communications Technician "O" Branch, HFDF Communications Technical Control | NV-1715-0800 |
| Cryptologic Technician, High Frequency Direction Finding (HFDF), Communications Technical Control, Class C1 | NV-1715-0800 |
| Electronics Technical Officer, Class O | NV-1715-0435 |
| High Frequency Direction Finding (HFDF) Communications Technical Control | NV-1715-0800 |
| Technical Instructor—Basic | MC-1406-0011 |
| Technician Communication Technician Theory | MC-1715-0005 |
| Technology Special Technology I | NV-1715-0905 |
| Special Technology II | NV-1715-0906 |
| Special Technology III | NV-1715-0907 |
| Telegraph AN/UCC-1 Series Telegraph Terminal Maintenance (Electronics Technician, Class C) | NV-1715-0009 |
| AN/VCC-2, AN/VRC-46 and AN/SRA-60 Telephone-Telegraph Communication System | NV-1715-0249 |
| Radio Telegraph Operator | MC-1715-0070 |

| Telemetering Talos Telemetering Data Reduction | NV-2202-0082 |
| Telemetering Ground Station AN/SKQ-2 | NV-1715-0791 |
| Terner Telemetering Data Reduction | NV-2202-0083 |
| Telemetry QH-50D Operational Telemetry Maintenance | NV-1715-0592 |
| Telephone AN/VCC-2, AN/VRC-46 and AN/SRA-60 Telephone-Telegraph Communication System | NV-1715-0249 |
| Automatic Electric—Strowger Switching Telephone Systems Maintenance, Class C1 | NV-1715-0735 |
| Dynalect Automatic Telephone System Maintenance, Class C1 | NV-1404-0007 |
K-102  KEYWORD INDEX

Stromberg Carlson Automatic Telephone
XY Switching System Maintenance,
Class CI
Telephone  Repair
MC-1715-0004
Teletypewriter
MC-1715-0038
Teletypewriter Switchboard Repair
MC-1715-0073
Teletypewriter System, Transportable AN/
TTG-28
MC-1715-0016
Teletypewriter Technician A School
CG-1715-0002
Teletypewriter Technician, Class A
CG-1715-0002
Teletypewriter Technician, Class B
CG-1715-0003
Teletypewriter Technician School
CG-1715-0002
Teletypewriter Technician Second Class
CG-1715-0063
Teletypewriter Repair
MC-1715-0013
Teletype Repair
MC-1715-0028

teletype

Electronics: Teletype Repair
MC-1715-0064
Model 28 ASR Teletype Maintenance
NV-1715-0062
Telephone-Teletype Repair
MC-1715-00013
Telephone Teletype Repair (Special)
MC-1715-0028
Teletype Maintenance, Class C, Low
Level Keying Teletype Maintenance
NV-1715-0063
Teletype Operator
MC-1404-0001
Teletype Repair
MC-1715-0076

Teletypewriter

AN/UGC-20/25 Teletypewriter Set
Maintenance
NV-1715-0090
AN/UGC-20A/25A Teletypewriter Set
Maintenance
NV-1715-0090
Electronics Technician Class C, AN/
FGC-73 Teletypewriter Routing Set and
AN/UGC-14 Intracine Page Printer
NV-1715-0019
P-3TT-264/AG Teletypewriter Group
Maintenance, No. 20
NV-1715-0019
Teletypewriter AN/UGC-20/25
Combined Maintenance
NV-1715-0090
Teletypewriter Repair
MC-1715-0076
Teletypewriter, Repertorat TT-253/UG
NV-1715-0064
Teletypewriter Repertorator TT-253/UG
Series and Teletypewriter Distributor
TT187/UG Series
NV-1715-0064
Teletypewriter Repertorator TT-253/UG
Series and Transmitter Distributor TT-
187/UG Series
NV-1715-0064
Teletypewriter Repertorator TT-253/UG
Series and Transmitter Distributor TT-
187/UG Series
NV-1715-0064

Teletypewriter System

TT-299/UG
NV-1715-0065
Teletypewriter Repair
TT-299 B/UG
NV-1715-0065

Teletypewriter System (Afloat)

Maintenance Models TT70A/UG and
AN/UGC-5 TT-252 Typing Perforator
NV-1715-0064

Teletypewriter Repair
TT-252
NV-1715-0065

Watchstanders Refreshment Maintenance
TT-2998/UG Teletypewriter Set
Maintenance (Enlisted)
NV-1715-0734

Television

Closed Circuit Television Maintenance,
Class CI
NV-1715-0407
Closed Circuit Television Systems by
Correspondence
CG-1715-0064
P-3Q AN/AXR-13 Low Light Level
Television Camera Intermediate
Maintenance
NV-1715-0358
Radio and Television Production
Specialist
DD-0505-0001
Shipboard Information, Training and
Entertainment (SITE) System Operators
(Television Afloat)
DD-0504-0010
Television Instructors
NV-1406-0007

Tender

AN/BST-1 Tender Maintenance
NV-1715-0588
Electronics Technician, Class C, FBM
Tender Navigation Maintenance
NV-1715-0182
Electronics Technician, Class C, SSBN
NAVDAC FBM Tender Navigation
Maintenance
NV-1715-0168
Fire Control System Technician Mk 88
Mod 1 Tender Maintenance
NV-1715-0205
Launcher Technician (Tender)
NV-1715-0300
Submarine Tender Radiological Controls
NV-1720-0001
Submarine Tender Radiological Controls
(Enlisted)
NV-0705-0005

Tenders

Storekeeper, Class C (Uniform
Automated Procedures for Tenders and
Repair Ships)
NV-1402-0045

Terminal

AN/UGC-1 Series Telegraph Terminal
Maintenance (Electronics Technician,
Class CI)
NV-1715-0099
E-2A AN/ACQ-2 and an/ACQ-2A
Data Terminal Sets Intermediate
Maintenance
NV-1715-0254
Introduction fo Traffic and Terminal
Management
NV-0419-0014
Marine Terminal Management
NV-0419-0012
Mobile Data Communications Terminal
Technician
MC-1715-0081
Terminal Equipment Repair

MC-1715-0015

Terrain

Terrain Analysis
DD-1601-0004

Terrier

DLG-16 (MOD) Terrier Weapons
System
NV-2202-0073

DLG 6-16 (MOD) Terrier Weapons
System Missile Fire Control System
(MFCS) Mk 76 Mod 5
NV-2202-0073

Tenter AN/SPG-55B ASMD '70 Radar
Update
NV-1715-0801

Tenter ASMD-70 55B Radar Update
NV-1715-0801

Tenter Computer Mark 119 Mod 5
NV-1715-0334

Tenter Computer Mark 149 Mod 5
(Fleet Inputs)
NV-1715-0334

Tenter Computer Mk 100 Mod 2
NV-1715-0398

Tenter Computer Mk 119 Mods 3 and 4
NV-1715-0344

Tenter Fire Control and Missile Officer
NV-1715-0288

Tenter Mark 152 Computer Complex
NV-1715-0391

Tenter Missile Launcher System Repair
MC-1715-0080

Tenter Missile Launcher System
Repairman
MC-1715-0080

Tenter Radar AN/SPQ-5A
NV-1715-0291

Tenter Radar Set AN/SPG-55B
Coherens Wave Acquisition and
Tracking (CWAT)
NV-1715-0693

Tenter Radar Set AN/SPG-55B Mod 5
NV-1715-0256

Tenter Radar Set AN/SPG-55B Mod 5
(Fleet Input)
NV-1715-0597

Tering/Tartar Guided Missile and
Guided Missile Test Sets Maintenance
NV-1715-0467

Tenter/Tartar Gunner's Mate
NV-1715-0603

Tenter Telemetering Data Reduction
NV-2202-0083

Tenter Weapon Direction System Mk 3
(DE Mk 9)
NV-1715-0649

Tenter Weapon Direction System Mk 7
(WDE Mk 8)
NV-1715-0473

Tenter Weapons
NV-1715-0005

Tenter Weapons System Missile Fire
Control System (MFCS) Mk 73
NV-1715-0442

Tenter Weapons System Missile Fire
Control System (MFCS) Mk 76
NV-1715-0443

Tenter Weapons Systems with Digital
Fire Control Systems (MFCS Mk 76-6/
AFCS)
NV-1715-0658

Tenter Weapon System DLG-28 (Class
System Level Maintenance)
Test
A-6A AN/APQ-112 Track Radar Test
Console and Detailed Radar Intermediate
Maintenance
NV-1715-0435
A-6A AN/APQ-92 Search Radar and
Module Analyzer Test Bench
Intermediate Maintenance
NV-1715-0431
A-6 AN/ASN-31 Inertial Navigation
System and Test Console Intermediate
Maintenance
NV-1715-0475
A-6A OA-6742/ASA-48 Universal
Encoder Test Console Intermediate
Maintenance
NV-1715-0109
A-6A Track Radar and Module Analyzer
Test Console Intermediate Maintenance
NV-1715-0429
A-6 Ballistic Computer Test Console
Intermediate Maintenance
NV-1715-0342
A-6 Card Module Analyzer Test
Console AN/ASM-118 Intermediate
Maintenance
NV-1715-0336
A-6 Data Processing Unit and Associated
Test Set Intermediate Maintenance
NV-1715-0560
A-6 Electronic Module Test Console
Intermediate Maintenance
NV-1715-0451
A-6 Pilots Horizontal Display, Direct
View Radar Indicator and Associated
Test Set Intermediate Maintenance
NV-1715-0297
A-6 Right Hand Unit Alignment Test
Set and Encoder Tape Dial Test Set
Intermediate Maintenance
NV-1715-0335
A-6 Search Radar Module Analyzer Test
Console
NV-1715-0530
A-6 Ship and Shore Inertial Platform
Test Station Intermediate Maintenance
NV-1715-0177
A-6 Track Radar Module Analyzer Test
Console and Detailed Module Theory
Intermediate Level Maintenance
NV-1715-0429
A-7E AN/ASM-375 Inertial Measurement System Test Set
Intermediate Maintenance
NV-1715-0146
AN/ALM-108 Receiver Test Console
AN/ALQ-99 Receivers Intermediate
Maintenance
NV-1715-0054
AN/ALM-109 Test Console and AN/
ALQ-99 Tracking Receivers and Control
Modulators Intermediate Maintenance
NV-1715-0052
AN/ALQ-99 Jamming Transmitters and
AN/ALM-107 Countermeasures Test
Station Intermediate Maintenance
NV-1715-0053
AN/APM 341 (V) Doppler Test Set
Intermediate Maintenance
NV-1715-0360
AN/AVM-11 (V) Head Up Display Test
Set Intermediate Maintenance
NV-1715-0229
AN/AWM-55(V) Armament Station
Control Unit Test Set Intermediate
NV-1715-0596
Maintenance
NV-1715-0174
E-2A Inertial Navigation System Semi-
Automatic Check-Out Equipment
(SACE) and Encoder Test Console
Operation and Maintenance
NV-1715-0323
Electronics Technician, Class C, AN/
SSM-5 Monitor Test Set Maintenance
NV-1715-0008
Maintenance Analysis Test Set (MATS)
Mk 352, Class F1
NV-1715-0904
Missile Test and Readiness Equipment
(MTRE) Mk 3 Measurement, Display
and Simulation Groups Advanced
Training
NV-1715-0908
Missile Test and Readiness Equipment
(MTRE) Mk 3 Mods 4 and 5
Measurement, Display and Simulation
Groups Advanced Training, Class F1
NV-1715-0908
Missile Test and Readiness Equipment
(MTRE) Mk 3 Programmer/Timer
Digital Multimeter Advanced Training,
Class C1
NV-1715-0884
OA-7371/ASM-76 Computer Detector
Test Console Intermediate Maintenance
NV-1715-0708
OA-7374/ASM-77 Ballistic Computer
Test Console Intermediate Maintenance
NV-1715-0548
Talos Guided Missile and Guided Missile
Test Set Maintenance
NV-1715-0542
Terrier/Tartar Guided Missile and
Guided Missile Test Set Maintenance
NV-1715-0467
Test Instrument Repairman
MC-1715-0027
Test Equipment
A-5A RA-5C AN/ASB-12 Verdan and
Digital Test Equipment
NV-1715-0238
A-6A AN/AVA-1 Vertical Display
Indicator Group and Associated Test
Equipment Intermediate Level Maintenance
NV-1715-0159
A-6 AN/APQ-112 Track Radar and
Associated Test Equipment Intermediate
Maintenance
NV-1715-0302
A-6 AN/APQ-92 Search Radar and
Associated Test Equipment Intermediate
Maintenance
NV-1715-0302
A-6A Programmer, Semi-Automatic Test
Equipment Intermediate Maintenance
NV-1715-0596
A-6A Programmier, Semi-Automatic Test
Equipment Intermediate Maintenance
NV-1715-0074
A-6 Associated Radar Test Equipment
Intermediate Level Maintenance
NV-1715-0406
AN/DPM-7 Sparrow III Guided Missile
Test Equipment Intermediate Maintenance
NV-1715-0628
AN/DPM-7 Sparrow III Guided Missile
Test Equipment Intermediate Maintenance
NV-1715-0446
Electronic Test Equipment Basic
Operator, Class F1
NV-1715-0896
KEYWORD INDEX K-103
Electronic Test Equipment Operation
NV-1715-0896
Electronic Test Equipment Operation/
Operational Use
NV-1715-0005
RA-5C AN/ASB-12 Verdan and Digital
Test Equipment Intermediate
Maintenance
NV-1715-0044
RA-5C Semi-Automatic Test Equipment
Air Data, Flight Reference, and Flight
Control Intermediate Maintenance
NV-1715-0542
RA-5C Semi-Automatic Test Equipment
Bomb Director
NV-1715-0547
RA-5C Semi-Automatic Test Equipment,
Programmer and System Analyzer
Intermediate Maintenance
NV-1715-0238
Sparrow III Missile Test Equipment
Maintenance Training-Depot Test
Equipment of the AN/DPM-7
NV-1715-0628
Sparrow III, Sidewinder, Shrike and
Wallyee Guided Missile Test Equipment
(CVA/CVS) Intermediate Maintenance
NV-1715-0619
Sparrow III, Sidewinder, Shrike,
Wallyee Guided Missile Test Equipment
Intermediate Maintenance (Shore)
NV-1715-0702
SUBROC Missile Mk 28 Mod 0 Test
Equipment Intermediate Maintenance
NV-1715-0795
Torpedo Mk 37 Mods 0, 2, and 3 Test
Equipment Intermediate Maintenance
NV-1715-0788
Torpedo Mk 45 Mods 1 and 2 Test
Equipment Intermediate Maintenance
NV-1715-0786
Testing
Nondestructive Testing of Metals
NV-1724-0002
Test Set
A-6 BNCN and BNCB Test Set,
Intermediate Maintenance
NV-1715-0051
A-6 Bombardier Navigator Control Box
and Associated Test Set, Intermediate
Maintenance
NV-1715-0051
TF30-P-6
TF30-P-6 Intermediate Maintenance/
Complete Engine Repair
NV-1704-0033
TF30-P-6/408
A-7A/B TF30-P-6/408 Power Plants and
Related Systems Organizational
Maintenance
NV-1704-0135
TF30-P-8
TF30-P-8/408 Engine Intermediate
Maintenance/Complete Engine Repair
NV-1704-0016b
TF30-P-8 Intermediate Maintenance/
Complete Engine Repair
NV-1704-0016
TF30-P-8/408
TF30-P-8/408 Engine Intermediate
Maintenance/Complete Engine Repair
NV-1704-0016
TF41-A-2
TF41-A-2 Engine Intermediate
Carner Air Traffic Control Center
Equipment Maintenance, AN/SPN-35A and AN/SPN-35, Class C
NV-1715-0713
Carner Air Traffic Control Center
Equipment Maintenance, AN/SPN-35, Class C
NV-1715-0713
Freight Transportation and Traffic Management
NV-0419-0008
Ground Controlled Approach/Radar Air Traffic Control Center Electronics
Maintenance Officers, Class O
NV-1715-0670
Introduction to Traffic and Terminal Management
NV-0419-0014
Marine Air Traffic Control Communications Repairman, Class C
NV-1715-0799
Marine Air Traffic Control Maintenance Supervisor Training, Class C
NV-1715-0742
Marine Air Traffic Control Navigational Aids Maintenance
NV-1715-0037
Marine Air Traffic Control Unit Auxiliary Equipment Maintenance, Class C
NV-1715-0669
Marine Air Traffic Control Unit Equipment Maintenance, Class C
NV-1715-0039
Marine Air Traffic Control Unit Maintenance Management, Class C
NV-1766-0039
NV-1715-0666
Marine Air Traffic Control Unit Maintenance Management, Class G
NV-1715-0039
Marine Air Traffic Control Unit Radar Maintenance, Class G
NV-1715-0038
Marine Air Traffic Control Unit Radar Repairman, Class C
NV-1715-0038
Personal Property Traffic Management
NV-0419-0011
Train
5/54 Rapid Fire Mount Fuzesetter, Train and Elevator, (Servo Amplifier System)
NV-1715-0667
TRAM
Sonar AN/SQS-23 D-G Series (TRAM) Maintenance
NV-1715-0864
Sonar, AN/SQS-23, D-G Series TRAM, MIP, LORA Maintenance
NV-1715-0864
Transceiver
AN/ARC-38A Single Side Band Transceiver Intermediate Maintenance
NV-1715-0094
AN/ARC-38A SSB Transceiver Maintenance
NV-1715-0686
AN/ARC-94 Radio Transceiver Intermediate Maintenance
NV-1715-0100
AN/ARC-94 Single Side Band Transceiver Maintenance
AN/SRC-20 Radio Transceiver NV-1715-0489
F-4J RT-791/ASQ UHF Transceiver Intermediate Maintenance NV-1715-0701
Radio Transceiver AN/SRC-20 Maintenance NV-1715-0089
Radio Transceiver AN/WRC-1 Family Equipment NV-1715-0089
RT 648/698 (AN/ARC-94/102/105/119/120) HF Transceiver Intermediate Maintenance NV-1715-0373
RT 648/ARC-94 and RT 698/ARC-102 HF Transceiver Intermediate Maintenance NV-1715-0069
Transceiver AN/SRC-20 Combined Maintenance NV-1715-0089
TRANSMITTER Advanced Transistor Theory
NV-1715-0165
Transmission
Data Computation and Transmission Loops Fire Control System (FCS) Mk 80, Class Cl
NV-1715-0085
Electronics Technician Class C, Data Transmission Group, Transmission Equipment Maintenance
NV-1715-0085
UH2/A/B Power Plant, Transmission, Fuel, Rotor and Related Systems Maintenance
NV-1704-0061
Transmissions
Construction, Mechanic/Automotive Transmissions, Class C
NV-1703-0003
UH-2C Power Plants, Fuel, Transmissions and Related Systems Organizational Maintenance
NV-1704-0076
Transmitter
AN/ARC-131 Receiver Transmitter Intermediate Maintenance
NV-1715-0188
AN/URT-23 Radio Transmitter With AN/UR-138 Antenna Coupler Maintenance (Electronics Technician, Class Cl)
NV-1715-0056
AN/URT-23 (V) Radio Transmitter Maintenance NV-1715-0531
AN/WRT-2 Radio Transmitter Maintenance (Electronics Technician, Class Cl)
NV-1715-0011
Communications Transmitter Site Systems Maintenance, Class Cl
NV-1715-0387
EA-6B Course Attitude Data Transmitter Intermediate Maintenance
NV-1715-0192
KEYWORD INDEX
AN/URA-30
NV-1715-0027
F-4J AN/AWG-10 Transmitter and Antenna-Positioning Intermediate Maintenance
NV-1715-0594
Relay Transmitter Mk 60 Mod 0 Maintenance—UPGC MK 114G/Mod 9-12
NV-1715-0389
Submarine Emergency Communications Transmitter (SECT) Buoy AN/BST-1 Maintenance
NV-1715-0900
T-073A/B Course Attitude Data Transmitter Intermediate Maintenance (EA-6B)
NV-1715-0192
Transmitter AN/WRT-4 Combined Maintenance
NV-1715-0250
Transmitters
AN/ALQ-99 Jamming Transmitters and AN/ALM-107 Cognitermeasures Test Station Intermediate Maintenance
NV-1715-0053
Transmitting
Radio Transmitting Set, AN/URT-23, (V) Maintenance (Enlisted)
NV-1715-0378
Transponder
AN/APX-64(V) IFF Transponder Set Intermediate Maintenance
NV-1715-0563
AN/APX-72 Series IFF Transponder System Maintenance NV-1715-0811
F-4B/J KY-532A/ASQ IFF Transponder Intermediate Maintenance NV-1715-0309
IFF Transponder AN/APX-72 and AN/UPX-17 Combined Maintenance, Class Fl
NV-1715-0914
KY-532A/KY-533A IFF Transponder Intermediate Maintenance
NV-1715-0184
Transport
Advanced Motor Transport
MC-1703-0002
Amphibious Transport/Cargo Ship Embarkation
NV-0419-0005
Motor Transport Chief
MC-1703-0003
Motor Transport Maintenance Management
MC-0419-0002
Motor Transport Officer
MC-0419-0003
Motor Transport Officer Leadership
MC-0419-0004
Motor Transport Officer Orientation
MC-0419-0006
Motor Transport Staff Noncommissioned Officer (NCO) Leadership
MC-1703-0016
Transportation
Freight Transportation and Traffic Management
NV-0419-0008
Intermediate, Transportation Management
NV-0419-0010
Introduction to Transportation Management
NV-0419-0006
TT-299 B/UG
Teletypewriter TT-299 B/UG
Traineeship Refresh and Maintenance
TT-299B/UG Teletypewriter Set
Maintenance (Enlisted)
TT70A/UG
Teletypewriter System (Afloat)
Maintenance Models TT70A/UG and
AN/UGC-5 TT-252 Typing Perforator
Tuner
AN/ALQ-86 Mid-Band Tuner
Intermediate Maintenance
Turbine
DD963 Basic Circuit Concepts for Gas
Turbine Controls, Class C1
Enginemen, Class C; Marine Gas Turbine
Basic
Enginemen, Gas Turbine Engines, Class C
Gas Turbine by Correspondence
General Electric LM100 and Solar T-
1000 Emergency Gas Turbine Solar Main
Propulsion Operation and Maintenance
LM2500 Gas Turbine Module
Maintenance, Class C1
Marine Gas Turbine Basic, Class C1
Pratt and Whitney FT4A Gas Turbine
Engine Operation and Maintenance
Ship's Service Gas Turbine Generator
Module (Allison 501) Maintenance, Class C1
Turbo-Jet
Aviation Machinist's Mate J (Turbo-Jet),
(Class A)
Turboprop
KC-130F T-56-A-7 Turboprop Engine
and Related Systems Maintenance
KC-130F T-56-A-7 Turboprop Engine
and Related Systems Organizational
Maintenance
Turkish
Tyrkisch
Turret
Aviation Ordnanceman (Turret), Class A
Turret Repairman
TV
Closed Circuit TV Maintenance, Class C1
Typewriter
Ships Inertial Navigation System (SINS)
Mk 2 Mod 6 Selectric Typewriter, Class F1
SINS Mk2 Mod 6 Selectric Typewriter
Advanced Maintenance
Typing
Typing and General Office Procedures
(Women)
UDT-SEAL
UDT-SEAL Explosive Ordnance
Disposal Information
UH-IE
UH-IE Airframe and Related Systems
Intermediate Maintenance
UH-IE Airframe and Related Systems
Organizational Maintenance
UH-IB T53-L-11 Engine Intermediate
Maintenance/Complete Engine Repair
UH-IE T53-L-11 Engine Organizational,
Maintenance
UH-IN
UH-IN Electrical Systems Organizational
Maintenance
UH-IN Power Package Organizational
Maintenance
UH-IN Powertrain and Rotors
Organizational Maintenance
UH-2A
UH-2A AN/APN-130 Radar Navigation
Equipment
UH-2A/B
UH-2A/B AN/AAS-13A Navigational
Computer Group Intermediate
Maintenance
UH-2A/B Automatic Stabilization
Equipment Intermediate Maintenance
UH-2A/B Automatic Stabilization
Equipment Maintenance
UH-2A/B Automatic Stabilization
Equipment Organizational Maintenance
UH-2A/B Electrical System Maintenance
UH-2A-B Power Plant, Transmission,
Fuel, Rotor and Related Systems
Maintenance
UH-2A/B Tactical Air Navigation
(TACAN) AN/ARN-52(V)
UH-2C
UH-2C Airframes, Hydraulic, Flight
Controls and Rotor Systems
Organizational Maintenance
UH-2C Automatic Stabilization
Equipment Intermediate Maintenance
Underwater Photographer/Scuba Diver

Underwater Photographer/Scuba Diver

UH-2C Electrical System Organizational Maintenance NV-1704-0090
UH-2C, HH-2C and HH-2D Power Plants and Related Systems Organizational Maintenance NV-1704-0141
UH-2C Power Plants, Fuel Transmissions and Related Systems Organizational Maintenance NV-1704-0176

UH34D
UH34D Airframe, Hydraulics and Flight Controls NV-1704-0064.

UHF
AN/ARC-27 UHF Radio Set Intermediate Maintenance NV-1715-0351
F-4J RT-793/ASQ UHF Transceiver Intermediate Maintenance NV-1715-0701
P-3 AN/ARC-52 UHF Communications Systems Maintenance, No. 21 NV-1715-0346

Ukrainian
Ukrainian DD-0602-0002

Underwater
Basic Underwater Demolition/Seal Team Training NV-1606-0007
Basic Underwater Demolition/Seal Training NV-1606-0007
Mark 105 Underwater Fire Control System (UWFCS) Mod 28 NV-1715-0675
Underwater Demolition Training NV-1606-0007
Underwater Demolition Training (Enlisted) NV-1606-0007
Underwater Demolition Training (Officer) NV-1606-0007
Underwater Fire Control Group Mk 111 Maintenance NV-1715-0119
Underwater Fire Control Group Mk 114 Maintenance NV-1715-0133
Underwater Fire Control System (FCS) Technician (Torpedoes) Mk 113 Mod 7 NV-1715-0760
Underwater Fire Control System Technician (Target Motion Analysis Subsystem) NV-1715-0313

Urologic
Urologic NV-0702-0004
Urologic Technician, Class C NV-0702-0004
Urological NV-0702-0004
Urological Technician NV-0702-0004
Urological Technician, Class C NV-0702-0004

User
Naval Tactical Data System (NTDS) Evaluator/Supervisor (USER) Class O/C NV-1402-0032

UT“A”
Utilitiesman, Class A1 (UT“A”) NV-1732-0006

Utilities
P-3 Air Conditioning, Pressurization and Utilities Organizational Maintenance NV-1701-0001
Utilities Chief MC-1710-0014
Utilities Officer MC-1701-0001
Utilities Officers MC-1710-0015

Utility
Aviation Boatswain’s Mate U (Utility), Class A NV-1728-0013
Aviation Ordnanceman (Utility), Class A NV-1714-0006

Utilitiesman
Utilitiesman, Class A1 (UT“A”) NV-1732-0006
Utilitiesman, Class B NV-1710-0036
Utilitiesman, Class J (UT“J”) NV-1710-0036
Utilitiesman, Shore Based Boiler Controls, Class C NV-1710-0027

Utilization
Naval Tactical Data System (NTDS)—Data Utilization—Basic NV-1402-0005
“NTDS Data Utilization” NV-1402-0005

UWFCs
Mark 105 Underwater Fire Control System (UWFCS) Mod 28 NV-1715-0675

V71 Series
Detroit Diesel V71 Series Engine Maintenance, Class C1 NV-1712-0019

Vapor
Submarine Low Pressure and Vapor Compression Distilling Units, Enlisted NV-1710-0025

Variable
AN/SQA-13 (V) Independent Variable Depth Sonar Operation and Maintenance NV-1710-0016
K-110 KEYWORD_INDEX

- General Ordinance NV-2202-0024
- CVA/CVS Air Launched Weapons NV-2202-0024 Supervisors NV-0802-0009
- CVS/MAUW Shop Nuclear Weapons Technical NV-0802-0005
- DGL-16 (MOD) Terrier Weapons System NV-2202-0073
- DGL 6-16 (MOD) Terrier Weapons System Missle Fire Control System (MFCS) Mk 76 Mod 5 NV-2202-0073
- F-14 Weapons System Technician NV-1704-0214
- Gunnery Officers—Weapons Department Officers NV-1715-0625
- Infantry Weapons Armorers NV-1715-0625
- Infantry Weapons Armorers (Basic) NV-2204-0052
- Infantry Weapons Armorers (Intermediate) NV-2204-0044
- Integrated Avionics Weapons System Technician NV-1715-0266
- Marine NOP (Nuclear Weapons Training for Nuclear Ordnance Platoon Personnel) NV-2202-0100
- Mk 80 Weapons Officer NV-1715-0606
- Naval Air Weapons Systems Orientation, Class O NV-1715-0743
- Navy Nuclear Weapons Advanced Maintenance NV-2202-0036
- Navy Nuclear Weapons Engineers, Calibration, and Maintenance (EC) NV-1715-0171
- Nuclear and Chemical Weapons Employment MC-2204-0036
- Nuclear, Biological, and Chemical NBC Weapons Employment MC-2204-0036
- Nuclear Weapons Disposal NV-0802-0007
- Nuclear Weapons Disposal Advanced Refresher NV-0802-0002
- Nuclear Weapons Employment MC-2204-0036
- Nuclear Weapons Technical (CVA) NV-0802-0006
- QH-50C Weapons System Intermediate Electronics Maintenance NV-1715-0568
- QH-50D Weapons System Electronic Intermediate Maintenance NV-1715-0633
- SSBN Command Weapons Systems Orientation—Polaris NV-1715-0573
- SWS (Strategic Weapons System) Command Polaris NV-1715-0573
- SWS (Strategic Weapons System) Weapons Officer Polaris NV-1715-0606
- Talos Weapons/Fire Control/Missile Battery NV-1715-0608
- Talos Weapons System Mk 77 Mod 2 (Class C) NV-1715-0444
- Tartar Weapons Officer NV-1715-0572
- Tartar Weapons System Missle Fire Control System (MFCS) Mk 74 Mod 0 NV-1715-0681
- Tartar Weapons System Missle Fire Control System (MFCS) Mk 74 Mods 6 and 7 NV-1715-0805
- Ternier Weapons NV-1715-0605
- Ternier Weapons System Missle Fire Control System (MFCS) Mk 73 NV-1715-0442
- Ternier Weapons System Missle Fire Control System (MFCS) Mk 76 NV-1715-0443
- Terrier Weapons Systems with Digital Fire Control Systems (MFCS Mk 76-67 AFCS) NV-1715-0658
- Weapons Delivery System (Officers) NV-2202-0047
- Weapons Director System (WDS) Mk 7 Mod 3 (6-Year Obligor) NV-1715-0414
- Weapons Director System (WDS) Mk 7 Mod 3 (Career) NV-1715-0413
- Weapons Employment CC-2204-0036
- Weapons Location Equipment Repair NV-1715-0050
- Weapons Repair Officer CC-2204-0036
- Weapons Repair Shop Machinist CC-2204-0036
- Weapons Systems Technician (Crew Member) NV-1715-0411
- Weapons Technician CC-1710-0029
- Weapons Control F-4B/J Armament, Missile and Weapons Control System Maintenance NV-1715-0622
- Weapons Control F-4B/J Armament, Missile and Weapons Control System Organizational Maintenance NV-1715-0632
- Tartar Weapons Control System NV-1715-0632
- Tartar Weapons Control System NV-1715-0466
- Weapons Controller Marine Tactical Data System (MTDS) Weapons Controller/Operator CC-1710-0021
- Tactical Air Operations Central (TAOC) Weapons Controller/Operator CC-2204-0013
- Weapons Controller/Operator CC-2204-0013
- Weather All Weather Carrier Landing System Equipment Maintenance, AN/SPN-42, Class C NV-1715-0286
- AN/APN-195 Weather Radar Systems Class C CC-1715-0025
- Cold Weather Field Indocritation MG-0803-0003
- Cold Weather Field Indocritation Training for FMF Cadets and Reservists MG-0803-0003
- Weather Briefer CC-1710-0009
- Welder Nuclear Power Plant Components NV-1710-0069
- Welders Fuel Gas Welders NV-1710-0052
- High-Pressure Pipe Welders NV-1710-0051
- Pipe Welders NV-1710-0050
- Plate Welders, Class C NV-1710-0044
- Pressure Hull Welders NV-1710-0049
- Welders MC-1710-0021
- Welding Advanced Welding NV-1710-0055
- Damage Controlman Welding, Class C CC-1710-0002
- Damage Control Welding, Class C CC-1710-0002
- Intermediate Welding NV-1710-0054
- Maintenance of Welding Qualifications NV-1710-0047
- Stainless Steel Welding (Requalification) NV-1710-0047
- Stainless Steel Welding (Requalification) NV-1710-0047
- Stainless Steel Welding Requalification—Phase I (Enlisted) NV-1710-0045
- Stainless Steel Welding Requalification—Phase II (Enlisted) NV-1710-0048
- Steelworker, Maintenance Welding Techniques, Class C NV-1710-0068
- SW”C” Maintenance Welding NV-1710-0068
- SW”C” Welding Certification NV-1710-0053
- Welding Course I NV-1710-0054
- Welding Course II NV-1710-0055
- Welding for Nuclear Power Plant Operators, Course V NV-1710-0046
- Well EE”C” Water Well Drilling and Development NV-1601-0004
- Equipment Operators, Water Well Drilling and Development, Class C NV-1601-0004
- Wideband Builseye Wideband Maintenance Technician, Class 3 NV-1715-0830
- Cryptologic Technician M, Builseye Wideband Maintenance NV-1710-0830
- Electronics Technician, Class C NV-1710-0830
K-112  KEYWORD INDEX

Oxygen Generator Electrical Model
6L16 (Enlisted)  NV-1715-0560

Oxygen Generator Mechanical Model
6L16 (Enlisted)  NV-1601-0006
# Course Number Index

The following columns cross-reference military course numbers to ID numbers for the courses listed in the course exhibit section. Readers who desire to trace courses for which they only have military course numbers as references may find the applicable courses by referring to the cross-reference list.

Each ID number begins with prefix initials which identify a specific branch of the Armed Services. The following prefixes are used:

- **AF**—Air Force
- **AR**—Army
- **CG**—Coast Guard
- **DD**—Department of Defense
- **MC**—Marine Corps
- **NV**—Naval

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Code</th>
<th>ID Number</th>
<th>Prefix</th>
<th>Code</th>
<th>ID Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>NV-002</td>
<td>0053</td>
<td>NV-0799-0004</td>
<td>A-100</td>
<td>0034</td>
<td>NV-1715-0815</td>
</tr>
<tr>
<td>NV-002</td>
<td>0055</td>
<td>NV-0799-0005</td>
<td>A-100</td>
<td>0035</td>
<td>NV-1715-0927</td>
</tr>
<tr>
<td>NV-002</td>
<td>0026</td>
<td>NV-1715-0928</td>
<td>A-100</td>
<td>0045</td>
<td>NV-1715-0904</td>
</tr>
<tr>
<td>NV-002</td>
<td>0037</td>
<td>NV-1406-0010</td>
<td>A-100</td>
<td>0046</td>
<td>NV-1715-0905</td>
</tr>
<tr>
<td>NV-002</td>
<td>0044</td>
<td>NV-2202-0102</td>
<td>A-100</td>
<td>0047</td>
<td>NV-1715-0906</td>
</tr>
<tr>
<td>NV-002</td>
<td>0045</td>
<td>NV-2202-0051</td>
<td>A-100</td>
<td>0050</td>
<td>NV-1715-0929</td>
</tr>
<tr>
<td>NV-002</td>
<td>0046</td>
<td>NV-2202-0101</td>
<td>A-100</td>
<td>0051</td>
<td>NV-1715-0930</td>
</tr>
<tr>
<td>NV-002</td>
<td>0047</td>
<td>NV-2202-0093</td>
<td>A-100</td>
<td>0052</td>
<td>NV-1715-0931</td>
</tr>
<tr>
<td>NV-002</td>
<td>0051</td>
<td>NV-2202-0010</td>
<td>A-100</td>
<td>0055</td>
<td>NV-1715-0932</td>
</tr>
<tr>
<td>NV-002</td>
<td>0053</td>
<td>NV-2202-0101</td>
<td>A-100</td>
<td>0100</td>
<td>NV-1714-0009</td>
</tr>
<tr>
<td>NV-002</td>
<td>0115</td>
<td>NV-1512-0002</td>
<td>A-100</td>
<td>0111</td>
<td>NV-1714-0009</td>
</tr>
<tr>
<td>NV-002</td>
<td>0116</td>
<td>NV-1512-0004</td>
<td>A-100</td>
<td>0114</td>
<td>NV-1715-0723</td>
</tr>
<tr>
<td>NV-002</td>
<td>0117</td>
<td>NV-1512-0001</td>
<td>A-101</td>
<td>0229</td>
<td>NV-1715-0010</td>
</tr>
<tr>
<td>NV-002</td>
<td>0107</td>
<td>NV-1722-0006</td>
<td>A-101</td>
<td>0105</td>
<td>NV-1715-0088</td>
</tr>
<tr>
<td>NV-002</td>
<td>4301</td>
<td>NV-2202-0103</td>
<td>A-101</td>
<td>0116</td>
<td>NV-1715-0088</td>
</tr>
<tr>
<td>NV-002</td>
<td>4401</td>
<td>NV-2202-0102</td>
<td>A-101</td>
<td>0122</td>
<td>NV-1715-0009</td>
</tr>
<tr>
<td>NV-002</td>
<td>4402</td>
<td>NV-2202-0101</td>
<td>A-101</td>
<td>0129</td>
<td>NV-1715-0010</td>
</tr>
<tr>
<td>NV-002</td>
<td>4404</td>
<td>NV-2202-0101</td>
<td>A-101</td>
<td>0131</td>
<td>NV-1715-0010</td>
</tr>
<tr>
<td>A-011</td>
<td>0012</td>
<td>NV-1513-0001</td>
<td>A-101</td>
<td>0135</td>
<td>NV-1715-0012</td>
</tr>
<tr>
<td>A-011</td>
<td>0013</td>
<td>NV-1513-0001</td>
<td>A-101</td>
<td>0136</td>
<td>NV-1715-0009</td>
</tr>
<tr>
<td>A-011</td>
<td>0015</td>
<td>NV-1513-0001</td>
<td>A-101</td>
<td>0140</td>
<td>NV-1715-0194</td>
</tr>
<tr>
<td>A-012</td>
<td>0011</td>
<td>NV-1406-0008</td>
<td>A-101</td>
<td>0147</td>
<td>NV-1715-0004</td>
</tr>
<tr>
<td>A-012</td>
<td>0012</td>
<td>NV-1406-0008</td>
<td>A-101</td>
<td>0148</td>
<td>NV-1715-0019</td>
</tr>
<tr>
<td>A-012</td>
<td>0013</td>
<td>NV-1406-0008</td>
<td>A-101</td>
<td>0149</td>
<td>NV-1715-0019</td>
</tr>
<tr>
<td>A-012</td>
<td>0025</td>
<td>NV-1406-0007</td>
<td>A-101</td>
<td>0150</td>
<td>NV-1715-0012</td>
</tr>
<tr>
<td>A-012</td>
<td>0030</td>
<td>NV-1408-0007</td>
<td>A-101</td>
<td>0153</td>
<td>NV-1715-0316</td>
</tr>
<tr>
<td>A-012</td>
<td>0036</td>
<td>NV-1406-0006</td>
<td>A-101</td>
<td>0155</td>
<td>NV-1715-0284</td>
</tr>
<tr>
<td>A-041</td>
<td>0010</td>
<td>NV-1715-0652</td>
<td>A-101</td>
<td>0161</td>
<td>NV-1715-0885</td>
</tr>
<tr>
<td>A-041</td>
<td>0011</td>
<td>NV-1715-0652</td>
<td>A-101</td>
<td>0162</td>
<td>NV-1715-0885</td>
</tr>
<tr>
<td>A-041</td>
<td>0012</td>
<td>NV-1715-0652</td>
<td>A-101</td>
<td>0163</td>
<td>NV-1715-0249</td>
</tr>
<tr>
<td>A-041</td>
<td>0013</td>
<td>NV-1715-0652</td>
<td>A-101</td>
<td>0169</td>
<td>NV-1715-0387</td>
</tr>
<tr>
<td>A-100</td>
<td>0010</td>
<td>NV-1714-0009</td>
<td>A-101</td>
<td>0172</td>
<td>NV-1715-0672</td>
</tr>
<tr>
<td>A-100</td>
<td>0012</td>
<td>NV-1714-0009</td>
<td>A-101</td>
<td>0173</td>
<td>NV-1715-0672</td>
</tr>
<tr>
<td>A-100</td>
<td>0014</td>
<td>NV-1714-0009</td>
<td>A-101</td>
<td>0174</td>
<td>NV-1715-0672</td>
</tr>
<tr>
<td>A-100</td>
<td>0016</td>
<td>NV-1714-0009</td>
<td>A-101</td>
<td>0175</td>
<td>NV-1715-0672</td>
</tr>
<tr>
<td>A-100</td>
<td>0017</td>
<td>NV-1714-0009</td>
<td>A-101</td>
<td>0176</td>
<td>NV-1715-0672</td>
</tr>
<tr>
<td>A-100</td>
<td>0019</td>
<td>NV-1714-0009</td>
<td>A-101</td>
<td>0177</td>
<td>NV-1715-0672</td>
</tr>
<tr>
<td>A-100</td>
<td>0021</td>
<td>NV-1714-0009</td>
<td>A-101</td>
<td>0178</td>
<td>NV-1715-0672</td>
</tr>
<tr>
<td>A-100</td>
<td>0022</td>
<td>NV-1714-0009</td>
<td>A-101</td>
<td>0179</td>
<td>NV-1715-0672</td>
</tr>
<tr>
<td>A-100</td>
<td>0023</td>
<td>NV-1714-0009</td>
<td>A-101</td>
<td>0180</td>
<td>NV-1715-0672</td>
</tr>
<tr>
<td>A-100</td>
<td>0030</td>
<td>NV-1714-0009</td>
<td>A-101</td>
<td>0181</td>
<td>NV-1715-0672</td>
</tr>
<tr>
<td>A-100</td>
<td>0031</td>
<td>NV-1714-0009</td>
<td>A-101</td>
<td>0182</td>
<td>NV-1715-0672</td>
</tr>
<tr>
<td>A-100</td>
<td>0032</td>
<td>NV-1402-0038</td>
<td>A-101</td>
<td>0183</td>
<td>NV-1715-0672</td>
</tr>
</tbody>
</table>

499
<table>
<thead>
<tr>
<th>COURSE NUMBER INDEX</th>
<th>N-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-300-27</td>
<td>NV-0702-0004</td>
</tr>
<tr>
<td>B-300-28</td>
<td>NV-0702-0005</td>
</tr>
<tr>
<td>B-300-29</td>
<td>NV-0702-0006</td>
</tr>
<tr>
<td>B-301-0033</td>
<td>NV-0703-0004</td>
</tr>
<tr>
<td>B-301-30</td>
<td>NV-0703-0004</td>
</tr>
<tr>
<td>B-301-31</td>
<td>NV-0703-0004</td>
</tr>
<tr>
<td>B-301-36</td>
<td>NV-0703-0004</td>
</tr>
<tr>
<td>B-301-38</td>
<td>NV-0703-0004</td>
</tr>
<tr>
<td>B-302-40</td>
<td>NV-0709-0011</td>
</tr>
<tr>
<td>B-305-24</td>
<td>NV-0704-0002</td>
</tr>
<tr>
<td>B-305-45</td>
<td>NV-0703-0003</td>
</tr>
<tr>
<td>B-305-46</td>
<td>NV-0703-0003</td>
</tr>
<tr>
<td>B-307-41</td>
<td>NV-0704-0002</td>
</tr>
<tr>
<td>B-307-42</td>
<td>NV-0704-0002</td>
</tr>
<tr>
<td>B-307-43</td>
<td>NV-0704-0002</td>
</tr>
<tr>
<td>B-307-44</td>
<td>NV-0704-0002</td>
</tr>
<tr>
<td>B-310-45</td>
<td>NV-0704-0002</td>
</tr>
<tr>
<td>B-311-0018</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-311-0025</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-311-0036</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-311-10</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-311-11</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-311-12</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-311-14</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-311-15</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-311-16</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-311-17</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-311-18</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-311-19</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-311-20</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-311-21</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-311-22</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-312-23</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-312-24</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-312-25</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-313-0026</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-313-26</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-313-27</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-313-28</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-313-29</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-313-30</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-313-31</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-313-32</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-313-33</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-313-34</td>
<td>NV-0702-0003</td>
</tr>
<tr>
<td>B-322-0010</td>
<td>NV-0705-0004</td>
</tr>
<tr>
<td>B-322-11</td>
<td>NV-0705-0004</td>
</tr>
<tr>
<td>B-322-12</td>
<td>NV-0705-0004</td>
</tr>
<tr>
<td>B-330-10</td>
<td>NV-0701-0006</td>
</tr>
<tr>
<td>B-330-11</td>
<td>NV-0701-0005</td>
</tr>
<tr>
<td>B-331-16</td>
<td>NV-0701-0004</td>
</tr>
<tr>
<td>B-331-17</td>
<td>NV-0701-0004</td>
</tr>
<tr>
<td>B-331-18</td>
<td>NV-0701-0004</td>
</tr>
<tr>
<td>B-331-19</td>
<td>NV-0701-0004</td>
</tr>
<tr>
<td>B-331-20</td>
<td>NV-0701-0004</td>
</tr>
<tr>
<td>B-400-10</td>
<td>NV-1709-0016</td>
</tr>
<tr>
<td>B-414-0010</td>
<td>NV-0202-0001</td>
</tr>
<tr>
<td>B-414-10</td>
<td>NV-0202-0001</td>
</tr>
<tr>
<td>B-513-0010</td>
<td>NV-1408-0021</td>
</tr>
<tr>
<td>B-513-0011</td>
<td>NV-1408-0021</td>
</tr>
<tr>
<td>B-513-0012</td>
<td>NV-1408-0021</td>
</tr>
<tr>
<td>B-513-0013</td>
<td>NV-1408-0021</td>
</tr>
<tr>
<td>B-670-10</td>
<td>NV-1715-0680</td>
</tr>
<tr>
<td>B-6A-22</td>
<td>NV-0705-0001</td>
</tr>
<tr>
<td>B-6F-0012</td>
<td>NV-0703-0001</td>
</tr>
<tr>
<td>B-6F-12</td>
<td>NV-0703-0001</td>
</tr>
<tr>
<td>C-000-3182</td>
<td>NV-1715-0155</td>
</tr>
<tr>
<td>COURSE NUMBÉR INDEX</td>
<td>N-9</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----</td>
</tr>
<tr>
<td>K-3A-5002</td>
<td>NV-2202-0023</td>
</tr>
<tr>
<td>K-3A-5005</td>
<td>NV-1606-0024</td>
</tr>
<tr>
<td>K-3A-5006</td>
<td>NV-1606-0039</td>
</tr>
<tr>
<td>K-3A-5010</td>
<td>NV-1606-0056</td>
</tr>
<tr>
<td>K-3A-5106</td>
<td>NV-1606-0055</td>
</tr>
<tr>
<td>K-3-536</td>
<td>NV-2202-0023</td>
</tr>
<tr>
<td>K-3-536</td>
<td>NV-1606-0056</td>
</tr>
<tr>
<td>K-33-527</td>
<td>NV-1606-0035</td>
</tr>
<tr>
<td>K-4H-2008</td>
<td>NV-1712-0008</td>
</tr>
<tr>
<td>K-4H-465</td>
<td>NV-1717-0006</td>
</tr>
<tr>
<td>K-532-0001</td>
<td>NV-1402-0015</td>
</tr>
<tr>
<td>K-532-0002</td>
<td>NV-1402-0019</td>
</tr>
<tr>
<td>K-532-0003</td>
<td>NV-1402-0021</td>
</tr>
<tr>
<td>K-532-0013</td>
<td>NV-1402-0046</td>
</tr>
<tr>
<td>K-722-2101</td>
<td>NV-1708-0005</td>
</tr>
<tr>
<td>K-722-4600</td>
<td>NV-2202-0076</td>
</tr>
<tr>
<td>K-7E-0043</td>
<td>NV-1402-0046</td>
</tr>
<tr>
<td>L-000-0033</td>
<td>NV-1715-0905</td>
</tr>
<tr>
<td>L-000-0034</td>
<td>NV-1715-0905</td>
</tr>
<tr>
<td>L-000-0035</td>
<td>NV-1715-0907</td>
</tr>
<tr>
<td>L-000-0058</td>
<td>NV-1715-0904</td>
</tr>
<tr>
<td>L-0E-13</td>
<td>CG-1715-0048</td>
</tr>
<tr>
<td>L-101-0013</td>
<td>NV-1715-0900</td>
</tr>
<tr>
<td>L-101-0015</td>
<td>NV-1715-0909</td>
</tr>
<tr>
<td>L-101-0031</td>
<td>NV-1715-0132</td>
</tr>
<tr>
<td>L-101-0039</td>
<td>NV-1715-0531</td>
</tr>
<tr>
<td>L-101-0028</td>
<td>NV-1715-0250</td>
</tr>
<tr>
<td>L-101-0029</td>
<td>NV-1715-0251</td>
</tr>
<tr>
<td>L-102-0020</td>
<td>NV-1715-0903</td>
</tr>
<tr>
<td>L-104-0010</td>
<td>NV-1715-0312</td>
</tr>
<tr>
<td>L-121-0030</td>
<td>NV-1715-0602</td>
</tr>
<tr>
<td>L-121-0048</td>
<td>NV-1715-0895</td>
</tr>
<tr>
<td>L-121-0049</td>
<td>NV-1715-0894</td>
</tr>
<tr>
<td>L-121-0051</td>
<td>NV-1715-0897</td>
</tr>
<tr>
<td>L-121-0053</td>
<td>NV-1715-0892</td>
</tr>
<tr>
<td>L-121-0056</td>
<td>NV-1715-0891</td>
</tr>
<tr>
<td>L-160-0012</td>
<td>NV-1715-0664</td>
</tr>
<tr>
<td>L-160-0011</td>
<td>NV-1706-0002</td>
</tr>
<tr>
<td>L-160-0012</td>
<td>NV-1706-0002</td>
</tr>
<tr>
<td>L-191-0011</td>
<td>NV-1715-0253</td>
</tr>
<tr>
<td>L-193-0011</td>
<td>NV-1715-0899</td>
</tr>
<tr>
<td>L-193-0026</td>
<td>NV-1715-0131</td>
</tr>
<tr>
<td>L-198-0012</td>
<td>NV-1715-0896</td>
</tr>
<tr>
<td>L-210-015</td>
<td>NV-1721-0003</td>
</tr>
<tr>
<td>L-652-0010</td>
<td>NV-1720-0006</td>
</tr>
<tr>
<td>L-652-0010</td>
<td>NV-1720-0006</td>
</tr>
<tr>
<td>L-652-0010</td>
<td>NV-1601-0005</td>
</tr>
<tr>
<td>L-652-0021</td>
<td>NV-1730-0001</td>
</tr>
<tr>
<td>L-661-0200</td>
<td>NV-1710-0057</td>
</tr>
<tr>
<td>L-662-0013</td>
<td>NV-1715-0898</td>
</tr>
<tr>
<td>L-662-0023</td>
<td>NV-1715-0901</td>
</tr>
<tr>
<td>L-701-0047</td>
<td>NV-1710-0047</td>
</tr>
<tr>
<td>L-701-0047</td>
<td>NV-1710-0047</td>
</tr>
<tr>
<td>L-702-0100</td>
<td>NV-1723-0001</td>
</tr>
<tr>
<td>MK-22</td>
<td>CG-1701-0001</td>
</tr>
<tr>
<td>MK-23</td>
<td>CG-1721-0001</td>
</tr>
<tr>
<td>MK-23</td>
<td>CG-1721-0002</td>
</tr>
<tr>
<td>MK-3</td>
<td>CG-1710-0007</td>
</tr>
<tr>
<td>MK-4</td>
<td>CG-1710-0006</td>
</tr>
<tr>
<td>MK-6</td>
<td>CG-1704-0020</td>
</tr>
<tr>
<td>NAV02</td>
<td>CG-1715-0544</td>
</tr>
<tr>
<td>NAV03</td>
<td>CG-1715-0555</td>
</tr>
<tr>
<td>NAV04</td>
<td>CG-1715-0545</td>
</tr>
<tr>
<td>NAV05</td>
<td>CG-1715-0499</td>
</tr>
<tr>
<td>NAV06</td>
<td>CG-1715-0550</td>
</tr>
<tr>
<td>NAV08</td>
<td>CG-1715-0541</td>
</tr>
<tr>
<td>NAV11</td>
<td>CG-1715-0444</td>
</tr>
<tr>
<td>NAV12</td>
<td>CG-1715-0301</td>
</tr>
<tr>
<td>P-00-1101</td>
<td>NV-1511-0002</td>
</tr>
<tr>
<td>P-00-1201</td>
<td>NV-1511-0003</td>
</tr>
<tr>
<td>Course Number</td>
<td>Course Title</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------</td>
</tr>
<tr>
<td>5220-2</td>
<td></td>
</tr>
<tr>
<td>5220-7</td>
<td></td>
</tr>
<tr>
<td>557</td>
<td></td>
</tr>
<tr>
<td>560</td>
<td></td>
</tr>
<tr>
<td>561</td>
<td></td>
</tr>
<tr>
<td>562</td>
<td></td>
</tr>
<tr>
<td>566</td>
<td></td>
</tr>
<tr>
<td>567</td>
<td></td>
</tr>
<tr>
<td>570-7IQ20</td>
<td></td>
</tr>
<tr>
<td>570-7IR10 (USA)</td>
<td></td>
</tr>
<tr>
<td>570-7IR10</td>
<td></td>
</tr>
<tr>
<td>570-ASI38</td>
<td></td>
</tr>
<tr>
<td>570-F1</td>
<td></td>
</tr>
<tr>
<td>570-F2</td>
<td></td>
</tr>
<tr>
<td>570-F3</td>
<td></td>
</tr>
<tr>
<td>570 (USMC)</td>
<td></td>
</tr>
<tr>
<td>SAAA79170</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Catalogue Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>5AAA79170</td>
<td></td>
<td>DD-0504-0002</td>
</tr>
</tbody>
</table>

**U.S. GOVERNMENT PRINTING OFFICE 1980 0–309-502 Vol 3**

508
REQUEST FOR COURSE RECOMMENDATION

The applicant for credit must fill out one form for each service school course completed. The institutional official is responsible for verifying from official military records that the student completed the entire course, and for submitting the form to the Office on Educational Credit, American Council on Education, One Dupont Circle, Washington, DC 20036, ATTN: Military Evaluations. Please Print.

1. Exact course title (do not abbreviate)

2. Service branch offering the course: □ Air Force □ Department of Defense □ Army □ Marine Corps □ Coast Guard □ Navy

3. Name of service school attended:

4. Location (installation, state):

5. Length of course (in weeks):

6. Dates of attendance. From day/month/year To day/month/year

7. Official military course number:

8. MOS/AFSC/NEC:

9. Course was designed for: □ Warrant Officers □ Enlisted Personnel □ Officer Candidates □ Aviation Cadets □ Commissioned Officers □ Noncommissioned Officers

10. Rank or rating upon completion of the course:

11. Please give some indication of subjects studied in course:

<table>
<thead>
<tr>
<th>SIGNATURE OF STUDENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAME OF STUDENT</td>
</tr>
<tr>
<td>STATUS (FRESHMAN, SOPHOMORE, ETC.)</td>
</tr>
</tbody>
</table>

[Blank space for college official's information]

[Blank space for college official's signature]
REQUEST FOR NAVY GENERAL RATE/RATING EXHIBITS

Officials should use this form only for requesting exhibits that contain the phrase, "Pending evaluation," As general rates and ratings are evaluated, they will be listed in the OEC Newsletter. When you want to obtain the recommendation for a newly-evaluated general rate or rating, identify the exhibit you are requesting by using the complete OEC I.D. number (e.g., NER-BT-001), and the title of the general rate or rating. Include the applicant's name if you would like the name mentioned in the OEC reply. Please check the form for accuracy before forwarding it to OEC. Submit the form to the Office on Educational Credit, American Council on Education, One Dupont Circle, Washington, DC 20036, attention Occupational Assessment Programs.

<table>
<thead>
<tr>
<th>OEC I.D. Number</th>
<th>General Rate or Rating Title</th>
<th>Name of Applicant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Signature of Official

Name of Official

Title

Institution or Organization

Street

City  State  Zip Code

Area Code  Number  Ext.

Please retain file.copies of any recommendations received from the OEC Information Service.
AMERICAN COUNCIL ON EDUCATION

J. W. Peltason, President

The American Council on Education, founded in 1918 and composed of institutions of higher education and national and regional education associations, is the nation's major coordinating body for postsecondary education. Through voluntary and cooperative action, the Council provides comprehensive leadership for improving educational standards, policies, and procedures.

The Office on Educational Credit and Credentials is the Council's division concerned with credit and credentialing policies and practices in postsecondary education. The role of the office and its policy-making and advisory arm, the Commission on Educational Credit and Credentials, is to give attention to educational credit and credentialing policies for postsecondary education; to foster high standards and sound practices for the evaluation and recognition of extra-institutional learning; to foster and operate programs to establish and publish credit equivalencies for extra-institutional learning, and to advise postsecondary education institutions on how these credit equivalencies can be used in placing students in academic programs and in credentialing educational accomplishment; to assist postsecondary education institutions in providing people with due recognition for competency, knowledge, and skills, wherever and however obtained; and to provide people with an alternative means of demonstrating high-school-graduation competencies. OECC makes credit recommendations for testing programs such as the College-Level Examination Program (CLEP) and administers the General Educational Development (GED) Testing Program. OECC also makes credit recommendations for formal courses offered by the military and other noncollegiate sponsors such as business, industry, government agencies, voluntary and professional associations, and labor unions; for Army military occupational specialties (MOS's) and Navy ratings; and for home study courses accredited by the National Home Study Council.