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ABSTRACT

The first edition of the National Audiovisual Center sales catalog (LI 003875) is updated by this supplement. Changes in price and order number as well as deletions from the 1969 edition, are noted in this 1971 version. Purchase and rental information for the sound films and silent filmstrips is provided. The broad subject categories are: agriculture, automotive, aviation, biography, business, education and culture, electricity, electronics, health and medical, human relations, machining, marine, national security, philosophy, safety, physical fitness, science, social science, technical, and woodworking. The following information is provided for each film: title, length, type (black and white or color, sound or silent), order number, price and a brief annotation. Indexes by title and by subject are provided. (SJ)

U. S. Government Films 1971 Supplement

NOTICE

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ALL FILMS WITH THE PRODUCING AGENCY
CODES LISTED BELOW (SEE PAGE 3) HAVE
BEEN AVAILABLE FOR GENERAL RENTAL
BY THE NATIONAL ARCHIVES, NARA, NIA,
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(Apr. 72)

RICHARD NIXON
President of the United States

ROBERT L. KUNZIG
Administrator of General Services

JAMES B. RHOADS
Archivist of the United States

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U.S. Government Films 1971 Supplement

A Catalog of Audiovisual Materials for Rent
and Sale by the National Audiovisual Center

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INTRODUCTION

General Information

This publication is a supplement to U.S. Government Films: A Catalog of Motion Pictures and Filmstrips for Sale by the National Audiovisual Center (1969).

Materials in this supplement may be located by using the subject sections or the title index. If a title is not found in this supplement or in the 1969 catalog, please inquire. It is suggested that you consult this supplement before the 1969 catalog. Changes in price or order number are reflected in this supplement and titles withdrawn from the 1969 catalog are listed in the "Withdrawn Titles" section. All prices in this supplement and other NAC publications are subject to change without notice or obligation.

Special Rights and Clearances

Titles marked "Professionally Interested Groups Only" or "Restricted" have been so designated by the producing agency, and prints will be sold only as indicated. In general, the Government does not have full rights to the audiovisual materials it produces. In most cases, the original contract prohibits commercial use (the reproduction and resale of prints or use at a showing where admission is charged). Prospective purchasers contemplating such use should first ascertain from the National Audiovisual Center (NAC) if it is permissible. Where this Supplement indicates that a title is cleared for television, such clearance is sufficient authorization for public service or educational use on television.

Purchase Information

Order by complete title and order number when given. Official letterhead or purchase orders will be accepted. Prepayment may be required for some materials. Orders for \$10 or less must include check or money order. Include complete shipping and/or billing address; i.e., name, title, department, organization, street address, city, state, and zip code. It may be necessary to telephone regarding and order; therefore, please include your area code and number.

Motion picture sales prices include reels, cans, and shipment by parcel post within the United States and its possessions. Any charges for special shipping requested, such as, cases, airmail, airfreight, etc., will be charged to the purchaser. Most orders are filled within 30 to 45 days; however, some may require a longer period.

For orders outside the United States and its possessions, payment must be in U.S. currency. Letters of credit are not accepted. Specify the means of shipment. Special packing charges and all shipping charges will be charged to the purchaser.

NAC operates a rental sales policy. If you wish to purchase a film after rental, the most recent rental charge paid can be applied towards its purchase. Attach a copy of your rental invoice to your purchase order. Filmstrips, slide sets, television "spots", and audio tapes are not available for rental.

Replacement Footage

When ordering replacement footage for 16mm film, specify the exact number of running feet needed. Indicate the starting point of the segment to be replaced by measuring either from the first or last frame of the picture.

Most replacement footage will be charged as follows:

	Price (per foot)	Minimum Charge (per section)
Black and white, 16mm	\$.10	\$10.00
Color, 16mm	\$.15	\$15.00

Rental Information

Only 16mm prints are available for rent.

Schedule of Rental Periods and Charges:

<u>Period</u>	<u>Charge</u>
3-day	As shown with the title
1 week	1½ times the price shown
2 weeks	Two times the price shown
1 month	Three times the price shown

If you wish to purchase a film after rental, the most recent rental charge paid can be applied towards its purchase. Attach a copy of your rental invoice to your purchase order.

Order by complete title and order number when given. Official letterhead or purchase orders will be accepted. Prepayment is required for orders of less than \$10.

Reserve films 1 month to 1 year in advance. Indicate a preferred date and at least two alternate dates. If alternate dates are not possible, indicate alternate titles. The date you indicate will be the beginning of the rental period. Indicate whether you will accept the film as soon as available or only on certain dates. Include complete shipping and/or billing address; i.e., name, title, department, organization, street address, city, state, and zip code. It may be necessary to telephone regarding an order; therefore, please include your area code and number. Where possible, telephone orders should be limited to three titles. Telephone orders must be confirmed in writing.

If the film or alternate is available on the date requested, you will receive a numbered confirming booking notice. Cite the number on this notice in any inquiries regarding your order. If it is necessary to cancel a scheduled rental, notice must be received at NAC seven days before the shipping date noted on the confirming booking notice, otherwise customer will be responsible for the rental fee and added shipping charges, if any.

Rental prices include shipment to the user by parcel post within the United States. Any charges for special shipping requested, such as, cases, airmail, airfreight, etc., will be charged to the user.

All films must be returned prepaid by the user.

Rental orders from Hawaii, Alaska, and Canada will be sent by air and the user charged accordingly. User is required to return *prepaid* via same method.

Users of films are responsible for the cost of replacing films lost or damaged while in their possession, normal wear excepted. Should a film break, do not repair it; but overlap the ends sufficiently and continue. Note any film breaks or defects on the report form furnished with the film. Return all film rewound on the original reel.

Please fill out the report form furnished with the shipment and return it to NAC with the film. Return all films promptly on or before the return date indicated on the confirming booking notice. Failure to do so will result in overtime charges.

Users are urged to purchase prints of frequently needed films.

PRODUCING AGENCIES

The following abbreviations are used in the film listings to indicate the agency that produced the film.

USA	Department of The Army (Department of Defense)
USA/IA	Department of The Army (re-released by USIA)
USAE	Corps of Engineers (Department of The Army)
USAEC	Atomic Energy Commission.
USAF	Department of The Air Force (Department of Defense)
USAID	Agency for International Development (Department of State)
USARBC	American Revolution Bicentennial Commission
USBEH	Bureau of Education for the Handicapped (Department of Health, Education, and Welfare)
USBND	Bureau of Narcotics and Dangerous Drugs (Department of Justice)
USBOR	Bureau of Outdoor Recreation (Department of the Interior)
USBSFW	Bureau of Sport Fisheries and Wildlife (Department of the Interior)
USCDC	National Communicable Disease Center (Department of Health, Education, and Welfare)
USCG	Coast Guard (Department of Transportation)
USCHS	Community Health Service (Department of Health, Education, and Welfare)
USCIAA	Coordinator of Inter-American Affairs (discontinued agency, re-released by USIA)
USCSC	Civil Service Commission
USDA	Department of Agriculture
USDDH	Division of Dental Health (Department of Health, Education, and Welfare)
USDHUD	Department of Housing and Urban Development
USDOD	Department of Defense
USDS	Department of State
USFAA	Federal Aviation Administration (Department of Transportation)
USFDA	Food and Drug Administration (Department of Health, Education, and Welfare)

USFHWA Federal Highway Administration (Department of Transportation)
 USFSI Foreign Service Institute (Department of State)
 USFSS Federal Supply Service (General Services Administration)
 USGS Geological Survey (Department of the Interior)
 USGSA General Services Administration
 USHS Project Head Start (Department of Health, Education, and Welfare)
 USHSMH Health Services and Mental Health Administration (Department of Health, Education, and Welfare)
 USIA United States Information Agency
 USIAA Institute of Inter-American Affairs (discontinued agency, re-released by USIA)
 USMC United States Marine Corps (Department of Defense)
 USN Department of The Navy (Department of Defense)
 USNASA National Aeronautics and Space Administration
 USNBS National Bureau of Standards (Department of Commerce)
 USNIGM National Institute of General Medical Sciences (Department of Health, Education, and Welfare)
 USNIMH National Institute of Mental Health (Department of Health, Education, and Welfare)
 USNIND National Institute of Neurological Diseases and Stroke (Department of Health, Education, and Welfare)
 USNLE Dwight D. Eisenhower Library (General Services Administration)
 USNLT Harry S. Truman Library (General Services Administration)
 USNMAC National Medical Audiovisual Center (Department of Health, Education, and Welfare)
 USNSF National Science Foundation
 USOCD Office of Civil Defense (Department of The Army)
 USOE Office of Education (Department of Health, Education, and Welfare)
 USOEO Office of Economic Opportunity
 USOIAA Office of Inter-American Affairs (discontinued agency, re-released by USIA)
 USOJD Office of Juvenile Delinquency (Department of Health, Education, and Welfare)
 USOSRD Office of Scientific Research and Development (discontinued agency)
 USOSW Office of Saline Water (Department of the Interior)
 USOWIO Office of War Information, Overseas Branch (discontinued agency, re-released by USIA)
 USPHS Public Health Service (Department of Health, Education, and Welfare)
 USPO Post Office Department
 USSBA Small Business Administration (Department of Commerce)
 USSRS Social and Rehabilitation Service (Department of Health, Education, and Welfare)
 USSSA Social Security Administration (Department of Health, Education, and Welfare)
 USVA Veterans Administration
 USWD War Department (discontinued agency, re-released by USIA)

AGRICULTURE

FARM MAINTENANCE

Care of a Tractor (22 min, 16mm, sd, b & w, 1944, Order No. OE454, sale \$38.50, rental \$7.50, USOE) Shows day-by-day operating care of a tractor and importance of periodic inspections. Describes parts of the tractor, including cooling system, fuel system, and ignition system.

From the *Farm Work Series. Equipment Maintenance, No. 6*

From Small Beginnings (7 min, 16mm, sd, color, 1947, sale \$29.50, rental \$7.50, USIA) Stresses the importance of using the right farm tool for each job. Compares two farmers and the results of their correct and incorrect use of their tools.

Reconditioning a Cultivator (14 min, 16mm, sd, b & w, 1944, Order No. OE453, sale \$25.50, rental \$7.50, USOE) Tells how to replace a worn wheel boxing, adjust yoke, check and adjust shovels, check and lubricate gang expansion and steering assemblies, and lubricate all parts of a cultivator.

From the *Farm Work Series. Equipment Maintenance, No. 5*

Reconditioning a Grain Drill (31 min, 16mm, sd, b & w, 1945, Order No. OE197, sale \$53.50, rental \$10.00, USOE) Shows how to inspect, repair and recondition a typical grain drill.

From the *Farm Work Series. Equipment Maintenance, No. 4*

Reconditioning a Mower, Pt 1, Cutter Bar (13 min, 16mm, sd, b & w, 1943, Order No. OE194, sale \$37.00, rental \$7.50, USOE) Illustrates how to repair the sickle, repair and adjust the guards, mount and align the cutter bar, and check the mower's operation.

From the *Farm Work Series. Equipment Maintenance, No. 1*

Reconditioning a Mower, Pt 2, Drive System (21 min, 16mm, sd, b & w, 1944, Order No. OE195, sale \$37.00, rental \$7.50, USOE) Describes how to clean, inspect, lubricate, and replace the wheel assembly. Tells how to replace a worn wrist pin, disassemble and inspect the gear assembly, check and remove worn flywheel shaft bearings, install new bearings, and lubricate the reconditioned mower.

From the *Farm Work Series. Equipment Maintenance, No. 2*

Reconditioning a Two-bottom Tractor Plow (25 min, 16mm, sd, b & w, 1943, Order No. OE196, sale \$43.75, rental \$10.00, USOE) Shows how to check, repair and maintain a two-bottom tractor plow.

From the *Farm Work Series. Equipment Maintenance, No. 3*

Sharpening and Tempering Farm Tools (17 min, 16mm, sd, b & w, Order No. OE193, sale \$30.50, rental \$7.50, USOE) Depicts how to heat carbon steel tools for forge sharpening. Tells how to sharpen, harden, and temper a plowshare and a cultivator shovel. Shows how to identify tempering colors.

From the *Farm Work Series. Forging, No. 3*

GENERAL

Factory Worker Turns Farmer (24 min, 16mm, sd, b & w, 1949, sale \$61.00, rental \$10.00, USDS) Story of a young U S factory worker

and his wife who, through hard work, wise planning, and neighbors' aid, become the owners of a small chicken farm.

Farmer and I, The (22 min, 16mm, sd, color, 1963, sale \$89.75, rental \$10.00, USIA) Illustrates the long hours and hard work of the average U S farmer by showing the dawn-to-nightfall life of an Ohio farm family. Points out the dependence of farmers upon whims of nature, the market, and consumer desires. Designed to show similarities between European and U S farming experiences.

Miracle in the Desert (19 min, 16mm, sd, b & w, 1964, sale \$40.50, rental \$7.50, USIA) Shows the participation of Mideast technicians in a U S training program concerned with methods for increasing agricultural and economic growth through the study of hydro-electric power plants and irrigation projects along the Colorado River.

LIVESTOCK

Handling Livestock for Market (21 min, 16mm, sd, b & w, 1945, Order No. OE459, sale \$37.00, rental \$7.50, USOE) Examines causes of losses in marketing livestock. Explains how to prevent injury to livestock on the farm--before shipment, when loading, and during shipment.

From the *Farm Work Series. Livestock, No. 3*

Horseshoeing (19 min, 16mm, sd, b & w, 1944, Order No. OE458, sale \$33.75, rental \$7.50, USOE) Shows how to handle a horse during shoeing, to prepare the feet, to select, fit and nail on shoes, to take off shoes and to tighten old shoes on a horse.

From the *Farm Work Series. Livestock, No. 2*

Sheep Shearing (21 min, 16mm, sd, b & w, 1944, Order No. OE199, sale \$43.25, rental \$7.50, USOE) Illustrates how to handle sheep for shearing, shear the sheep step by step, and roll and tie the fleece.

From the *Farm Work Series. Livestock, No. 1*

MEAT

Canning Beef (17 min, 16mm, sd, b & w, 1945, Order No. OE455, sale \$30.50, rental \$7.50, USOE) Tells how to prepare soup stock, preheat beef, pack hot beef in cans, seal the cans, process canned beef, and cool and dry the cans before packing.

From the *Farm Work Series. Food Preservation, No. 2*

Cutting and Boning a Forequarter of Beef (19 min, 16mm, sd, b & w, 1945, Order No. OE456, sale \$33.75, rental \$7.50, USOE) Explains how to chill and quarter beef, how to trim the forequarter, how to cut wing, brisket and chuck, and how to prepare meat for freezing or canning.

From the *Farm Work Series. Meat Cutting, No. 1*

Cutting and Boning a Hindquarter of Beef (17 min, 16mm, sd, b & w, 1945, Order No. OE457, sale \$30.50, rental \$7.50, USOE) Shows how to chill beef, quarter it, trim it, and prepare the meat for freezing or canning.

From the *Farm Work Series. Meat Cutting, No. 2*

AUTOMOTIVE

DRIVER TRAINING

Motor Vehicle Driver. The - Traction Aids And the Winch (29 min, 16mm, sd, b & w, 1957, Order No. TF55-2348, sale \$61.00, USA) Describes methods and expedients to obtain traction in driving across sandy and muddy terrain. Shows use of winch to extricate trucks mired in mud.

Operator and His Job. The (12 min, 16mm, sd, b & w, 1945, Order No. OE491, sale \$22.25, rental \$7.50, USOE) Illustrates responsibilities of the bus operator toward his passengers, including safety and comfort, maintenance of schedules, and courtesy.

From the *Automotive Series. Bus Operation*, No. 1.

Operator and His Passengers. The (18 min, 16mm, sd, b & w, 1945, Order No. OE492, sale \$37.50, rental \$7.50, USOE) Stresses the importance of good customer relations and presents ways of handling problems such as expired transfers, people who miss their stops, and getting passengers to move to the rear of a bus.

From the *Automotive Series. Bus Operation*, No. 2.

Your Driving Habits (15 min, 16mm, sd, b & w, 1945, Order No. OE487, sale \$27.00, rental \$7.50, USOE) Presents elements of good driving, such as--how to start the engine, use the clutch and shift gears, use brakes, drive on curves in mountain country and through snow and mud, and how to park a car.

From the *Automotive Operation and Maintenance Series. Automobile Operation*, No. 2.

MAINTENANCE

Bus Care and Maintenance (13 min, 16mm, sd, b & w, 1945, Order No. OE494, sale \$23.75, rental \$7.50, USOE) Shows importance of daily and weekly maintenance checks. Tells how to start, steer, and stop the bus. Describes how to double clutch and the importance of safe driving habits.

From the *Automotive Series. School Bus Operation*, No. 1.

Clutch and Hand Brake. The (12 min, 16mm, sd, b & w, 1945, Order No. OE482, sale \$22.25, rental \$7.50, USOE) Depicts how to determine the amount of clutch pedal clearance or 'lash,' correct abnormal 'lash,' check clutch for slipping, grabbing, or drag, and inspect and adjust the hand brake.

From the *Automotive Operation and Maintenance Series. Preventive Maintenance*, No. 6.

Cooling System and Fuel System. The (22 min, 16mm, sd, b & w, 1945, Order No. OE464, sale \$38.50, rental \$7.50, USOE) Explains how to check for leaks in the cooling system and check the fan and water pump. Describes mechanical operation of the carburetor, filters and vents, fuel pump, and leakage in the fuel system.

From the *Automotive Operation and Maintenance Series. Preventive Maintenance*, No. 4.

Engine Assembly (19 min, 16mm, sd, b & w, 1945, Order No. OE463, sale \$33.75, rental \$7.50, USOE) Shows how to check the cylinder head and block, intake and exhaust manifolds, under-chassis parts, valve mechanism and adjusting tappets, vents, screw and air filters, oil filter and lines and cylinder depression.

Engine Tests and Tune Up (18 min, 16mm, sd, b & w, 1945, Order No. OE465, sale \$32.00, rental \$7.50, USOE) Shows how to adjust the automatic choke and check and adjust ignition, valve tappets,

and carburetor. Describes how to make vacuum gage tests and test the vacuum brake system.

From the *Automotive Operation and Maintenance Series. Preventive Maintenance*, No. 5.

Hydraulic Brake System. The (12 min, 16mm, sd, b & w, 1945, Order No. OE483, sale \$22.25, rental \$7.50, USOE) Shows how to check brake pedal travel, how to examine the brake lining, how to adjust the brake shoes and how to inspect and adjust the hydraulic brake fluid system.

Injector Rack Setting for GM Diesel Series 71 Engine (4 min, 16mm, sd, b & w, 1956, Order No. TF55-2369, sale \$9.50, USA) Gives procedure to insure adequate fuel for each cylinder, adjusting buffer screw, placing injector in rack and adjusting, and securing locking screws.

Injector Timing for GM Diesel Series 71, Using 70MM, 80MM and 90MM Injectors (5 min, 16mm, sd, b & w, 1956, Order No. TF55-2368, sale \$11.25, USA) Surveys conditions that necessitate injector timing. Gives timing procedures, with particular attention to proper use of timing tool J-1853. Shows adjustment of rocker arm assembly and injector timing.

Inspecting and Adjusting Hydraulic Brakes (13 min, 16mm, sd, b & w, 1945, Order No. OE255, sale \$28.50, rental \$7.50, USOE) Tells how to inspect the hydraulic brake system, bleed the hydraulic brakes, add fluid to the hydraulic system reservoir, and check the brakes.

Introduction to Preventive Maintenance (12 min, 16mm, sd, b & w, 1945, Order No. OE461, sale \$22.25, rental \$7.50, USOE) Tells importance of preventive maintenance in truck operation. Describes typical checks of the clutch pedal, battery, and voltage regulator.

Automotive Operation and Maintenance Series. Preventive Maintenance, No. 1.

Keeping Your Car Fit (12 min, 16mm, sd, b & w, 1945, Order No. OE488, sale \$22.50, rental \$7.50, USOE) Tells why a weekly checkup is necessary, tires should be crisscrossed, cars lubricated regularly, the oil filter element replaced, and the cooling system inspected periodically.

From the *Automotive Operation and Maintenance Series. Automobile Operation*, No. 3.

Operation of the GM Unit Injectors (4 min, 16mm, sd, b & w, 1958, Order No. TF55-2560, sale \$9.50, USA) Shows construction, function and operation of unit, including--functions, location and operations of components, flow of fuel through unit to engine, and importance of proper maintenance.

Periodic Check-up. The (18 min, 16mm, sd, b & w, 1945, Order No. OE489, sale \$32.00, rental \$7.50, USOE) Shows how to tune up the engine, check and adjust the brake system and inspect the steering system, chassis and body.

From the *Automotive Operation and Maintenance Series. Automobile Operation*, No. 4.

Steering, Wheels, Front and Rear Axles (19 min, 16mm, sd, b & w, 1945, Order No. OE484, sale \$33.75, rental \$7.50, USOE) Discusses how to check for play in the steering wheel and the front end assembly, correct wheel runout, make a toe-in test and test springs, axles and over all backlash.

Transmission, Drive Shaft, And Differential (14 min, 16mm, sd, b & w, 1945, Order No. OE485, sale \$25.50, rental \$7.50, USOE) Tells how to check the transmission gear shift mechanism, drive shaft, and differential. Shows how to test their running condition.

From the *Automotive Operation and Maintenance Series. Preventive Maintenance*, No. 9.

Trouble Shooting Your Car (12 min, 16mm, sd, b & w, 1945, Order No. OE490, sale \$22.25, rental \$7.50, USOE) Shows what a driver should do to locate and correct minor car troubles and how to recognize symptoms of impending trouble.

From the *Automotive Operation and Maintenance* Series. Automobile Operation, No. 5

PRINCIPLES OF OPERATION

Know Your Car (15 min, 16mm, sd, b & w, 1945, Order No. OE486, sale \$27.00, rental \$7.50, USOE) Describes construction of a car chassis, and how the engine functions. Depicts operations of the clutch, transmission, rear axle, brakes, and electrical cooling systems. From the *Automotive Operation and Maintenance* Series. Automobile Operation, No. 1

AVIATION

AIR TRAFFIC CONTROL

Aeromedical Research and the Controller's Health (10 min, 16mm, sd, color, 1962, Order No. FA-0137, sale \$109.25, USFAA) Documents testing situations of FAA's medical research program--a program designed to investigate psychological stresses that might affect the performance of air traffic controllers.

At the Other End of the Mike (10 min, 16mm, sd, color, 1961, Order No. FA-0133, sale \$129.50, USFAA) Shows an FAA controller taking a flight familiarization ride in a civil air carrier jet to see what things look like from the pilot's point of view.

Controller-computer Partnership, The (8 min, 16mm, sd, color, 1969, Order No. FA-0906, sale \$31.25, USFAA) Explains the emergence of a semi-automated air traffic control environment designed to apply computer technology to the heart of the aviation system. The purpose of this concept is to permit controllers to spend their time making vital flight decisions, with computers performing the routine clerical chores.

Flight Service Station, The (30 min, 16mm, sd, color, 1969, Order No. FA-0901, sale \$121.25, USFAA) Shows what FAA flight service stations do to make flight safer, and a lot easier.

Introduction to NAS (National Airspace System) En Route Stage A (30 min, 16mm, sd, color, 1969, Order No. FA-0710, sale \$121.25, USFAA) Explains in depth FAA's semi-automatic system for expediting en route air traffic control. Advanced radar systems, 'alpha numerics' and the controller's computerized working environment are featured.

FLIGHT TRAINING

Short Field Procedure L-19 (Bird Dog), Pt 1, Power Approach and Maximum Performance Takeoff (16 min, 16mm, sd, b & w, 1960, Order No. TF46-2847, sale \$34.25, USA) Shows start and control of power approach, effects of wind and temperature, landing technique, and preparation, start and climb in effecting maximum performance takeoff.

Short Field Procedure L-19 (Bird Dog), Pt 2, Barrier Landing and Barrier Takeoff (10 min, 16mm, sd, b & w, 1960, Order No. TF46-2848, sale \$21.00, USA) Shows directional control, power approach and line of descent in barrier landing, maximum performance takeoff and climb, and normal climb in barrier takeoff.

FLYING EXHIBITIONS AND COMPETITION

Sky Divers (29 min, 16mm, sd, b & w, 1962, Order No. TV554, sale \$59.50, USA) Features U S Army parachute teams in two-mile high maneuvers. (Cleared for TV)
From the *Big Picture* Series.

Thunderbolt Geometry (16 min, 16mm, sd, b & w, 1957, Order No. SFPO423, sale \$33.50, USAF) Depicts the annual rocketry meet at Vincent AFB, Arizona. Pictures how this meet, attracting world-wide competitors, generates ideas to improve combat equipment. (Cleared for TV)

GENERAL

Airports in Perspective (15 min, 16mm, sd, color, 1969, Order No. FA-0706, sale \$68.00, USFAA) Documents how some cities have applied workable solutions to problems associated with aviation's dynamic growth, with special emphasis focused on the coordination between airport development and comprehensive urban transportation planning programs.

All It Takes Is Once (25 min, 16mm, sd, color, 1969, Order No. FA-0801, sale \$101.75, USFAA) Depicts the serious flight hazard of mental distraction, and shows how pilots can be distracted in flight by preoccupation with personal problems. Five psychological problems frequently encountered by general aviation pilots are presented.

C-5 Galaxy - World's Largest Aircraft (28 min, 16mm, sd, color, 1969, Order No. SFP1768, sale \$113.50, USAF) Relates story of an aviation milestone, the C-5 Galaxy. Tells many problems involved in its construction and why it was manufactured. Depicts unique features of the aircraft and explains its capabilities and subsystems. Predicts revolutionary impact on military and civilian transportation. Pictures roll out ceremonies and maiden flight from Dobbins AFB, Georgia. (Cleared for TV)

Dulles International Airport - Port of the Future (15 min, 16mm, sd, color, 1965, Order No. FAC-0121, sale \$62.25, USFAA) Shows the first modern airport designed for the jet and supersonic age.

Dulles International Airport - Progress Report (15 min, 16mm, sd, color, 1961, Order No. FA-0124, sale \$114.00, USFAA) Illustrates the step-by-step progress of the construction of Dulles International Airport, including preliminary tests of the mobile lounge.

Fabricating Metal Aircraft (14 min, 16mm, sd, b & w, 1945, Order No. OE288, sale \$29.50, rental \$7.50, USOE) Describes how sheet metal is used in aircraft fabrication, how to cut sheet metal, form and assemble sheet metal parts, and fit major assemblies together.
From the *Aircraft Work Series, Metal Fabrication*

Flying Clubs (20 min, 16mm, sd, color, 1969, Order No. FA-0705, sale \$89.75, USFAA) Describes the advantages in belonging to a flying club. Emphasizes safety factors to be considered in organizing flying clubs, enlisting new members, purchasing and leasing equipment, establishing good relations with a fixed base operator and other important matters affecting safe, efficient, and economical operations.

How Airplanes Fly (18 min, 16mm, sd, color, 1969, Order No. FA-0703, sale \$76.00, USFAA) Shows what makes an airplane get off the ground and stay aloft. Combines animation and live sequences to explain basic aerodynamics for general aviation pilots and high school science students. Describes forces of lift, weight, thrust, and drag in relation to flight.

International Skies (5 min, 16mm, sd, color, 1969, Order No. FA-0904, sale \$23.50, USFAA) Highlights training of foreign nationals both in the US and in their own countries through FAA's technical assistance. Shows that international cooperation is the key to FAA projects around the world as is evidenced by the hundreds of aviation technicians who come from various nations each year to learn from FAA and to exchange ideas.

Now 'Airport' (11 min, 16mm, sd, color, 1967, sale \$44.75, rental \$7.50, USIA) Presents an impressionistic study of Kennedy Airport as a hub of perpetual international motion. Uses a rapidly-paced series of images to portray the charged atmosphere of urgency, excitement, glamor and anxiety. Reveals the complex logistics and machinery that must function continuously to maintain daily operation.

Personnel Loading Capabilities of the C-130 Aircraft (11 min, 16mm, sd, b & w, 1954, Order No. SFP0375, sale \$23.25, USAF) Demonstrates easy conversion of C-130 from a cargo to a personnel carrier. Depicts its capabilities to carry paratroops, personnel and medical station equipment. (Cleared for TV)

This Is FAA (5 min, 16mm, sd, color, 1967, Order No. FA-0708, sale \$21.75, USFAA) Summarizes the missions and varied activities of the Federal Aviation Administration.

HELICOPTER

Theory of Helicopter Flight, The (22 min, 16mm, sd, color, 1969, Order No. MN10650, sale \$52.50, USN) Describes how the helicopter obtains lift, direction stability and control. Shows the use of the helicopter in war and peace.

HISTORY

Anatomy of a Triumph (30 min, 16mm, sd, color, 1970, sale \$153.50, rental \$12.50, USGSA) Documents man's attempts to fly--from the Wright Brothers' Kitty Hawk flight to the Apollo 11 walk on the moon. Includes, in its coverage, pictures or records of six presidents--Taft, Wilson, Eisenhower, Kennedy, Johnson, and Nixon. Contains footage of the Wright Brothers, Lindbergh, Rickenbacker, Goddard, Von Braun, Hitler, astronauts in the Mercury, Gemini, and Apollo programs, as well as Russian film of Sputniks and Yuri Gagarin's epic voyage into space.

Kites to Capsules (5 min, 16mm, sd, color, 1969, Order No. FA-0905, sale \$21.75, USFAA) Contrasts early flying attempts with modern, successful commercial and general aviation.

INSPECTION AND MAINTENANCE

Adjustments After Check Flight (19 min, 16mm, sd, b & w, 1944, Order No. OE261, sale \$39.25, rental \$7.50, USOE) Explains the causes of nose-heaviness, tail-heaviness, yawing, torque tendency, rough propeller and ground looping. Shows how to determine the particular causes of these troubles and make necessary adjustments. From the *Aircraft Work Series*. Aircraft Maintenance

Airplane Mechanic, The (9 min, 16mm, sd, b & w, 1945, Order No. OE278, sale \$19.00, rental \$5.00, USOE) Gives duties, skills, and responsibilities of an airplane mechanic. From the *Aircraft Work Series*. Preventive Maintenance

Attaching and Aligning Wings (20 min, 16mm, sd, b & w, 1944, Order No. OE258, sale \$42.25, rental \$12.50, USOE) Describes how to inspect a damaged wing, remove the damaged wing, attach a new wing, level the airplane and align the wing, and inspect the finished job. From the *Aircraft Work Series*. Aircraft Maintenance

Building a Box Beam Spar (21 min, 16mm, sd, b & w, 1944, Order No. OE297, sale \$43.25, rental \$7.50, USOE) Tells how to assemble parts of the spar in a jig, apply aircraft glue, clamp parts together for a good glue bond, varnish surfaces, and use jigs for accurate drilling. From the *Aircraft Work Series*. Wood Fabrication, No. 2

Building a Wooden Rib (20 min, 16mm, sd, b & w, 1944, Order No. OE296, sale \$40.50, rental \$7.50, USOE) Describes how to assemble, fit, and glue wooden parts in a jig, fit and position the gussets to the framework, and apply aircraft glue and varnish. From the *Aircraft Work Series*. Wood Fabrication, No. 1

Disassembling the Engine (13 min, 16mm, sd, b & w, 1945, Order No. OE268, sale \$23.75, rental \$7.50, USOE) Shows how to remove the oil sump, valve tappet, and gear case cover assemblies. Tells how to separate crankcase, remove crankshaft assembly and camshaft, and disassemble crankshaft and gear case cover assemblies. From the *Aircraft Work Series*. Power Plant Maintenance

Engine Change - Installation (17 min, 16mm, sd, b & w, 1945, Order No. OE273, sale \$35.75, rental \$7.50, USOE) Describes safety precautions to be observed when installing an engine, how to inspect engine mount, controls, and firewall, connect controls and attachments, ground-test the engine, and prepare for check flight. From the *Aircraft Work Series*. Power Plant Maintenance

Engine Change - Removal (17 min, 16mm, sd, b & w, 1945, Order No. OE272, sale \$35.75, rental \$7.50, USOE) Shows safety precautions to be observed when removing an engine, how to disconnect controls and attachments, remove the engine, and inspect the mount, firewall, and controls. From the *Aircraft Work Series*. Power Plant Maintenance

In These Hands (23 min, 16mm, sd, color, 1961, Order No. FA-0123, sale \$157.55, USFAA) Emphasizes the role of electronic maintenance as a necessary function in the mission of the FAA by following two graduates of the FAA Academy to their respective electro-maintenance posts where they reveal the practical application of what they had been taught.

Inspecting and Reconditioning Piston Assembly (22 min, 16mm, sd, b & w, 1945, Order No. OE263, sale \$46.25, rental \$7.50, USOE) Explains how to clean, inspect and recondition the piston assembly. Shows how to measure clearances and how to install new piston rings. From the *Aircraft Work Series*. Power Plant Maintenance

Inspecting and Reconditioning Valve Assembly (25 min, 16mm, sd, b & w, 1945, Order No. OE264, sale \$52.50, rental \$10.00, USOE) Demonstrates how to disassemble the valve mechanism, clean and recondition the parts, measure clearances, reassemble the valve mechanism and reinstall pistons and cylinders. From the *Aircraft Work Series*. Power Plant Maintenance

Inspection of Minor Assemblies (16 min, 16mm, sd, b & w, 1944, Order No. OE146, sale \$28.50, rental \$7.50, USOE) Tells how to inspect a minor assembly in detail, read rivet specifications, and inspect rivets. From the *Aircraft Work Series*. Inspection, No. 2

Inspection of Plumbing and Piping (17 min, 16mm, sd, b & w, 1944, Order No. OE147, sale \$30.50, rental \$7.50, USOE) Tells how to inspect plumbing and piping in detail, verify the materials used, inspect installation of the part in the plane, and identify the different plumbing lines. From the *Aircraft Work Series*. Inspection, No. 3

Inspection of Sheet Metal Parts (20 min, 16mm, sd, b & w, 1944, Order No. OE145, sale \$35.25, rental \$7.50, USOE) Describes how to plan an inspection routine, inspect sheet metal parts in detail, and make visual inspections and spot checks. From the *Aircraft Work Series*. Inspection, No. 1

Installing and Aligning Tail Surfaces (19 min, 16mm, sd, b & w, 1944, Order No. OE259, sale \$39.25, rental \$7.50, USOE) Shows how to inspect and remove damaged tail surfaces, and prepare new parts

for installation. Describes how to install new stabilizers, elevators, and rudder.

From the *Aircraft Work Series. Aircraft Maintenance*

Introduction to Aircraft Engine Instruments (16 min, 16mm, sd, b & w, 1964, Order No. TF46-3406, sale \$34.25, USA) Shows use of aircraft engine instruments by mechanic and aviator to check condition of the engine. (Cleared for TV)

Overhauling Camshaft Assembly and Crankcase Section (19 min, 16mm, sd, b & w, 1945, Order No. OE270, sale \$39.25, rental \$7.50, USOE) Explains how to inspect the camshaft and gear case cover assembly, inspect and recondition the crankcase section, measure crankcase bearings and inspect and recondition the remaining parts.

From the *Aircraft Work Series. Power Plant Maintenance*

Overhauling Crankshaft Assembly (19 min, 16mm, sd, b & w, 1945, Order No. OE269, sale \$39.25, rental \$7.50, USOE) Explains how to clean the parts of a disassembled engine, inspect and recondition crankshaft assembly parts, determine clearances and check for out-of-round and inspect clearances against specifications.

From the *Aircraft Work Series. Power Plant Maintenance*

Overhauling the Carburetor (23 min, 16mm, sd, b & w, 1945, Order No. OE267, sale \$40.50, rental \$10.00, USOE) Shows how to remove the carburetor assembly from the engine, disassemble, clean, inspect and reassemble the carburetor, check the fuel level and reinstall the carburetor assembly.

From the *Aircraft Work Series. Power Plant Maintenance*

Periodic Inspection - Airplane (17 min, 16mm, sd, b & w, 1945, Order No. OE282, sale \$35.75, rental \$7.50, USOE) Explains the importance and meaning of thoroughness in performing a periodic inspection, showing a complete detailed inspection of an aileron as an example.

From the *Aircraft Work Series. Preventive Maintenance*

Periodic Inspection - Engine (23 min, 16mm, sd, b & w, 1945, Order No. OE283, sale \$47.75, rental \$10.00, USOE) Shows how to inspect the general condition of an engine, examine internal parts, check ignition and fuel system, examine the propeller, and prepare an engine for run-up.

From the *Aircraft Work Series. Preventive Maintenance*

Preflight Inspection - Airplane (17 min, 16mm, sd, b & w, 1945, Order No. OE280, sale \$35.75, rental \$7.50, USOE) Shows the necessity for careful and thorough inspection. Tells how to use the 'circle method' to inspect landing gear, wings, fuselage, tail surfaces, cabins, controls, and instruments.

From the *Aircraft Work Series. Preventive Maintenance*

Preflight Inspection - Engine (13 min, 16mm, sd, b & w, 1945, Order No. OE281, sale \$28.50, rental \$7.50, USOE) Tells how to check the general condition of an aircraft engine--inspect the fuel system, ignition system, and engine fittings and attachments. Describes how to conduct an engine run-up and complete the inspection procedure.

From the *Aircraft Work Series. Preventive Maintenance*

Reassembling the Engine (22 min, 16mm, sd, b & w, 1945, Order No. OE271, sale \$46.25, rental \$7.50, USOE) Describes how to reassemble the crankshaft and camshaft assemblies, crankcase section, and gear case cover assembly. Tells how to reinstall the oil sump and completely reassemble the engine.

From the *Aircraft Work Series. Power Plant Maintenance*

Removing and Inspecting Cylinders (18 min, 16mm, sd, b & w, 1945, Order No. OE262, sale \$37.50, rental \$7.50, USOE) Tells how to remove the cylinder assemblies from the engine, disassemble the cylinder assemblies, and clean, inspect, and recondition the cylinders.

From the *Aircraft Work Series. Power Plant Maintenance*

Repairing a Wooden Rib (24 min, 16mm, sd, b & w, 1945, Order No. OE247, sale \$50.75, rental \$10.00, USOE) Tells how to remove gussets and broken rib parts, splice a section of cap strip, cut and finish a scarf joint, make a new truss member, and make and assemble gussets and reinforcement plates.

From the *Aircraft Work Series. Aircraft Maintenance*

Repairing and Relining Mechanical Brakes (21 min, 16mm, sd, b & w, 1945, Order No. OE256, sale \$43.25, rental \$7.50, USOE) Describes how to check brake action, remove wheel and inspect brakes, disassemble wheel and remove brake lining, install new brake lining, replace brake cables, and adjust brakes.

From the *Aircraft Work Series. Aircraft Maintenance*

Servicing a Propeller (18 min, 16mm, sd, b & w, 1945, Order No. OE277, sale \$37.50, rental \$7.50, USOE) Tells how to inspect and remove a propeller, repair damage to the metal edges, check and correct for out-of-track and for out-of-balance, and reinstall the propeller.

From the *Aircraft Work Series. Power Plant Maintenance*

Servicing an Airplane (17 min, 16mm, sd, b & w, 1945, Order No. OE279, sale \$35.75, rental \$7.50, USOE) Shows how to perform the various routine servicing operations on a plane on the ground--cleaning the airplane, refueling, changing the oil, inflating tires and starting the engine. Shows hand signals for guiding the pilot.

Servicing and Timing Magnetos (16 min, 16mm, sd, b & w, 1945, Order No. OE266, sale \$33.25, rental \$7.50, USOE) Tells how to remove magnetos from the engine, install and adjust new points, and reinstall and time the magnetos.

From the *Aircraft Work Series. Power Plant Maintenance*

Servicing Army Aircraft in Extreme Climatic Conditions, Pt 2, Desert Areas (16 min, 16mm, sd, b & w, 1963, Order No. TF46-3293, sale \$34.25, USA) Points out hazards of heat and abrasive sand on aircraft. Shows measures employed in servicing aircraft in desert areas. (Cleared for TV)

Servicing Spark Plugs and Ignition Wiring (22 min, 16mm, sd, b & w, 1945, Order No. OE265, sale \$46.25, rental \$7.50, USOE) Shows how to remove spark plugs and ignition wires, how to clean, inspect, adjust and reinstall the spark plugs, and how to prepare and install ignition wires.

From the *Aircraft Work Series. Power Plant Maintenance*

Splicing a Wooden Spar (21 min, 16mm, sd, b & w, 1945, Order No. OE248, sale \$43.25, rental \$7.50, USOE) Tells how to cut a scarf joint on a spar, finish a scarf face by hand, and glue and assemble a scarf joint. Tells how to make, glue, and assemble reinforcement plates and trim a spar to shape and size.

From the *Aircraft Work Series. Aircraft Maintenance*

Trouble Shooting Problems - Fuel Induction (17 min, 16mm, sd, b & w, Order No. OE276, sale \$35.75, rental \$7.50, USOE) Shows how to trouble shoot the fuel system for failure to develop full power, for rough running at idling speed, and for overheating.

From the *Aircraft Work Series. Power Plant Maintenance*

Trouble Shooting Problems - Ignition (19 min, 16mm, sd, b & w, Order No. OE275, sale \$39.25, rental \$7.50, USOE) Describes how to locate trouble within the ignition system when an engine fails to start, when it runs rough, and when it fails to develop full power.

From the *Aircraft Work Series. Power Plant Maintenance*

Trouble Shooting Problems - Mechanical and Lubrication (10 min, 16mm, sd, b & w, 1945, Order No. OE274, sale \$21.00, rental \$5.00, USOE) Shows how to check symptoms and locate causes of an airplane engine's running 'rough,' of low oil pressure, and of high oil temperature.

From the *Aircraft Work Series. Power Plant Maintenance*

NAVIGATION

From the Ground Up (27 min, 16mm, sd, color, 1969, Order No. FA-0903, sale \$113.50, USFAA) Describes the role of the FAA airway facilities technician. Tells the story of the contributions made in maintaining the electronic and lighting aids that guide pilots safely to their destinations.

Inspectors, The (25 min, 16mm, sd, color, 1969, Order No. FA-0701, sale \$101.75, USFAA) Shows FAA's inspectors aboard their 'flying laboratories' as they check and double-check all navigational aids defining the airways. Points out that the inspectors fly seventeen million miles each year in their around-the-world, around-the-clock inspection of facilities to make the airways safe.

Instrument Landing System, Pt 1, The Localizer (22 min, 16mm, sd, color, 1964, Order No. FA-0305A, sale \$89.75, USFAA) Illustrates the part that systems maintenance sector personnel play during flight inspection of the ILS localizer. Depicts the coordinated efforts of the ground maintenance personnel and the flight inspection crews as the flight inspection is performed. Both aircraft measurements and ground adjustments are shown to illustrate the closely related efforts necessary to complete an efficient flight inspection of the ILS localizer.

Instrument Landing System, Pt 2, - The Glide Slope (14 min, 16mm, sd, color, 1964, Order No. FA-0305B, sale \$58.25, USFAA) Illustrates the part that systems maintenance sector personnel play during flight inspection of the glide slope. Depicts the coordinated efforts of the ground maintenance personnel and the flight inspection crews as the flight inspection is performed. Both aircraft measurements and ground adjustments are shown to illustrate the closely related efforts necessary to complete an efficient flight inspection of the glide slope.

Path from the Sky (16 min, 16mm, sd, color, 1963, Order No. FA-0119, sale \$66.00, USFAA) FAA experiments with the doppler VOR, blind landing experimental unit, range and elevation guidance for approach and landing, visual approach slope indicators, runway slush, and aircraft arresting gear are featured.

Stable and Safe (20 min, 16mm, sd, color, 1969, Order No. FA-0704, sale \$82.00, USFAA) Reveals what frequently happens when pilots inadvertently fly into marginal or IFR weather and lose their visual reference, becoming dangerously disoriented. Describes the different types of stability augmentation systems available for use in general aviation aircraft to assist pilots in maintaining control.

This Is VORTAC (15 min, 16mm, sd, b & w, 1959, Order No. FA-0104, sale \$32.50, USFAA) Explains the combination VOR and TACAN navigational systems.

REPAIR

Assembling in a Jig - Drilling and Riveting (21 min, 16mm, sd, b & w, 1943, Order No. OE137, sale \$37.00, rental \$7.50, USOE) Shows drilling, burring, dimpling, and riveting an aircraft sheet metal assembly.

From the *Aircraft Work Series*. Assembling and Riveting, No. 2

Assembling in a Jig - Fitting and Lining Up (16 min, 16mm, sd, b & w, 1943, Order No. OE136, sale \$28.50, rental \$7.50, USOE) Tells how aircraft sheet metal parts are assembled in a precision assembly jig. Describes how to use an awl for lining up, use skin fasteners, and correct misaligned holes.

From the *Aircraft Work Series*. Assembling and Riveting, No. 1

Blanking Sheet Metal on the Squaring Shear (15 min, 16mm, sd, b & w, 1943, Order No. OE130, sale \$27.00, rental \$7.50, USOE) Describes how to lay out tapered blanks on an aluminum sheet, set up a hand-operated squaring shear, use holddowns and treadle, and check and trim blanks.

From the *Aircraft Work Series*. Blanking Sheet Metal, No. 1

Blanking with the Swing Arm Router (17 min, 16mm, sd, b & w, 1944, Order No. OE132, sale \$30.50, rental \$7.50, USOE) Tells how to operate a swing-arm router, set up the work and template for routing, change router bits, and rout internal and external contours.

From the *Aircraft Work Series*. Blanking Sheet Metal, No. 3

Blanking Sheet Metal with Hand Snips (18 min, 16mm, sd, b & w, 1943, Order No. OE131, sale \$32.00, rental \$7.50, USOE) Shows care and adjustment of sheet metal snips, proper selection of snips, how to remove burrs, and how to cut a straight line, inside circle and outside circle.

From the *Aircraft Work Series*. Blanking Sheet Metal, No. 2

Blanking with Rotary and High Speed Shears (16 min, 16mm, sd, b & w, 1945, Order No. OE292, sale \$28.50, rental \$7.50, USOE) Shows how to set up rotary and high-speed shears, make test cuts, and operate shears for production runs.

From the *Aircraft Work Series*. Blanking Sheet Metal, No. 4

Blind Riveting (15 min, 16mm, sd, b & w, 1945, Order No. OE294, sale \$27.00, rental \$7.50, USOE) Demonstrates necessity for blind riveting, how to rivet parts that are completely blind, and use special tools and rivets in blind riveting jobs.

From the *Aircraft Work Series*. Assembling and Riveting, No. 8

Connecting and Adjusting Controls (19 min, 16mm, sd, b & w, 1944, Order No. OE260, sale \$39.25, rental \$7.50, USOE) Describes how to inspect and adjust the elevator and rudder control cables, line up and safety a turn buckle, remove and replace a damaged aileron control cable, and adjust it for proper aileron travel.

From the *Aircraft Work Series*. Aircraft Maintenance

Dimpling and Countersinking (21 min, 16mm, sd, b & w, 1943, Order No. OE139, sale \$37.00, rental \$7.50, USOE) Shows how dimpling and countersinking prepare metal for flush riveting. Shows how to operate a dimpling machine and how to countersink work for flush rivets.

From the *Aircraft Work Series*. Assembling and Riveting, No. 4

Driving and Bucking Rivets (18 min, 16mm, sd, b & w, 1943, Order No. OE140, sale \$32.00, rental \$7.50, USOE) Describes how to set up and adjust a rivet gun, drive and buck rivets, and how a riveter and buckler work together as a team.

From the *Aircraft Work Series*. Assembling and Riveting, No. 5

Filing Template Metal (15 min, 16mm, sd, b & w, 1943, Order No. OE129, sale \$27.00, rental \$7.50, USOE) Indicates how to file a square edge and remove burrs, rotate the wrist for filing inside curves, file inside rectangle, and remove fillets from corners.

From the *Aircraft Work Series*. Templates, No. 5

Finish Forming by Hand (16 min, 16mm, sd, b & w, 1943, Order No. OE135, sale \$28.50, rental \$7.50, USOE) Shows successive stages of forming with a flat fibre strip, shrinking large wrinkles with a forming tool, marking excess metal with a surface gage, and checking finished work with a contour template.

From the *Aircraft Work Series*. Forming Sheet Metal, No. 4

Forming on a Hand Operated Brake (17 min, 16mm, sd, b & w, 1944, Order No. OE134, sale \$30.50, rental \$7.50, USOE) Shows how to set up the brake for bend angle and bend radius, operate the brake, and check test pieces and finished work.

From the *Aircraft Work Series*. Forming Sheet Metal, No. 3

Forming on Rotary Machines (17 min, 16mm, sd, b & w, 1945, Order No. OE290, sale \$30.50, rental \$7.50, USOE) Describes how to form sheet-metal parts on the sliproll machine and on the beading-roll machine.

From the *Aircraft Work Series*. Forming Sheet Metal, No. 2

Forming on the Stretching Machine (17 min, 16mm, sd, b & w, 1945, Order No. OE251, sale \$35.75, rental \$7.50, USOE) Shows how to form a skin panel on the stretch press, set up the machine, make necessary adjustments for a production run, and handle the run.

From the *Aircraft Work Series*. Forming Steel Metal, No. 6

Forming with a Drop Hammer (17 min, 16mm, sd, b & w, 1945, Order No. OE291, sale \$30.50, rental \$7.50, USOE) Gives the purpose of drop hammer forming. Tells how to operate the pneumatic hammer, set up the punch and die, handle a production run on a single-hit job, and use draw rings on a deep-draw job.

From the *Aircraft Work Series*. Forming Sheet Metal No. 5

Forming with Rubber on the Hydraulic Press (11 min, 16mm, sd, b & w, 1944, Order No. OE133, sale \$19.25, rental \$5.00, USOE) Shows how sheet metal parts are formed with rubber on a hydraulic press, how to set up the work and how to operate the press.

From the *Aircraft Work Series*. Forming Sheet Metal

Installing Landing Gear (19 min, 16mm, sd, b & w, 1944, Order No. OE257, sale \$40.50, rental \$7.50, USOE) Tells how to remove damaged landing gear. Shows how to replace old bolts, nuts, and cotters. Describes how to install an aircraft bolt properly, assemble and install a new landing gear, and check alignment and track of wheels.

From the *Aircraft Work Series*. Aircraft Maintenance

Laying Out and Forming Plywood (21 min, 16mm, sd, b & w, 1944, Order No. OE285, sale \$43.25, rental \$7.50, USOE) Tells how to lay out plywood using blueprints and templates, form plywood in a press, reinforce plywood, and apply glue and varnish.

From the *Aircraft Work Series*. Wood Fabrication, No. 3

Making a Five Tuck Splice (26 min, 16mm, sd, b & w, 1944, Order No. OE143, sale \$45.50, rental \$10.00, USOE) Tells how to prepare the cable for splicing, and make the tucks. Includes a description of how to taper, set, serve, and shellac the splice.

From the *Aircraft Work Series*. Control Cables, No. 2

Making Sheet Metal Repairs (19 min, 16mm, sd, b & w, 1945, Order No. OE252, sale \$40.50, rental \$7.50, USOE) Describes how to remove damaged area around hole and lay out trim lines. Tells how to prepare hole to receive patch, 'Bump' out plug and doubler, mark and drill plug and doubler, and rivet completed patch to part.

From the *Aircraft Work Series*. Aircraft Maintenance

Patching Fabric (22 min, 16mm, sd, b & w, 1945, Order No. OE250, sale \$44.50, rental \$7.50, USOE) Tells how to cut out and prepare the damaged area. Describes how to prepare, dope, rib-stitch, and finish a patch.

From the *Aircraft Work Series*. Aircraft Maintenance

Patching Plywood (26 min, 16mm, sd, b & w, 1945, Order No. OE249, sale \$53.50, rental \$10.00, USOE) Shows how to splay the edge of a hole, prepare and apply a splayed patch, make a flush or plug-type patch, make a frame of doubler and apply a flush patch.

From the *Aircraft Work Series*. Power Plant Maintenance

Removing Defective Rivets (15 min, 16mm, sd, b & w, 1943, Order No. OE141, sale \$27.00, rental \$7.50, USOE) Illustrates how an inspector marks defective rivets, how to drill the heads of flush-type and brazier head rivets, and how to remove the shank and head after drilling.

From the *Aircraft Work Series*. Assembling and Rivecing, No. 6

Repairing Aircraft Tires (20 min, 16mm, sd, b & w, 1945, Order No. OF254, sale \$42.25, rental \$7.50, USOE) Tells how to inspect an airplane tire, remove the tire, remove the tube from the tire, vulcanize the tube, repair a cut in the tire, and reinstall the wheel.

From the *Aircraft Work Series*. Aircraft Maintenance

Repairing Structural Tubing (20 min, 16mm, sd, b & w, 1945, Order No. OE253, sale \$42.25, rental \$7.50, USOE) Shows how to straighten a bent tube, round out a tube, remove a damaged section of tube, prepare a replacement section, prepare internal reinforcing sleeves and assemble and weld the replacement section and sleeves.

From the *Aircraft Work Series*. Aircraft Maintenance

Squeeze Riveting - Stationary and Portable Riveters (15 min, 16mm, sd, b & w, 1945, Order No. OE293, sale \$27.00, rental \$7.50, USOE) Shows how to select correct rivet sets for stationary and portable squeezers, set up and use the stationary squeezer and the portable squeezer.

From the *Aircraft Work Series*. Assembling and Riveting, No. 7

Swaging Cable Terminals (12 min, 16mm, sd, b & w, 1944, Order No. OE298, sale \$22.50, rental \$7.50, USOE) Tells how to measure and mark the cable accurately, set up the swaging machine, and check the terminals after swaging. Shows how to remove, clean, and reassemble parts of the machine.

From the *Aircraft Work Series*. Control Cables, No. 3

Tube Bending by Hand (15 min, 16mm, sd, b & w, 1943, Order No. OE142, sale \$27.00, rental \$7.50, USOE) Shows why tubes must be bent for installation in airplanes. Tells how to set up the tube bending machine for the job, and how the various parts of the machine function.

From the *Aircraft Work Series*.

Using a Portable Spray Gun (26 min, 16mm, sd, b & w, 1945, Order No. OE289, sale \$45.50, rental \$10.00, USOE) Shows operation and use of the suction type spray gun, including--pressure tank operation, cleaning portable spray guns, adjusting paint, adjusting spray and air controls, and controlling the stroke.

From the *Aircraft Work Series*. Finishing

Wing Assembly - The Bow Tip (24 min, 16mm, sd, b & w, 1944, Order No. OE284, sale \$49.75, rental \$10.00, USOE) Shows how to fit the bow tip strip to the leading edge strip, make the spar tip joint, install the ribs, shape the bow tip, apply and glue the bow tip skins, and varnish the surface

From the *Aircraft Work Series*. Wood Fabrication, No. 6

Wing Assembly - The Inboard Panel (19 min, 16mm, sd, b & w, 1944, Order No. OE300, sale \$39.25, rental \$7.50, USOE) Describes how to install subassemblies in a jig, apply and glue the skins, apply and remove pressure strips, finish the outside surface, and inspect the completed assembly.

From the *Aircraft Work Series*. Wood Fabrication, No. 5

Wing Assembly - The Nose Section (20 min, 16mm, sd, b & w, 1944, Order No. OE299, sale \$42.25, rental \$7.50, USOE) Tells how to position the main spar in the jig. Describes installation of the webbed ribs, junction rib, regular ribs, and leading edge strip. Shows how to apply and glue the skins, and finish the surface of the nose section.

From the *Aircraft Work Series*. Wood Fabrication, No. 4

RESEARCH AND DEVELOPMENT

But How Does It Fly (25 min, 16mm, sd, color, 1969, Order No. SFPI652, sale \$101.75, USAF) Documents test engineering activities

at Air Force Systems Command Flight Test Center. Explains operations of various branches which plan, conduct and evaluate all phases of testing. Shows in-house capabilities such as flight simulator. Illustrates use of telemetry and closed circuit television. Analyzes aircraft performance, capabilities and limitations. Demonstrates how to detect malfunctions and to test equipment against design limitations. Shows how flight characteristics are determined by monitoring every phase of flight. Covers technical reports, guide manuals, and operational handbooks. (Limited to professionally interested groups only)

Flight Without Wings (14 min, 16mm, sd, color, 1969, Order No. HQ175, sale \$75.00, USNASA) Traces the development of wingless aero-space craft which can be launched by rockets for space shuttle use in returning men to predetermined landing sites on earth. Describes in non-technical terms the aerodynamic characteristics of these lifting bodies and potential uses of them.

Space Age Railroad (18 min, 16mm, sd, color, 1969, Order No. SFP1650, sale \$74.25, USAF) Tells the story of high speed test track, a research and development facility at Holloman AFB, New Mexico. Highlights advancements since the first track run in 1950. Illustrates monorail runs and explains principal braking systems. Introduces unique track features and explains scope and versatility. Shows mass of electronic equipment used to provide data. Depicts instrumentation setup involving use of optical systems. Explains physical layout of areas. (Cleared for TV)

Today for Tomorrow (15 min, 16mm, sd, color, 1969, Order No. FA-0907, sale \$62.25, USFAA) Shows FAA's Research and Development Center in Atlantic City, N J (called The National Aviation facilities Experimental Center or NAFEC). There are between 150 and 200 projects going on at one time, at the center, exploring such facets of civil flight as air traffic control, new aircraft, airport runways and lighting systems, wake turbulence, structural stress, and all weather landing capability.

BIOGRAPHY

ART

Charley Russell's Friends (10 min, 16mm, sd, color, 1959, sale \$48.75, rental \$7.50, USIA) Depicts Charley Russell's paintings of the West as he knew and loved it which reveal the American cowboy artist's traits and show people who were his friends. Includes the dedication, attended by Montana's two senators, of a statue of Russell which has been placed in Statuary Hall in Washington, D C.

One Man - Lyn McLain (10 min, 16mm, sd, color, 1969, sale \$41.00, rental \$7.50, USIA) Depicts the work of Lyn McLain as the founder and director of the District of Columbia Youth Symphony, one of the most extraordinary musical groups in the U S. It is composed of children, ages eight to 17, from all walks of life who voluntarily use their Saturdays for the serious study of music.

Photographer, The (30 min, 16mm, sd, b & w, 1948, sale \$62.50, rental \$10.00, USDS) Personality, philosophy, techniques and artistry of Edward Weston are shown through scenes of the artist at home, on location and at work with his students.

GENERAL

American Newsboy (10 min, 16mm, sd, b & w, 1952, sale \$21.00, rental \$5.00, USDS) Portrays an American boy taking over a newspaper route and learning the fundamentals of conducting a business. Emphasizes family co-operation.

Faces of America (21 min, 16mm, sd, color, 1965, sale \$44.50, rental \$10.00, USIA) Depicts in a kaleidoscopic manner, colorful images of America which are representative of all facets of society in the United States. (No narration)

Journey into Medicine (39 min, 16mm, sd, b & w, 1949, sale \$80.25, rental \$12.50, USIA) Follows a young doctor through medical school, graduation, internship, study in pediatrics and work in the field of public health.

On Parade (18 min, 16mm, sd, color, 1969, Order No. TF35-3979, sale \$74.25, USA) Describes a young WAC's reflections on her growth as a result of her military training and group living experiences since joining the Women's Army Corps.

One Man - Jose Gonzales (10 min, 16mm, sd, color, 1968, sale \$41.00, rental \$7.50, USIA) Tells the story of Jose Gonzales, a 12-year-old Puerto Rican newspaper delivery boy in Chicago, Illinois. Depicts early difficulties on the job, quick progress in learning his trade and the happy occasion when he arrives at home with his first pay check.

One Man - Reverend Leon Sullivan (10 min, 16mm, sd, color, 1969, sale \$41.00, rental \$7.50, USIA) Tells the story of Reverend Leon Sullivan, who has inspired thousands of school dropouts and potential criminals to become useful citizens. Describes the Opportunities Industrialization Center (OIC), which he organized to train men and women out of the ghetto.

One Man - Walter Spiel (10 min, 16mm, sd, color, 1968, sale \$41.00, rental \$7.50, USIA) Tells the story of Walter Spiel, a 62-year-old news vendor of American and foreign papers and magazines at a Los Angeles street corner stand. Depicts his customers choosing their purchases and gives biographical information about 'Willy,' who emigrated from Canada.

Shipbuilders of Essex (22 min, 16mm, sd, b & w, 1949, sale \$46.25, rental \$7.50, USDS) Portrayal of New England craftsmen and their skill in the building of wooden ships in Essex, Massachusetts, illustrated through the construction of a 70-foot trawler, the St Rosalie.

Student Engineer (10 min, 16mm, sd, b & w, 1963, sale \$21.00, rental \$5.00, USIA) Tells of a young engineering major at a mid-western university who attends academic programs in the mornings and a co-operative industry training program in the afternoons.

Student Teacher (9 min, 16mm, sd, b & w, 1964, sale \$19.00, rental \$5.00, USIA) Tells of a young education major at the University of Wisconsin as he nears graduation. Visualizes his growth in self-confidence as a teacher. Offers an insight into the way a student must perform as a teacher while still a student.

Tender Power, The (19 min, 16mm, sd, color, 1969, sale \$78.00, rental \$10.00, USIA) Portrays the lives of three typical American women as they participate in the world of work, and the resultant benefits to themselves, their families, and the nation's economy.

Voice in the City, A (28 min, 16mm, sd, b & w, 1968, sale \$58.50, rental \$10.00, USIA) Describes the routine daily activities of Audrey Brand, a union representative, member of District Council 37 in New York, who looks after the interests of a number of local municipal unions. Through her varied encounters, illustrates the important role of the labor union in a democratic society and the many satisfactions it offers those who work within it.

LITERATURE

Impression of John Steinbeck, An - Writer (22 min, 16mm, sd, color, 1969, sale \$89.75, rental \$10.00, USIA) Provides series of vignettes on the life of John Steinbeck.

Robert Frost (28 min, 16mm, sd, color, 1960, sale \$113.50, rental \$12.50, USIA) Shows Robert Frost reading his poems at his New England home.

MILITARY

Destroyermen (15 min, 16mm, sd, color, 1970, Order No. MN10680, sale \$60.00, USN) Provides a visual impression of day-to-day life aboard a navy destroyer at sea.

First in Command - The Navy Skipper (29 min, 16mm, sd, color, 1968, Order No. MN10414, sale \$117.50, USN) Shows authority and responsibilities of the commanding officer of a navy ship. The captain's role on the bridge, in the wardroom, on the mess deck, at captain's mast and at general quarters on a DLG, is described. Narrated by Richard Boone.

John J Pershing (21 min, 16mm, sd, b & w, Order No. AF5M0579, sale \$44.50, USDOD) Describes the life of General Pershing (1860-1948) such as his leadership qualities in battle and his influence in molding the American Army during World War I.

MacArthur Story, The (20 min, 16mm, sd, b & w, 1964, Order No. AF1F0132, sale \$42.50, USDOD) Highlights the life of General Douglas MacArthur. Cites his leadership in three wars and reviews his peacetime contributions.

Medal of Honor - Capt Jay Zeamer (5 min, 16mm, sd, b & w, 1967, Order No. SFP1544E, sale \$11.25, USAF) Cites Captain Zeamer, bomber pilot, for heroism during World War II reconnaissance mission. (Cleared for TV)

Medal of Honor - One for One (5 min, 16mm, sd, b & w, 1967, Order No. SFP1544P, sale \$11.25, USAF) Pays tribute to Maj Bernard Fisher, first Vietnam hero to receive the Medal of Honor, for saving a fellow pilot's life in the battle of Ashau. (Cleared for TV)

Medal of Honor - Try, Try Again (5 min, 16mm, sd, b & w, 1967, Order No. SFP1544I, sale \$11.25, USAF) Pays tribute to Lt Edward S Michael who, though wounded, managed to bring his damaged aircraft back from air battle during World War II. (Cleared for TV)

Medal of Honor - Twenty-five Years Later (7 min, 16mm, sd, b & w, 1968, Order No. SFP1544B, sale \$15.00, USAF) Maj General Perpont M Hamilton, in a personal interview, recalls his mission in the invasion of North Africa in 1943. (Cleared for TV)

Men of Maintenance - Southeast Asia (15 min, 16mm, sd, color, 1968, Order No. SFP1571, sale \$62.25, USAF) Highlights aircraft maintenance operations in SouthEast Asia and presents an insight into the life of the maintenance man there. Depicts specialized personnel using sophisticated electronic equipment to check out complex aircraft systems. Shows how the men work against time and under adverse weather and combat conditions. Interviews maintenance specialists who explain their jobs and attitudes toward their work. Also takes a look at some of the living conditions. (Cleared for TV)

Men with Green Faces (29 min, 16mm, sd, color, 1969, Order No. MN10585, sale \$115.50, USN) Shows functions and a cross section of life of the Navy's frogmen commandos, the Seals. From the excitement of parachute jump training, to the quiet of jungle patrols.

Pershing (30 min, 16mm, sd, b & w, 1963, Order No. TV588, sale \$59.50, USA) Highlights Pershing's career prior to the turn of the century through World War II and including his retirement days. (Cleared for TV)

From the *Big Picture* Series. Famous Generals

Pershing Story, The (29 min, 16mm, sd, b & w, 1959, Order No. TV444, sale \$59.50, USA) Relates the life of General John J Pershing.

From the *Big Picture* Series.

Place in History, A (28 min, 16mm, sd, color, 1970, sale \$109.25, rental \$12.50, USNLE) Depicts General Eisenhower's entire life and emphasizes his role in World War II as well as his White House years. Narrated by Lorne Greene.

There Is a Way (Rev Ed) (58 min, 16mm, sd, color, 1967, Order No. SFP1756, sale \$234.00, USAF) Portrays life of F 105 pilots who daily fight the air war in Southeast Asia. Pictures their hazardous missions against determined enemy fire in the North, while pilots and crews tell about the job they are doing and why. (Cleared for TV)

POLITICS

In Search of Lincoln (20 min, 16mm, sd, color, 1959, sale \$98.50, rental \$10.00, USIA) Covers Lincoln's life before his election to the presidency by showing the sites of his birth, farm home and early jobs. Includes his election to Congress and the Lincoln-Douglas debates. Portrays the American concept of Lincoln's greatness, unique place in history, and leadership in behalf of democratic and human values.

Tribute to President Herbert Clark Hoover, A, 1874-1964 (11 min, 16mm, sd, b & w, 1964, Order No. AFMR0633, sale \$23.25, USDOD) Highlights President Hoover's ability as an organizer and his humanitarian work as a food administrator in World Wars I and II. Cites his contribution to government reorganization as Secretary of Commerce and as an elder statesman and advisor to presidents.

SCIENCE

One Man - Dr De Bakey (11 min, 16mm, sd, color, 1968, sale \$44.75, rental \$7.50, USIA) Tells the story of Dr Michael de Bakey, world-renowned heart specialist and innovator of surgical techniques and materials for building body organs. Depicts typical daily activities of Dr de Bakey, who is the son of Lebanese immigrants. Also shows him with his young aides experimenting with new equipment and materials.

One Man - Dr Robert Simpson (10 min, 16mm, sd, color, 1969, sale \$41.00, rental \$7.50, USIA) Features Dr Robert Simpson and his work as Director of the National Hurricane Watch Center at the University of Miami, where hurricanes originating in the Southeast Atlantic are tracked and warnings are issued.

SPORTS

Mamo of Colby (15 min, 16mm, sd, color, 1967, sale \$62.25, rental \$10.00, USIA) Describes the life of an Ethiopian student, Sebsibe Mamo, at Colby College in Maine. Concentrates on his performance as a star athlete on Colby's track team. Includes other sequences which show Mamo as an integrated part of college life.

One Man - Hayes Jones (10 min, 16mm, sd, color, 1968, sale \$41.00, rental \$7.50, USIA) Tells the story of Hayes Jones, an American Negro Olympic star, who administers 900 parks and supervises 12,000 employees in his job as New York City's Commissioner of Recreation. Depicts his activities on a typical working day.

BUSINESS

CONTRACTS

Let the Buyer Prepare (34 min, 16mm, sd, color, 1969, sale \$137.25, USFSS) Procurement by negotiation is the theme of this film dealing principally with six major steps in the negotiation process. Four basic negotiations objectives are identified and some important do's and don'ts relating to negotiation are set forth.

One Bite at the Apple (38 min, 16mm, sd, color, 1970, sale \$152.75, USFSS) Stresses familiarization with procurement procedures relative to contracting by formal advertising. A discussion between a disappointed bidder and a procurement agent sets the scene for procedural review including the role of the Federal Supply Service.

Signal Corps Prepares, The (16 min, 16mm, sd, color, 1960, Order No. MF11-8979, sale \$66.00, USA) Describes how objectives of Signal Corps production base program are being fulfilled through production engineering contracts. Shows benefits for military, technical, and national progress. (Cleared for TV)

DATA PROCESSING

Computer Fluid Dynamics (24 min, 16mm, sd, color, sale \$138.00, USAEC) Demonstrates use of giant electric computers for solving fluid flow problems previously impractical to undertake.

Computer Systems in Personnel Accounting (23 min, 16mm, sd, color, 1966, Order No. MF11-5203, sale \$94.00, USA) Tells the story of acquisition and application of ADPS in the 4th U S Army in the area of personnel accounting. (Cleared for TV)

ECONOMY AND CONSERVATION

Inside Story, The (15 min, 16mm, sd, color, sale \$62.25, rental \$10.00, USSBA) Illustrates steps which can be taken to limit or prevent pilferage by plant employees. Reveals that an old, trusted employee can be guilty.

It Can Happen to You (15 min, 16mm, sd, color, sale \$62.25, rental \$10.00, USSBA) Outlines the experience of Jack Norton, a hardware store owner, in cooperating with a police lieutenant to get the facts about a pilferage problem. The police lieutenant points out situations and procedures which encourage pilferage and shows how to remedy these matters.

Mess Management - Conservation Control in the Management of a Mess (14 min, 16mm, sd, b & w, 1956, Order No. TF10-2243, sale \$30.75, USA) Illustrates functions of mess management in relation to prevention of waste. Shows personnel training and attitude, duties of mess officer, food advisor, and unit commander. (Cleared for TV)

Profit Policy and Techniques - Weighted Guide Lines - Introduction (27 min, 16mm, sd, b & w, 1964, Order No. FR0486, sale \$56.50, USAF) Relates cost reduction program to DOD's policy on contractor profits. Explains techniques of using weighted guide lines to establish, document and negotiate profit objectives. Discusses rewards and penalties for contractor performance. (Cleared for TV)

Profit Policy and Techniques - Weighted Guide Lines - Procedures, Pt 1 (27 min, 16mm, sd, b & w, 1964, Order No. FR0492, sale \$56.50, USAF) Outlines mechanics and explains factors on which weighted guide lines are based. Presents fixed price contract to illustrate contractor's input to performance and selected factors. (Cleared for TV)

Profit Policy and Techniques - Weighted Guide Lines - Procedures, Pt 2 (50 min, 16mm, sd, b & w, 1964, Order No. FR0500, sale \$105.00, USAF) Diagrams techniques for establishing and evaluating weighted guide lines. Considers costs, risks, contract types, incentives, penalties, performance and selected factors. (Cleared for TV)

Value Engineering (24 min, 16mm, sd, b & w, 1965, Order No. FR0573, sale \$50.75, USAF) Evaluates impact of value engineering program on cost reduction and improved performance. Discusses need for incentives, savings, subcontractor participation and need for contractor support. (Cleared for TV)

GENERAL

Advertising Question, The (14 min, 16mm, sd, color, sale \$54.50, rental \$10.00, USSBA) Designed to correct some of the misconceptions and change some of the attitudes which many small businessmen display toward advertising. The values and techniques of advertising are discussed and some business examples are shown to emphasize pertinent points.

Burglary Is Your Business (15 min, 16mm, sd, color, 1969, sale \$62.25, rental \$10.00, USSBA) Through an investigation by a police department detective following a burglary at a home furnishings/appliance store, points out security measures which retailers should take to prevent burglaries.

Calendar Game, The (14 min, 16mm, sd, color, 1967, sale \$56.50, rental \$10.00, USSBA) Emphasizes the need for planning and budgeting by small retail and service businesses.

City Letter Carrier (15 min, 16mm, sd, color, sale \$62.25, USPO) Depicts a Day in the life of a 'mail man'--his routine duties and dedication to the neighborhood he serves.

Follow Up, The (13 min, 16mm, sd, color, 1967, sale \$54.50, rental \$10.00, USSBA) Illustrates the value of following up on advertisements and promotions, such as--radio commercials, soliciting customers' reactions to store layouts and point-of-sale ads, and getting business associates' opinions of ads used or planned to bring out many of the factors to consider in advertising/sales promotion follow-up.

How to Run a Mail Room (15 min, 16mm, sd, color, 1970, sale \$62.00, USPO) Highlights some of the areas where mistakes can prove costly to the mail user, such as--the importance of proper facing and bundling of mail, the advantage of experienced mail clerks over part-time and temporary employees, how mail can be misapplied and overcharged, and the advantage of early processing.

It's Your Move (13 min, 16mm, sd, color, sale \$54.50, rental \$10.00, USSBA) Designed to inform small business owners faced with relocation problems because of urban renewal about help available through SBA and urban renewal offices and to motivate them to take positive steps if they wish to relocate.

Junior Achievement (11 min, 16mm, sd, color, 1949, sale \$44.75, rental \$7.50, USA/IA) Explains how local businessmen in the United States sponsor projects enabling high-school students to start and operate small businesses, from which they can earn money and learn about business methods.

Mail Distribution Clerk, The (15 min, 16mm, sd, color, sale \$62.25, USPO) Tells what the duties of a mail distribution clerk are and demonstrates the 'inside work' at a post office.

Mail Handler, The (12 min, 16mm, sd, color, sale \$50.50, USPO) Demonstrates the responsibilities of the mail handler at a large post office.

Mainstay of the Malls, The (13 min, 16mm, sd, color, sale \$54.00, USPO) Shows the need for building and equipment maintenance and the work of highly skilled maintenance employees.

Men Who Fish (30 min, 16mm, sd, b & w, 1950, sale \$62.50, rental \$1000, USIA) Shows how a fishing cooperative association in Japan established since World War II is gradually improving living conditions of the fishermen of Japan.

They're Out to Get You (13 min, 16mm, sd, color, sale \$52.50, rental \$1000, USSBA) Shows how shoplifters operate and, indirectly, points out preventive measures small businessmen can take to limit shoplifting in their stores.

Variations On a Theme (13 min, 16mm, sd, color, sale \$54.50, rental \$1000, USSBA) Calls attention to important steps in planning a sales event.

You and Your Customers (14 min, 16mm, sd, color, 1970, sale \$56.50, rental \$1000, USSBA) Dramatizes situations which small retailers may encounter involving customer relations. Stimulates audience involvement by providing opportunity to stop film for discussion following some detailed situations, then presents possible solutions to the problems presented on the screen.

MANAGEMENT

Language of Business, The (15 min, 16mm, sd, color, sale \$58.25, rental \$1000, USSBA) Dramatizes the need for being able to analyze facts and problem areas in a business so that decisions can be made. Shows the value of records in business management.

Man or Woman for the Job, The (14 min, 16mm, sd, color, sale \$58.25, rental \$1000, USSBA) Points out the importance of effective employee recruitment and selection procedures through the experiences of a small print shop owner who learned the hard way that such procedures are necessary. Brief vignettes of other types of business reflect various sources of employees.

My Friend, The Enemy (35 min, 16mm, sd, b & w, 1965, sale \$72.50, rental \$12.50, USIA) Uses an actual case in which labor and management settle a dispute by the bargaining process, to illustrate how mutual co-operation benefits both labor and industry. Gives intimate details of the meetings which reveal principles and tactics of bargaining.

Origin and History of Program Budgeting, The (25 min, 16mm, sd, b & w, sale \$52.50, USCSC) Traces the history of planning - programming - budgeting (PPB) and describes the fundamentals of the system. A film lecture by Dr David Novick, of the RAND Corporation. (Kinescope)

Reserve Management in Action (21 min, 16mm, sd, color, 1959, Order No. SFPO599, sale \$86.00, USAF) Shows how management planning is effective in keeping the air reserve forces combat ready. (Cleared for TV)

Statistical Sampling - A Management Tool (26 min, 16mm, sd, color, 1968, sale \$105.75, USFSS) Endeavors to bring about an understanding, acceptance, and use of statistical sampling as a management tool. Planned for initial use with GSA warehouse management and supervisory personnel, it is beneficial to any personnel with similar responsibilities.

Technical Data Management and Documentation (42 min, 16mm, sd, b & w, 1965, Order No. FR0629, sale \$86.25, USAF) Presents panel discussion on status of DOD management program. Major areas of discussion include program weaknesses, problems, and improvement possibilities.

Three Times Three (14 min, 16mm, sd, color, sale \$56.50, rental \$1000, USSBA) Illustrates nine important keys to small business success--personal ability of the owner, use of outside assistance and information, understanding of insurance, regulations, taxes, business opportunity, knowing sources of capital, maintenance and use of business records, understanding financial factors, effective organization and planning, and using good management techniques.

Union Steward and You, The (15 min, 16mm, sd, color, 1969, Order No. MN10686, sale \$62.25, USN) Shows the relationship between a first line supervisor and a union steward in solving problems.

MATERIALS HANDLING

Outloading of Diesel Locomotives (13 min, 16mm, sd, b & w, 1952, Order No. FB55-0248, sale \$28.50, USA) Points up problems and proper techniques in loading diesel locomotives aboard a cargo ship. Describes correct rigging, lifting, aligning, lowering into wooden cradles, lashing, bracing and waterproofing the 120 ton locomotive. Shows the necessity of teamwork and stevedoring knowledge to operations. (Cleared for TV)

Popularity Storage - Planning the Storage Layout (20 min, 16mm, sd, color, 1958, Order No. FN08552B, sale \$82.00, USN) Shows storage space, layout control of space, material positioning, and design of a stock location system.

Popularity Storage - Principles of Stock Positioning (18 min, 16mm, sd, color, 1958, Order No. FN08552A, sale \$74.25, USN) Shows basic principles of popularity storage--demand, similarity, size and characteristics, and the advantage of stock positioning at all levels of the supply system.

What, Where and When - The Story of the U S Army Supply and Maintenance Command (27 min, 16mm, sd, color, 1966, Order No. MF38-5155, sale \$109.50, USA) Describes dual mission of the U S Army Supply and Maintenance Command--to deliver supplies to the soldier, and to perform fifth echelon maintenance of Army equipment. (Cleared for TV)

QUALITY CONTROL

Evaluation of Plant Facilities and Capabilities (18 min, 16mm, sd, color, 1969, sale \$74.25, USFSS) Examines pre-award plant surveys conducted by quality control representatives. Intended to be used for orientation and/or refresher for quality control representatives and contracting officers.

Maintaining Quality Standards (10 min, 16mm, sd, b & w, 1944, Order No. OE164, sale \$17.50, rental \$5.00, USOE) Tells how a supervisor learns that quality as well as quantity production is necessary and how such quality standards can be achieved and maintained.

From the *Problems in Supervision Series*.

Quality Programs and Inspection System Requirements - Quality Program... (29 min, 16mm, sd, b & w, 1964, Order No. FR0440, sale \$60.50, USAF) Full title - Quality Programs and Inspection System Requirements - Quality Program MIL-Q9858A, Inspection System MIL-145208A - Shows military and civilian panel review Department of Defense specifications for contractor's quality program and inspection system. The group explores use and advantages of these specifications. (Cleared for TV)

Quartermaster Quality Control for Subsistence Items (18 min, 16mm, sd, b & w, 1959, Order No. MF10-9023, sale \$38.50, USA) Gives analysis and benefits of new quality control system as applied to cake baking. Gives inspection requirements and necessary records before, during and after baking operation.

Quartermaster Quality Control for Clothing and Textile Items (17 min, 16mm, sd, b & w, 1959, Order No. MF10-9021, sale \$36.75, USA) Reveals analysis and benefits of new quality control system as it applies to clothing manufacture. Shows inspection requirements and necessary records before, during and after production.

Quartermaster Quality Control for General Supplies and Parts (17 min, 16mm, sd, b & w, 1959, Order No. MF10-9022, sale \$36.75, USA) Presents analysis and benefits of new quality control system as it applies to tableware manufacture. Gives inspection requirements and necessary records before, during and after production.

Sauce for the Gander (22 min, 16mm, sd, color, 1968, Order No. MN10544, sale \$89.75, USN) Examines attitudes of a man who expects perfection from others. Shows importance of a right-the-first-time attitude, which also applies to him.

Zero Defects (32 min, 16mm, sd, b & w, 1965, Order No. FR0574, sale \$66.50, USAF) Explains Zero Defects Program and relates its benefits to national defense, industrial cooperation, improved production and worker motivation.

SUPPLY

Air Force Logistics in Southeast Asia (21 min, 16mm, sd, color, 1968, Order No. SFP1586, sale \$84.00, USAF) Shows how Air Force Logistics Command employs modern technology, automation, and airlift in supplying material and services to Southeast Asia. Illustrates magnitude of providing everything needed to build and maintain Air Force installations, feed and house personnel, and keep parts, equipment and supplies moving through a 10,000 mile pipeline. (Cleared for TV)

Ammunition Supply Point Operation (25 min, 16mm, sd, b & w, 1954, Order No. TF09-1859, sale \$52.50, USA) Depicts the operation of a typical ammunition supply point in receipt and issue of ammunition, emphasizing the need for accurate records, proper storage, and safety measures.

Army Transportation - Key to Mobility (29 min, 16mm, sd, color, 1967, Order No. TV719, sale \$115.50, USA) Depicts the role of the Army Transportation Corps in delivering men and materials to the battlefield. (Cleared for TV)

From the *Big Picture Series*.

Army Triangle, The (29 min, 16mm, sd, color, 1967, Order No. TV728, sale \$115.50, USA) Documents how food, mail, and pay are processed and delivered to the soldier. (Cleared for TV)

From the *Big Picture Series*.

Beans, Bullets and Black Oil (29 min, 16mm, sd, color, 1968, Order No. MN10490, sale \$117.50, USN) Shows replenishment-at-sea in the Gulf of Tonkin, Navy's system of supplying ships at sea, and vertical replenishment by helicopter.

Military Pipeline System (23 min, 16mm, sd, b & w, 1948, Order No. CHRE-007, sale \$48.75, USA) Describes achievements of American troops who built a pipeline under extremely hazardous conditions and difficult terrain.

Operational Readiness (19 min, 16mm, sd, color, 1969, Order No. SFP1677, sale \$78.00, USAF) Explains logistics by following the logistic results of a battle in Vietnam, and showing how aircraft engines are ordered and repaired. Describes various activities of Air Force Logistics Command and its methods of supplying U S forces. Shows its plans for the future when computers will order fully mechanized warehouses to supply specific items to specific locations. (Cleared for TV)

TECHNIQUES AND SYSTEMS

Nothing for Granted (29 min, 16mm, sd, color, 1970, Order No. MN10825, sale \$115.50, USN) Describes the Navy operational test and evaluation force and procedures for testing and evaluating systems and equipment programmed for future Navy use.

Prepare with Care (15 min, 16mm, sd, color, 1969, sale \$62.25, USPO) Provides an informational and motivational look at modern mail handling machines used in many U S Post Offices. Explains the importance of preparing U S Government mail properly for maximum service.

Reliability - Economic Considerations in Reliability (20 min, 16mm, sd, color, 1965, Order No. MN08770J, sale \$82.00, USN) Shows application of break-even analysis for use in selection from competing systems and for economic decisions when changes to a system are being considered.

Reliability - Reliability Monitoring (20 min, 16mm, sd, color, 1964, Order No. MN08770H, sale \$82.00, USN) Shows how a program is monitored from concept through use phase, and shows how data are used.

Reliability - The Application of Reliability Data (21 min, 16mm, sd, color, 1964, Order No. MN08770I, sale \$86.00, USN) Shows application of feed-back to the solution of problems arising during the life-cycle of a weapon system.

Step in the Right Direction, A (13 min, 16mm, sd, color, 1970, sale \$54.50, rental \$10.00, USSBA) Dramatizes importance of merchandise control in retail stores and illustrates some control procedures and techniques.

Work Measurement Works (23 min, 16mm, sd, b & w, 1969, Order No. MF61-5349, sale \$48.75, USA) Illustrates work measurement in four areas--improving work methods, scheduling and controlling work, determining productivity, and forecasting resource requirements.

TRANSPORTATION

Airlift from America (24 min, 16mm, sd, color, 1966, Order No SFP1293, sale \$98.00, USAF) Depicts the wide scope and global range of the Military Airlift Command (MAC) mission. Travelogue footage from numerous foreign countries highlights MAC achievements in aeromedical evacuation, mercy mission to disaster areas, and assault and strategic airlifts. (Cleared for TV)

Don't Get Stranded (18 min, 16mm, sd, b & w, 1967, Order No AF1F0167, sale \$38.50, USDOD) Tells service members how to arrange for travel by commercial aircraft at reduced rates while on leave. Discusses use of DOD Form 1580, benefits of non-stop flights, baggage problems, and services afforded military travelers.

Electronic Route Guidance System (14 min, 16mm, sd, color, 1969, sale \$58.25, USFHWA) Traces the Electronic Route Guidance System Project from its conception through the present state of the

art. The ERGS system places route guidance inside the vehicle where the driver may easily see where he should make his turn and what sort of maneuver he should make. By dialing the route code into the transceiver in the vehicle, and driving on an instrumented highway, the driver is guided to his destination without the inconvenience of searching for route markers in the confusion of present day highway signing.

Transportation, U S A (22 min, 16mm, sd, color, 1966, sale \$89.75, rental \$10.00, USIA) Visualizes without commentary the air, water, rail and highway transportation systems in the United States. Indicates that modern technology has been able to integrate the systems to expedite movement of people and materials throughout U S states and regions.

Troop Movement by Rail (26 min, 16mm, sd, b & w, 1965, sale \$54.75, USA/IA) Describes the principles and procedures in preparing for and carrying out a unit movement by rail, with focus on duties of company and post personnel, and action during training, alert, and moving phases.

EDUCATION & CULTURE

From the *Report From America* Series.

ART

Art of the Real, The (20 min, 16mm, sd, color, 1968, sale \$82.00, rental \$10.00, USIA) Features the 'Art of the Real' exhibit at the Museum of Modern Art at New York City. Suggests that Americans have an alive concern for their culture, a culture which, though controversial, is real and moving, not stagnant. Indicates that the new graphic plastic art is not just a fad, but rather ahead of its time.

Art Scene, U S A (17 min, 16mm, sd, color, 1966, sale \$70.25, rental \$10.00, USIA) A look at today's U S painters, sculptors and dancers, such as Wyeth, Warhol, Johns, Lichtenstein, Kienholz, Motherwell, Calder, Pollock, Shahn, Levine, Rivers, Marisol, Martha Graham Dancers, the Once Group (a happening), Hawkins, Cunningham and the Alwin Nikolais Dancers. Uses minimum narration and is designed to reflect the vitality, experimentation and creativity in tune with a society that encourages art.

Arts of Japan (30 min, 16mm, sd, b & w, 1954, sale \$62.50, rental \$10.00, USIA) Features a young artist and ex-soldier in Japan learning about the Ise Shrine, Noh Drama, Kyoto Katsura Palace and Gardens, Kabuki, the Tea Ceremony, and modern art in woodblock, clay and oil. He visits with several leading Japanese artists and philosophers.

Asian Artists in Crystal (17 min, 16mm, sd, b & w, 1956, sale \$36.75, rental \$7.50, USIA) Shows the Steuben Glass Company 1956 exhibit which includes 36 pieces of American crystal designed and engraved from original drawings by leading contemporary Asian and Middle Eastern artists. Describes folklore, religious traditions and local customs depicted in the engravings. Filmed at the National Gallery of Art in Washington, D C and the Metropolitan Museum of Art in New York City.

Museum of Art (27 min, 16mm, sd, color, 1958, sale \$109.50, rental \$12.50, USIA) Describes the role of art museums in communities throughout the United States and shows examples of art on display.

Performing Arts, The (30 min, 16mm, sd, b & w, 1965, sale \$62.50, rental \$10.00, USIA) Examines the role of the performing artist in American society. Participating in the program are Mary Costa of the Metropolitan Opera, violin prodigy James Oliver Bushwell, the Bob Brookmeyer-Clark Terry Quintet, the Christianson Brothers, and impresarios of the San Francisco Ballet Company.

From the *Report From America* Series.

Printmakers (21 min, 16mm, sd, color, 1961, sale \$94.00, rental \$10.00, USIA) Features American graphic artists Worden Day, Seong Moy, Karl Schrag, Gabor Peterdi and Mauricio Lesansky. Explores in depth their works, demonstrating the creative ability and technical skills of each in his individual approach to the art of printmaking.

Sculptor, The (10 min, 16mm, sd, b & w, 1963, sale \$21.00, rental \$5.00, USIA) Deals with a young man associated with Massachusetts Institute of Technology and involved with the development of casting techniques as a by-product of rocket research. Explores the link between art and industry as well as the personal life and environment of this young sculptor.

Visual Arts, The (30 min, 16mm, sd, b & w, 1965, sale \$62.50, rental \$10.00, USIA) Explores in detail the works of painter Edward Hooper, architect Minoru Yamasaki, sculptor Richard Hunt and photographer Ansel Adams.

EDUCATIONAL INSTITUTIONS

Air University, The (28 min, 16mm, sd, color, 1968, Order No. SFP1680, sale \$113.50, USAF) Depicts the Air University mission. Outlines the curricula, objectives and methods of instruction in the Air War College, Air Command and Staff College, Officers' Squadron School, Institute of Technology, and Extension Courses. Explains how the University's wide field of teaching is designed to advance Officers and Airmen in their careers. Depicts courses in engineering, electronics, nuclear physics, logistics, advance weapon systems, missilery, language, leadership. Also explains the AFROTC two and four-year programs. (Cleared for TV)

Beyond Silence (17 min, 16mm, sd, b & w, 1960, sale \$36.75, rental \$7.50, USIA) The story of Gallaudet College, a university for the deaf in Washington, D C, and of the work of Gallaudet Graduate School, a world famous research center for the deaf. Gallaudet is the only school of its kind in the world and is open to students of all nations.

Bridge to Tomorrow (19 min, 16mm, sd, b & w, 1964, sale \$40.50, rental \$7.50, USIA) Emphasizes American scientific education's goal of turning out well-rounded men and women. Specifically shows this philosophy in the integration of humanities into the science curricula at Massachusetts Institute of Technology, famous for scientific work and its international student body.

Brooklyn Technical High School (10 min, 16mm, sd, b & w, 1950, sale \$81.00, rental \$5.00, USIA) Features Brooklyn Technical High School in New York, which is equipped to provide instruction in engineering, construction and manufacturing procedures.

Centers of Learning (30 min, 16mm, sd, color, 1961, sale \$121.25, rental \$12.50, USIA) Shows such representative types of U S institutions of higher learning as University of Pittsburgh, Colorado School of Mines, Goucher College for Women, California Institute of Technology, Wittenberg University and Harvard. Stresses freedom of choice for students and freedom of universities to teach without restriction.

College of African Wildlife (15 min, 16mm, sd, b & w, 1968, sale \$32.50, rental \$7.50, USIA) Depicts the Mweka College of African Wildlife Management in Tanzania which receives assistance from both private and governmental organizations of the U S and Europe. This college trains students from African countries that are undertaking broad new programs to protect their wildlife and promote tourism.

Company of Scholars, A (30 min, 16mm, sd, b & w, 1966, sale \$62.50, rental \$10.00, USIA) Tells the story of the Smithsonian Institute founded in 1846 in Washington, D C, by James Smithson's bequest 'for the increase and diffusion of knowledge among men.' Includes a tour of the institute and a report of what it does today. From the *Report From America* Series.

Freedom to Learn (28 min, 16mm, sd, b & w, 1949, sale \$58.50, rental \$10.00, USIA) Pictures facilities and activities of the State University of Iowa, such as student newspaper, radio station and hospital. Shows how, in both scholastic and social activities, the environment helps individual development in accordance with democratic processes.

Greatest Treasure, The (20 min, 16mm, sd, b & w, 1957, sale \$43.25, rental \$7.50, USIA) Describes the important activities, services and collections of the Library of Congress.

Hail, Alma Mater (6 min, 16mm, sd, b & w, 1951, Order No. MF45-7805, sale \$13.25, USA) Shows scenes of the U S Military Academy campus while the West Point Choir and Glee Club sing 'Hail, Alma Mater' and 'Army Blue.' (Cleared for TV)

Helping Teachers to Understand Children, Pt 1 (21 min, 16mm, sd, b & w, 1953, sale \$44.50, rental \$7.50, USIA) Presents the story of the work of the Institute for Child Study at the University of Maryland. Shows how a school faculty may set up a local child study program and receive guidance and aid from the Institute.

Helping Teachers to Understand Children, Pt 2 (25 min, 16mm, sd, b & w, 1953, sale \$52.50, rental \$10.00, USIA) Describes a summer workshop at the Institute for Child Study at the University of Maryland. Shows activities that aid in making the group more aware of the forces that affect a child's personality, his approach to other children and his school studies.

Medical School and the Community, The - How Are They Related (29 min, 16mm, sd, b & w, Order No. T-1879, sale \$60.50, USNMAC) Reviews and elaborates upon two basic viewpoints that the commitment is necessary to the resolution of medical care problems which face the community, and that good medical care depends upon the further development of excellence at the medical school level. (Kinoscope)

From the *Concepts and Controversies in Modern Medicine* Series.

Museum of Science and Industry, The (18 min, 16mm, sd, b & w, 1950, sale \$38.50, rental \$7.50, USIA) An excursion through the Museum of Science and Industry in Chicago shows the world of today against the background of yesterday--the automobile, streamliner, and stratoliner of today and the horseless carriage and wood-burning train of early years.

Museums for School Children (21 min, 16mm, sd, b & w, 1951, sale \$44.50, rental \$7.50, USIA) Pictures the facilities and explains the educational value of children's museums in the United States.

Return to Holyoke (15 min, 16mm, sd, color, 1969, Order No. MN10831, sale \$62.25, USN) Depicts the visit of the Director of Women Marines to Mt Holyoke to commemorate the establishment of Women's Reserve Officer Training School on campus in 1943.

School for Strings (10 min, 16mm, sd, b & w, 1963, sale \$21.00, rental \$5.00, USIA) Reflects the aura of dedication, excellence, and even genius, at Meadowmount School of Music, one of the foremost institutions in the world for the study of stringed instruments.

School of the Sky - Parachuting at the U S Air Force Academy (12 min, 16mm, sd, color, 1969, Order No. SFP1737, sale \$50.50, USAF) Demonstrates skills of cadet volunteers in the U S Air Force Academy parachute program. Shows basic parachute training program for all the services and continuation of training by volunteers in advanced programs of the Academy. Pictures cadets making first airborne jump and competing in tournaments. (Cleared for TV)

Small Town Library (10 min, 16mm, sd, b & w, 1951, sale \$21.00, rental \$5.00, USIA) Explains the benefits, and shows some operations of a small town library, particularly the weekly delivery of books from the library of a big city nearby.

Tanglewood, Music School and Music Festival (21 min, 16mm, sd, b & w, 1951, sale \$44.50, rental \$7.50, USIA) Serge Koussevitsky conducts the Boston Symphony Orchestra in the 'Overture' from 'Egmont' by Beethoven at the summer music workshop in Massachusetts.

Three Cheers on a June Day (14 min, 16mm, sd, color, 1968, Order No. MN10670, sale \$58.25, USN) Shows June week and graduation at the Naval Academy at Annapolis, Maryland.

West Point - The Making of a Leader (30 min, 16mm, sd, b & w, 1966, sale \$62.50, rental \$10.00, USIA) Explains that in addition to military training, a West Point cadet receives a well-rounded education.

From the *Report From America* Series.

Winterthur - Adventure in the Past (19 min, 16mm, sd, color, 1960, sale \$78.00, rental \$10.00, USIA) Depicts the largest and richest assemblage of American decorative arts, especially furniture, ever brought together in an authentic setting. Recalls rich US traditions of craftsmanship in architecture, ceramics, textiles, paintings, prints, metalwork and furniture. Indicates foreign influences, especially from England and the Orient, in the 200-year period represented.

World in a Schoolroom (17 min, 16mm, sd, b & w, 1951, sale \$36.75, rental \$7.50, USIA) Portrays citizens demonstrating their skills in the classroom so that students may see the application of the principles and techniques taught in school.

GENERAL

Adult Education (22 min, 16mm, sd, b & w, 1951, sale \$46.25, rental \$7.50, USIA) Shows how evening adult education classes offer personal satisfaction and opportunity for professional or economic advancement.

Anything Is Possible - with Training (14 min, 16mm, sd, color, 1970, sale \$56.50, rental \$10.00, USSBA) Provides examples of successful employee training in a telephone answering service, a boat yard, and a newspaper office. Shows that employee training is essential to business success.

Architecture, U S A (13 min, 16mm, sd, color, 1965, sale \$54.50, rental \$10.00, USIA) Using an original music score and no narration, presents an impressionistic view of U S architecture which reflects America's cultural life. Includes educational and religious institutions, cultural centers, and the skyscraper, America's space-saving structure with service centers and pretentious living areas.

Atoms for Peace, Pt 6, Training Men for the Atomic Age (20 min, 16mm, sd, b & w, 1957, sale \$42.50, rental \$7.50, USIA) Documents training programs in nuclear physics for foreign scientists sponsored by the U S Atomic Energy Commission. Covers activities at University of North Carolina, University of Pennsylvania, Oak Ridge, Tennessee, La Grange, Illinois and Shippingport, Pennsylvania.

Books for Everyone (20 min, 16mm, sd, b & w, 1958, sale \$42.50, rental \$7.50, USIA) Traces the evolution of pocket-books in Germany caused by the desire of the people for classical reading material.

Educational Opportunities in the U S Marine Corps (14 min, 16mm, sd, color, 1965, Order No. MH10140, sale \$58.25, USMC) Shows how educational opportunities are related to military duties and future employment and ways they benefit the individual Marine in the Corps and in civilian life.

Harvest of Learning (31 min, 16mm, sd, b & w, 1961, sale \$64.25, rental \$10.00, USIA) Explains the role of 68 land-grant colleges in U S education. Includes their history and development which is based upon equality of educational opportunity, a variety of courses of study, and important extension services and adult education.

Paper Blizzard (Librarians' Version) (30 min, 16mm, sd, color, 1970, sale \$115.50, rental \$17.50, USOE) Introduces the array of information sources within the federal government and identifies the use of these resources with professionalism. Briefly scans the spectrum of services available from the typical information source as well as the

range of subject matters to be expected. Indicates the principal switching centers and entry points for one who is unfamiliar with information resources. The second half surveys the range of services that may be expected from a representative information source from the viewpoint of the librarian. Ranging from acquisition to abstracting and repackaging, this film should be helpful incorporated in library science curricula.

LANGUAGES

Foreign Language Learning in Our Schools - a Report on Results Achieved by Starting In... (27 min, 16mm, sd, color, 1966, Order No. OE499, sale \$91.25, rental \$12.50, USOE) Full title - Foreign Language Learning in our Schools - a Report on Results Achieved by Starting in the Elementary School - presents a pictorial survey of activities during classes in French, German, Spanish, and Russian in elementary and secondary schools, and one college. Suitable for showings to P T A meetings, school administrators, teachers, and youth groups.

Foreign Language Teacher Training - Audio-Lingual Techniques for Teaching... (60 min, 16mm, sd, b & w, 1962, Order No. OE497, sale \$103.75, rental \$15.00, USOE) Full title - Foreign Language Teacher Training - Audio-lingual Techniques for Teaching Foreign Languages - depicts the transition of techniques, the first day of language class, and technique examples to be viewed for class discussion. Available in versions for teaching French, German, Spanish, and Russian. Specify desired version when ordering.

Growth of a Language - American English (29 min, 16mm, sd, b & w, 1960, sale \$60.50, rental \$10.00, USIA) Reports the historical development of American English against a background of factors involved in language change and growth. Illustrates varieties of English spoken in many countries. Depicts each language as a 'melting pot' which borrows its vocabulary from other languages around the world.

In the National Interest (60 min, 16mm, sd, color, Order No. OE498, sale \$242.00, rental \$17.00, USOE) Covers the work of State Department education supervisors of foreign languages, the National Defense Educational Act foreign language institutes, instruction in heretofore 'neglected languages,' and research underway dealing with foreign languages.

Teaching English Conversation (30 min, 16mm, sd, b & w, 1962, sale \$62.50, rental \$10.00, USIA) Presents the hearing and speaking method of teaching English as a foreign language.

Teaching English Grammar (19 min, 16mm, sd, b & w, 1959, sale \$40.50, rental \$7.50, USIA) Shows how the drill method is used in teaching English grammar through structural pattern practice. Gives examples of both simple and complex patterns.

Teaching English Pronunciation (20 min, 16mm, sd, color, 1963, sale \$40.50, rental \$10.00, USIA) Shows how to demonstrate correct pronunciation, how to direct the student in practicing correct pronunciation, and how to help him recognize and overcome errors.

Teaching English Speech (17 min, 16mm, sd, b & w, 1964, sale \$36.75, rental \$7.50, USIA) Emphasizes the aural-oral approach to the teaching of English. Designed for teacher-training.

MASS MEDIA

Freedom of the Press (17 min, 16mm, sd, b & w, 1950, sale \$36.75, rental \$7.50, USIA) Presents a portrayal of Peter Zenger's trial, showing the responsibilities of a free press and the results of 'free' as opposed to 'controlled' press. Shows various newspaper processes.

Independent Commercial Radio Station (18 min, 16mm, sd, b & w, 1952, sale \$38.50, rental \$7.50, USIA) Shows the day-by-day operation of a local commercial radio station in the United States.

Small Town Editor (18 min, 16mm, sd, b & w, 1952, sale \$38.50, rental \$7.50, USIA) Tells the story of a small town newspaper editor and his place in the community. Contrasts his operation with that of a big city newspaper, emphasizes friendly relationships with townspeople, and points up principles of a free press.

MATHEMATICS

Introduction to Vectors - Coplanar Concurrent Forces (22 min, 16mm, sd, b & w, 1945, Order No. OE361, sale \$38.50, rental \$7.50, USOE) Explains the meaning of scalar and vector quantities and describes how to add them. Shows the methods of composition and resolution and their use in solving engineering problems. From the *Engineering Series. Fundamentals of Mechanics*

Mathematics - Utending Search for Excellence (28 min, 16mm, sd, b & w, 1963, Order No. OE501, sale \$48.75, rental \$10.00, USOE) Demonstrates a variety of new media being used to improve mathematics instruction in elementary and secondary schools.

Mathematics Through Discovery (25 min, 16mm, sd, b & w, 1963, Order No. OE500, sale \$43.75, rental \$10.00, USOE) Shows how skilled instructors use a 'learner discovery' method in teaching new concepts in mathematics at elementary and secondary school levels.

Operations with Whole Numbers (22 min, 16mm, sd, color, 1970, sale \$94.00, rental \$10.00, USOE) Explores procedures for interrelating addition and subtraction. Shows materials, methods and strategies which are particularly effective. Attention is focused on the use of multiple techniques for improving instruction in multiplication. Emphasizes algorithms which have been found to be particularly effective. Stresses the use of materials. Prepared by the Center for Cooperative Research, the Pennsylvania State University, under a grant from the Office of Education, Department of Health, Education, and Welfare.

From the *Project On Interpreting Mathematics Education Research Series*.

Powers of Ten - Decimal Conversion and Multiplication (20 min, 16mm, sd, b & w, Order No. TVK30-116A, sale \$42.50, USAF) Develops the need for powers of ten, shows the procedures for converting large and small numbers to powers of ten and explains the rules for multiplying powers of ten. (Kinescope)

Powers of Ten - Division and Prefixes (25 min, 16mm, sd, b & w, Order No. TVK30-116B, sale \$52.50, USAF) The rules of division are stated and example problems are solved. Introduces prefixes and shows how to convert from prefix to power of ten, then from power of ten to standard prefix. (Kinescope)

Practicing Mathematical Skills (18 min, 16mm, sd, color, sale \$74.00, rental \$10.00, USOE) Shows how the effectiveness of drill and practice is highly dependent on when it is used and how it is presented. Illustrates suitable materials, use of a computer terminal, techniques for promoting interest, and ways of identifying appropriate items for drill. Prepared by the center for cooperative

research with schools, the Pennsylvania State University, under a grant from the Office of Education, Department of Health, Education, and Welfare.

From the *Project On Interpreting Mathematics Education Research Series*.

Project On Interpreting Mathematics Education Research--a Series (16mm, sd, color, 1970, sale \$380.00, USOE) Prepared by the Center for Cooperative Research with Schools. The Pennsylvania State University, under a grant from the Office of Education, Department of Health, Education, and Welfare.

USING A MATHEMATICS LABORATORY APPROACH	15 min
USING DIAGNOSIS IN A MATHEMATICS CLASSROOM	15 min
OPERATIONS WITH WHOLE NUMBERS	22 min
practicing mathematical skills	18 min
SOLVING VERBAL PROBLEMS IN MATHEMATICS	21 min

Simple Equations (40 min, 16mm, sd, b & w, Order No. TVK30-117A, sale \$82.25, USAF) Explains axioms and algebraic rules needed to solve simple linear equations. (Kinescope)

Simple Equations - Fractions (20 min, 16mm, sd, b & w, Order No. TVK30-117B, sale \$42.50, USAF) Applies axioms and algebraic rules to rearrangement of several electronic formulas. (Kinescope)

Slide Rule, The - Proportion, Percentage, Squares, and Square Roots (21 min, 16mm, sd, b & w, 1944, Order No. OE354, sale \$37.00, rental \$7.50, USOE) Demonstrates how to use the 'C' and 'D' scales of the slide rule to calculate proportions and percentages, how to read the 'A' and 'B' scales, and how to calculate squares and square roots.

From the *Engineering Series*.

Slide Rule, The - 'C' and 'D' Scales (24 min, 16mm, sd, b & w, 1943, Order No. OE179, sale \$42.25, rental \$10.00, USOE) Explains the 'C' and 'D' scales and markings on the slide rule. Shows how to use these scales for multiplication, division and combined operations.

Solving Verbal Problems in Mathematics (21 min, 16mm, sd, color, sale \$85.75, rental \$10.00, USOE) Shows effective ways to promote verbal problem solving skills. Examples of teachers and pupils in action, using various problem solving techniques, are interspersed with examples of actual work which results from the use of multiple approaches. Ranges across content areas, without stressing any particular content. Prepared by the Center for Cooperative Research with Schools, the Pennsylvania State University, under a grant from the Office of Education, Department of Health, Education, and Welfare.

From the *Project On Interpreting Mathematics Education Research Series*.

Sound Perception Method, The (39 min, 16mm, sd, color, 1970, sale \$170.50, rental \$15.00, USBEH) Surveys the methods of instruction used at the Institute Voor Doven, Sint Michielsgestel, The Netherlands from home visit through integrated secondary school.

From the *International Education Of the Hearing Impaired Child Series*.

Using a Mathematics Laboratory Approach (15 min, 16mm, sd, color, sale \$64.25, rental \$10.00, USOE) Acquaints teachers with the laboratory approach by describing what labs are, why they are used, how they are organized, and the kinds of activities which are valuable in the mathematics laboratory. Illustrative activities at several grade levels are shown. Prepared by the Center for Cooperative

Research with Schools, the Pennsylvania State University, under a grant from the Office of Education, Department of Health, Education, and Welfare.

From the *Project On Interpreting Mathematics Education Research Series*.

Using Diagnosis in a Mathematics Classroom (15 min, 16mm, sd, color, 1970, sale \$62.00, rental \$10.00, USOE) Points out that mathematics instruction can be improved by effectively diagnosing pupil needs. Shows the use of interview inventories and a diagnostic instrument. Explores ways of grouping pupils on the basis of such evaluation and of providing instruction to meet specific needs. Prepared by the Center for Cooperative Research with Schools, the Pennsylvania State University, under a grant from the Office of Education, Department of Health, Education, and Welfare.

From the *Project on Interpreting Mathematics Education Research Series*.

MUSIC

Cradle Is Rocking, The (12 min, 16mm, sd, b & w, 1968, sale \$26.75, rental \$7.50, USIA) Traces the origins of jazz and depicts its continuing vitality in New Orleans, the city of its birth. Shows that jazz is still an expression of the daily joys and tribulations within the milieu from which it sprang many years ago. Narrated by a jazz musician.

Creative Leisure (20 min, 16mm, sd, b & w, 1951, sale \$42.50, rental \$7.50, USA/IA) Shows how some Americans spend their leisure in pursuit of the arts.

Hymn of the Nations (28 min, 16mm, sd, b & w, 1944, sale \$58.50, rental \$10.00, USOWIO) Shows Arturo Toscanini conducting the NBC Symphony Orchestra in a radio broadcast of Verdi's Overture to 'Forza del Destino.' The narrator recounts the contributions of Toscanini and other great Italians to democracy, and Toscanini conducts the NBC Symphony, the Westminster Choir, and Jan Peerce in a radio broadcast of Verdi's 'Hymn of the Nations.'

Ode to Joy (28 min, 16mm, sd, color, 1968, sale \$113.50, rental \$12.50, USOE) Shows that the development of rhythm and appreciation for music is natural and progressive. Shows children playing percussion instruments, attending live concerts, opera, and ballet. Also, shows them participating in school orchestra and choral groups. Alternates between scenes of children participating in project activities and scenes relating the music to their total environment.

Symphony Across the Land (53 min, 16mm, sd, b & w, 1958, sale \$111.00, rental \$15.00, USIA) Suggests the important role of music in American life by featuring leading symphony orchestras as representative of the more than 1,000 symphonies in the United States. Includes performances of the works of Elgar, Creston, Van Vactor, Moussorgsky, Gillis, Bizet and Piston by the Wichita, Atlanta, Knoxville, Denver, Oklahoma City and Boston Symphonies.

Tradition in Music, A (28 min, 16mm, sd, color, 1969, Order No. MN10679, sale \$113.50, USN) Shows the U S Navy Band during rehearsals and recording sessions, and shows the work involved in keeping the band in shape.

SPECIAL EDUCATION

Auditory Assessment (26 min, 16mm, sd, color, 1970, sale \$139.25, rental \$12.50, USBEH) Exhibits techniques of identification and paedo-audiometry currently seen in Denmark, Sweden, England and

the Netherlands. This film was designed to be shown sequentially, following 'developmental auditory response Patterns' and preceding 'The Developing Audio-Vocal System.'

From the *International Education Of the Hearing Impaired Child Series*.

Connecticut, The Turning Point (30 min, 16mm, sd, b & w, 1966, sale \$62.50, rental \$10.00, USIA) Examines an experimental eight-week program during which Connecticut college's facilities are opened to a group of under-privileged and under-motivated high school students with the aim of motivating them toward a university education.

From the *Report From America Series*.

Deaf-blind, The (23 min, 16mm, sd, color, 1970, sale \$106.00, rental \$12.50, USBEH) Observes the techniques of evaluation employed by Dr Ladislav Fisch, Heston Audiology Clinic, England, and the approaches to instruction at Sint Michielsgestel.

From the *International Education Of the Hearing Impaired Child Series*.

Developing Audio-Vocal System, The (38 min, 16mm, sd, color, 1970, sale \$143.75, rental \$15.00, USBEH) Demonstrates the application of European methods of auditory training and speech in Sweden, the Netherlands, Belgium, England, and Denmark. This film was designed to be shown sequentially, following both 'Developmental Auditory Response Patterns' and 'Auditory Assessment.'

From the *International Education Of the Hearing Impaired Child Series*.

Early Recognition of Learning Disabilities (30 min, 16mm, sd, color, 1969, Order No. M-1890-X, sale \$119.50, USNIND) Shows the daily activities of children in kindergarten and first and second grades in two California communities. Those children with learning disabilities stand out vividly. Interviews with parents, teachers and children emphasize the urgent need to recognize and accept learning disabilities early, provide the extra teaching needed to overcome disabilities in time to reach full educational potential before failure and frustration limit intellectual development, and to get the community to provide the facilities for giving that extra help.

Elementary Education (24 min, 16mm, sd, color, 1970, Order No. AIRLIE, sale \$112.00, rental \$12.50, USBEH) Demonstrates language as taught at a Belgian residential school for boys, in Swedish extern classes, and the Woodford School at Essex, England.

From the *International Education Of the Hearing Impaired Child Series*.

English High School, An (13 min, 16mm, sd, color, 1970, sale \$68.00, rental \$10.00, USBEH) Observes science, history, and French classes at the Mary Hare Grammar School, England.

From the *International Education Of the Hearing Impaired Child Series*.

Foundation for Growth (27 min, 16mm, sd, color, 1970, sale \$119.25, rental \$12.50, USBEH) Emphasizes the need for early intervention in training of the mentally retarded, and features mostly pre-school activities, but with demonstration of progressive training activities that may have a beginning in pre-school. Filmed in Scandinavia and England.

Individual Speech (8 min, 16mm, sd, color, 1970, sale \$47.25, rental \$7.50, USBEH) Examines individual speech instruction at preschool and nursery level in Sint Michielsgestel.

From the *International Education of the Hearing Impaired Child Series*.

Integrated Nursery, An (7 min, 16mm, sd, color, 1970, sale \$45.00, rental \$7.50, USBEH) Shows hearing impaired children integrated with normally hearing children in group and tutoring sessions in Sweden.

From the *International Education Of the Hearing Impaired Child Series*.

International Education of the Hearing Impaired Child--a Series (16mm, sd, color, 1970, USBEH) The Airlie films are a series of fifteen color films on programs and practices related to the hearing impaired in Europe. These films were made on location in Belgium, England, Denmark, Sweden, Germany and the Netherlands. Supplementary materials included for use with the films are study guides, slides, transparencies and tear sheets. These films are designed to meet the expressed needs of educators and students in teacher preparation programs for the hearing impaired and of ancillary professional personnel interested in diagnosis and research. Work done by Airlie Productions in conjunction with the George Washington University Medical Center, Department of Medical and Public Affairs, under a grant from the Bureau of Education for the Handicapped, Department of Health, Education, and Welfare.

AUDITORY ASSESSMENT	26 min
INTRAUTERINE AND NEONATAL SCREENING ...	9 min
DEAF-BLIND, THE	23 min
DEVELOPING AUDIO-VOCAL SYSTEM, THE	38 min
DEVELOPMENTAL AUDITORY RESPONSE PATTERNS, PTS 1 AND 2	44 min
ELEMENTARY EDUCATION	24 min
ENGLISH HIGH SCHOOL, AN	13 min
INDIVIDUAL SPEECH	8 min
INTEGRATED NURSERY, AN	7 min
MULTIPLY HANDICAPPED, THE	23 min
PARENT EDUCATION	24 min
PARENT EDUCATION AT HEIDELBERG	11 min
PARTIALLY HEARING, THE	15 min
SCHOOL OTOLOGICAL-AUDIOLOGICAL FOLLOW-UP	10 min
SOUND PERCEPTION METHOD, THE	39 min

Intrauterine and Neonatal Screening (9 min, 16mm, sd, color, 1970, sale \$51.00, USBEH) Demonstrates the assessment of auditory function in utero by Wedenberg, Westin, and Johansson in Stockholm and use of the Murphy cradle at Reading, England.

From the *International Education Of the Hearing Impaired Child Series*.

Multiply Handicapped, The (23 min, 16mm, sd, color, 1970, sale \$108.00, rental \$12.50, USBEH) Shows mentally retarded, cerebral palsied, dysmelia, deaf-blind, and emotionally disturbed deaf children in Sweden, Germany, the Netherlands, and England.

From the *International Education Of the Hearing Impaired Child Series*.

My Child Is Blind (22 min, 16mm, sd, b & w, 1951, sale \$46.25, rental \$7.50, USIA) Shows how a blind child, given patient treatment and proper training at a special nursery school for the blind, can be taught many things normal children do.

Parent Education (24 min, 16mm, sd, color, 1970, sale \$113.75, rental \$12.50, USBEH) Shows home and clinic instruction in Sweden, Germany, England and the Netherlands.

From the *International Education Of the Hearing Impaired Child Series*.

Parent Education at Heidelberg (11 min, 16mm, sd, color, 1970, sale \$62.50, rental \$7.50, USBEH) Presents Professor Arman Lowe's home teaching and parent education program at the paedo-audiological guidance center.

From the *International Education Of the Hearing Impaired Child Series*.

Partially Hearing, The (15 min, 16mm, sd, color, sale \$64.50, rental \$100.00, USBEH) Shows classes at the newly constructed school for the partially hearing in Stockholm, in the Alviksskolan. From the *International Education Of the Hearing Impaired Child Series*.

Path to Fulfillment (38 min, 16mm, sd, color, 1970, sale \$162.50, rental \$150.00, USBEH) Gives an overview of the philosophy, facilities, and techniques used in the care of the mentally retarded, principally in Scandinavia and England.

School Otological-Audiological Follow-up (10 min, 16mm, sd, color, 1970, sale \$58.00, rental \$7.50, USBEH) Presents otological and audiological assessment within the school for the partially hearing and hearing aid check at the School for the Deaf, Stockholm. From the *International Education Of the Hearing Impaired Child Series*.

TECHNIQUES

AAAARK - Something About Communication (18 min, 16mm, sd, color, 1969, Order No. SFP1876, sale \$74.25, USAF) Defines communication and elaborates on art of communicating. Shows communications as giving purpose and meaning to life. Highlights ways of getting ideas across to others. Covers personal problems involved in communicating to others. Shows individual involvement as key to opening new vistas. Recognizes vast field of human knowledge and cites communications as only means of narrowing the information gap. Shows advancement in audio-visual field and calls attention to communication media influencing the world. Challenges viewer to unlock his potential. (Cleared for TV)

Adult as Enabler, The (17 min, 16mm, sd, b & w, sale \$38.50, rental \$10.00, USOE) Demonstrates some good and poor techniques of adult intervention in child centered activity. From the *Teams For Learning Series*.

Audio-visual Aids to Learning (11 min, 16mm, sd, b & w, 1951, sale \$23.25, rental \$5.00, USIA) Describes the services provided by a centralized audio-visual department for use in both educational and civilian information programs.

Capuchino Story, The (14 min, 16mm, sd, b & w, Order No. OE509, sale \$25.50, rental \$7.50, USOE) Documents a research study using programmed instruction in several classes in government in Capuchino High School, San Bruno, California in 1962. Depicts various stages of the study with particular emphasis on contributions made consistently by teachers throughout the entire study.

Career Development (7 min, 16mm, sd, b & w, sale \$16.75, rental \$5.00, USOE) Shows the career opportunities available to a teacher's aide. From the *Teams For Learning Series*.

Communication Conference (31 min, 16mm, sd, b & w, 1966, sale \$63.25, rental \$10.00, USOE) Gives insights on the nature of communications in an informal conference explaining how communication differs from other social interactions. Discusses the social implications of a widespread communication network in most modern societies and the inadequacy of language as a vehicle of communication. Additional topics include--unintended and expressive meanings of messages that must accompany intended communications, the nature and educational implications of packaged instructional systems, and the teacher's role in the classroom at the learner's elbow with important decision-making responsibilities in the selection and arrangement of instructional materials and systems.

Produced by the Ohio State University Department of Photography for the Office of Education.

From the *Communication Theory and the New Educational Media Series*.

Communications Revolution, The (22 min, 16mm, sd, b & w, 1966, sale \$46.25, rental \$7.50, USOE) Presents Edgar Dale, Marshall McLuhan, Gilbert Seldes, and I Keith Tyler in a discussion of the impact of the information explosion and the mass media of communication on Western Civilization. McLuhan talks of 'cool' and 'hot' media of a global culture made possible by radio. Questions are raised of a new distribution of power through a redistribution of information and the inevitable need for discrimination in teaching media. Produced by the Ohio State University Department of Photography for the Office of Education.

From the *Communication Theory and the New Educational Media Series*.

Communication Theory and the New Educational Media--A Series (16mm, sd, b & w, 1966, sale \$54.00, USOE) Provides a flexible, useful, rich, and provocative repertory of materials for use by those who discharge the responsibility of interpreting and articulating theory and experimental research in communication, learning theory, perception, and instructional technology. Produced by The Ohio State University Department of Photography for the Office of Education.

INFORMATION EXPLOSION, THE	34 min
PROCESS OF COMMUNICATION, THE	46 min
PERCEPTION AND COMMUNICATION	32 min
TEACHER AND TECHNOLOGY, THE	49 min
COMMUNICATION CONFERENCE	31 min
COMMUNICATIONS REVOLUTION, THE	22 min
TEACHING MACHINES AND SIDNEY PRESSEY	12 min
MUSIC RESEARCH	17 min

Design for Growing (34 min, 16mm, sd, color, 1954, sale \$137.25, rental \$15.00, USIA) Deals with the Cleveland Public Schools' Educational Program which is designed to stimulate in growing children an imaginative approach to problems of living in the modern world. Includes classroom scenes and shows how the program aids one boy's development.

Eight-mm Film, The - Its Emerging Role in Education (28 min, 16mm, sd, color, sale \$94.50, rental \$12.50, USOE) Explores the educational potential of 8 mm film. Presents a sampling of activities in the field. Suggests both the current state and future promise of the role of 8 mm film in education.

Eighth Grade Mathematics (10 min, 16mm, sd, b & w, 1966, Order No. OE507, sale \$21.00, rental \$5.00, USOE) One of a series designed to stimulate teacher discussion of the various uses of programmed instruction in teaching eighth grade mathematics. From the *Programmed Instruction the Teacher's Role Series*.

Fifth Grade Geography (10 min, 16mm, sd, b & w, 1966, Order No. OE507, sale \$21.00, rental \$5.00, USOE) One of a series designed to stimulate teacher discussion of the various uses of programmed instruction in teaching fifth grade geography. From the *Programmed Instruction the Teacher's Role Series*.

First Grade Reading (10 min, 16mm, sd, b & w, 1966, Order No. OE507, sale \$21.00, rental \$5.00, USOE) One of a series designed to stimulate teacher discussion of the various uses of programmed instruction in teaching first grade reading. From the *Programmed Instruction the Teacher's Role Series*.

Fourth Grade Vocabulary (13 min, 16mm, sd, b & w, 1966, Order No. OE507, sale \$28.50, rental \$7.50, USOE) One of a series designed to stimulate teacher discussion of the various uses of programmed instruction in the teaching of fourth grade vocabulary.

From the *Programmed Instruction the Teacher's Role* Series.

Home-school Inter-action (10 min, 16mm, sd, b & w, sale \$22.75, rental \$5.00, USOE) Illustrates an example of a home-school interaction program.

From the *Teams For Learning* Series.

Information Explosion, The (34 min, 16mm, sd, b & w, 1966, sale \$85.75, rental \$12.50, USOE) Suggests the spirit of the revolution in communication that has made it possible for any information, verbal and pictorial, to be stored, duplicated, transferred or transformed, distributed, and received over distances and with speeds unimagined by the human mind a few decades ago. It is concerned with how this flood of information may be responsibly processed, and with the effects of it all on the lives of children. Produced by the Ohio State University Department of Photography for the Office of Education.

From the *Communication Theory and the New Educational Media* Series.

Instructional Television at Pennsylvania State University (60 min, 16mm, sd, b & w, Order No. OE512, sale \$103.75, rental \$15.00, USOE) Gives information regarding the experiences of one institution of higher learning with the successful use of closed circuit television on the campus-wide basis.

Light from a Black Box (28 min, 16mm, sd, b & w, Order No. OE510, sale \$48.75, rental \$10.00, USOE) Documents experimental efforts to apply programmed instruction and auto-instructional devices in the education of mentally retarded children.

Music Research (24 min, 16mm, sd, b & w, sale \$50.75, rental \$10.00, USOE) Teaches the application of educational technology to a creative skill, music. Part I focuses on Dr Charles Spohn's music laboratory at the Ohio State University, while Part II shows children at the Leslie Ellis Elementary School in Cambridge, Massachusetts, using a keyboard-oriented machine, developed by Dr Edward Maltzman, to learn the basic skills of music. Produced by the Ohio State University Department of Photography for the Office of Education.

From the *Communication Theory and the New Educational Media* Series.

New Eyes and New Ears (20 min, 16mm, sd, b & w, 1951, sale \$42.50, rental \$7.50, USA) Explains the use of audio-visual materials in Japan and shows how civilian informational and educational (CI & E) films of the Supreme Commander, Allied Powers were produced for and utilized in Japan.

Perception and Communication (32 min, 16mm, sd, b & w, 1966, sale \$78.00, rental \$10.00, USOE) Shows concrete examples of how human perception affects the communication process and the individual's concept of reality. Two major theories of perception, the cognitive and the transactional, are introduced, each being illustrated to varying degrees in the six segments of which this film is composed. Produced by the Ohio State University Department of Photography for the Office of Education.

From the *Communication Theory and the New Educational Media* Series.

Point of View (41 min, 16mm, sd, b & w, Order No. OE502, sale \$70.00, rental \$12.50, USOE) Demonstrates the 'discovery' method as applied to the teaching of English. Louis C Zahner leads a class of 7th graders to see the implications of point of view in writing and speaking.

Preparation of Teachers (20 min, 16mm, sd, b & w, 1950, sale \$42.50, rental \$7.50, USIA) Shows teacher education at Ball State Teachers College in Muncie, Indiana.

Probing Mind (29 min, 16mm, sd, b & w, 1961, Order No. OE505, sale \$50.25, rental \$10.00, USOE) Illustrates the uses of new educational media-films, television, recordings, teaching machines and well-equipped laboratories in the teaching of high-school science.

Process of Communication, The (46 min, 16mm, sd, b & w, 1966, sale \$106.50, rental \$15.00, USOE) Explores the process of communication beginning with an animated theoretical model, followed by sequences which progressively elaborate and illuminate the theory through illustrations drawn from communications networks in military, industrial, research, and teaching settings. Produced by the Ohio State University Department of Photography for the Office of Education.

From the *Communication Theory and the New Educational Media* Series.

Programmed Instruction - The Development Process (19 min, 16mm, sd, color, Order No. OE508, sale \$65.00, rental \$10.00, USOE) Introduces the viewer to the major stages in the development of programmed instructional materials with primary emphasis on student tryouts and revisions leading to lasting and influential effects on education.

Programmed Instruction - The Teacher's Role-- A Series (16mm, sd, b & w, 1966, Order No. OE507, , USOE) A series of five short films designed to stimulate teacher discussion of the various uses of programmed instruction in teaching the following subjects--

FIRST GRADE READING	10 min
THIRD GRADE SCIENCE	11 min
FOURTH GRADE VOCABULARY	13 min
FIFTH GRADE GEOGRAPHY	10 min
EIGHTH GRADE MATHEMATICS	10 min

Some Glimpses of Anthony (10 min, 16mm, sd, b & w, sale \$22.75, rental \$5.00, USOE) An in-depth story of the individualized handling required for one child.

From the *Teams For Learning* Series.

Stages of Instruction, The - Preparation (12 min, 16mm, sd, b & w, Order No. TF21-2303, sale \$42.50, USA) Discusses the importance of estimating the instructional situation, selecting and organizing teaching materials, checking on the availability of training aids, preparing a lesson plan, rehearsing the lesson, and checking all arrangements to insure no slip up in the classroom.

Teacher and Technology, The (49 min, 16mm, sd, b & w, 1966, sale \$105.00, rental \$15.00, USOE) Traces the beginnings and history of the impact of technology on education and illustrates some of the ways in which technology is being used to meet the dual problem of masses of students and the need for individual instruction. Suggests, throughout, the implications for the role of the students, teachers, and school administrator. The film ends with segments on how the school and the teacher of tomorrow might look based on working prototypes found in programs existent today. Produced by the Ohio State University Department of Photography for the Office of Education.

From the *Communication Theory and the New Educational Media* Series.

Teacher-directed Television Instruction (28 min, 16mm, sd, b & w, 1968, Order No. OE513, sale \$48.75, rental \$10.00, USOE) Demonstrates for university and school faculties how a television facility can free the instructor from some of the restrictions inherent in traditional television presentations, and enable him to control by push buttons the use of the medium to best serve his purposes.

Teaching Box, The (10 min, 16mm, s.d., color, 1967, sale \$41.00, rental \$7.50, USIA) Describes the introduction of closed circuit TV in American Samoa--a revolutionary experiment in education which makes a high standard of education accessible to many widely dispersed people, in this case on six scattered islands.

Teaching Machines and Programmed Learning (29 min, 16mm, sd, b & w, Order No. OE496, sale \$50.25, rental \$10.00, USOE) Presents B F Skinner explaining the theory of programmed learning, Arthur Lumsdaine describing a variety of teaching machines and programmed materials, and Robert Glaser discussing the implication of such machines, and materials for education.

Teaching Machines and Sidney Pressey (12 min, 16mm, sd, b & w, 1966, sale \$26.75, rental \$7.50, USOE) Relates the story of Sidney Pressey, Emeritus Professor of Psychology at the Ohio State University who presents the historic teaching machine he invented in 1925 as a self-teaching, self-testing device. Produced by the Ohio State University Department of Photography for the Office of Education. From the *Communication Theory and the New Educational Media Series*.

Team Analysis and Planning (17 min, 16mm, sd, b & w, sale \$38.50, rental \$10.00, USOE) Depicts an analysis by teachers and auxiliaries of classroom problems. From the *Teams For Learning Series*.

Teams for Learning (27 min, 16mm, sd, b & w, 1969, sale \$54.00, rental \$10.00, USOE) Assists the teacher or teacher aide teams so that administrators, supervisors, teachers, auxiliaries, parents and students may more effectively meet the student's individual learning needs. Illustrates some of the issues which may arise when persons with different capabilities and backgrounds function as a team. From the *Teams For Learning Series*.

Teams for Learning--a Series (16mm, sd, b & w, sale \$220.75, USOE)

TEAMS FOR LEARNING	27 min
VARIOUS PERCEPTIONS OF AUXILIARIES AT WORK	15 min
I AM A TEACHER AIDE	13 min
TEAM ANALYSIS AND PLANNING	17 min
ADULT AS ENABLER, THE	17 min
HOME-SCHOOL INTER-ACTION	10 min
SOME GLIMPSES OF ANTHONY	10 min
CAREER DEVELOPMENT	7 min

Television, A Teaching Assistance, Presenting Patterns Of Inter-institutional and... (28 min, 16mm, sd, b & w, Order No. OE511, sale \$48.75, rental \$10.00, USOE) Full title - Television, a Teaching

Assistance, Presenting Patterns of Inter-institutional and Inter-regional College Teaching by Television - Documents Patterns of inter-institutional and inter-regional teaching on television in selected areas of the United States, including the educational advantages to both staff and students of cooperative uses of television in college teaching.

Third Grade Science (11 min, 16mm, sd, b & w, 1966, Order No. OE507, sale \$23.00, rental \$5.00, USOE) One of a series designed to stimulate teacher discussion of the various uses of programmed instruction in teaching third grade science. From the *Programmed Instruction the Teacher's Role Series*.

To Speak with Friends (29 min, 16mm, sd, b & w, 1960, Order No. OE506, sale \$50.25, rental \$10.00, USOE) Illustrates instructional practices in elementary and secondary schools using language laboratories, television, motion pictures, recordings, slides, and other special audio-visual facilities to help students in understanding and speaking foreign languages.

Using Visual Aids in Training (14 min, 16mm, sd, b & w, 1944, Order No. OE167, sale \$25.50, rental \$7.50, USOE) Depicts an instructor's use of a training motion picture, a coordinated film-strip and a manual in teaching his class the use of the micrometer.

Various Perceptions of Auxiliaries at Work (15 min, 16mm, sd, b & w, sale \$36.00, rental \$10.00, USOE) Shows how administrators, students and auxiliaries have widely varying perceptions of the auxiliaries' contribution to an inner city high school. From the *Teams For Learning Series*.

WRITING

Army Effective Writing, Pt 1, Shortness (24 min, 16mm, sd, color, 1968, Order No. MF12-5317, sale \$98.00, USA) Explains and illustrates the rules for achieving shortness in Army writing.

Army Effective Writing, Pt 2, Simplicity (21 min, 16mm, sd, color, 1968, Order No. MF12-5318, sale \$86.00, USA) Explains and illustrates the rules for achieving simplicity in Army writing.

Army Effective Writing, Pt 3, Strength (21 min, 16mm, sd, color, 1968, Order No. MF12-5319, sale \$86.00, USA) Explains and illustrates the rules for achieving strength in Army writing.

Army Effective Writing, Pt 4, Sincerity (25 min, 16mm, sd, color, 1968, Order No. MF12-5320, sale \$101.75, USA) Explains how the writer can convey to the reader an attitude of sincere interest, and illustrates rules for achieving sincerity in Army writing.

ELECTRICITY

EQUIPMENT

AC Generators (27 min, 16mm, sd, b & w, Order No. TVK30-201, sale \$56.50, USAF) Explains operation of AC generators, compares output with a rotating radius vector, and explains function of each part. Explains Lenz's law and requirements for induction. (Kinescope)

AC Motors (34 min, 16mm, sd, b & w, Order No. TVK30-704, sale \$70.50, USAF) Shows AC motors in various appliances and electronic equipment to emphasize their wide use and importance. An actual motor is disassembled to point out each part and the simplicity of construction. Demonstrates the principle of operation, pointing out the moving magnetic field and magnetization of the rotor. Induction from rotating field to wire loops is demonstrated. Concludes the lesson with a demonstration of slippage and its relationship to internal and external loading, and an explanation of a typical torque curve. (Kinescope)

Across-the-line Starters (15 min, 16mm, sd, b & w, 1945, Order No. OE389, sale \$27.00, rental \$7.50, USOE) Shows theory and operation of manually operated thermal overload switch, a magnetically operated across-the-line starter, a drum reversing switch for a three-phase motor, and a magnetic reversing switch.

From the *Electrical Work Series*. Motor Control, No. 2

Battery, Ignition and Electrical System, The (26 min, 16mm, sd, b & w, 1945, Order No. OE462, sale \$45.50, rental \$10.00, USOE) Shows how to check and service the battery and check the starting motor, generator, lighting circuit, electrical instruments and ignition.

From the *Automotive Operation and Maintenance Series*. Preventive Maintenance, No. 2

Control Transformer (30 min, 16mm, sd, b & w, Order No. TVK30-708, sale \$62.50, USAF) Explains the purpose of a control transformer and the action in the circuit. Discusses and shows graphically the physical and electrical characteristics. Explains transformer action, and defines and shows the position of electrical zero. (Kinescope)

DC Motors (40 min, 16mm, sd, b & w, Order No. TVK30-703, sale \$82.25, USAF) Explains the basic principles of DC motor operation by a progressive development of magnetic fields and shows how a current carrying device acts when placed in these fields. Explains the positions of maximum and minimum torque. (Kinescope)

DC Motor, Pt 1, Mechanical Overhaul (20 min, 16mm, sd, b & w, 1945, Order No. OE392, sale \$35.25, rental \$7.50, USOE) Tells how to test for electrical and mechanical faults, dismantle DC motor, turn the commutator, repair and replace field coils, assemble the motor, and adjust and make final tests.

From the *Electrical Work Series*. Motor Maintenance and Repair, No. 1

DC Motor, Pt 2, Rewinding (37 min, 16mm, sd, b & w, 1945, Order No. OE393, sale \$63.50, rental \$12.50, USOE) Tells how to dismantle and clean an armature core, determine commutator pitch, reinsulate the core, insert coils, band an armature, shape coil ends, lay in and solder leads, balance and impregnate the armature, and turn a commutator.

From the *Electrical Work Series*. Motor Maintenance And Repair, No. 2

Direct Current Controllers (15 min, 16mm, sd, b & w, 1945, Order No. OE388, sale \$27.00, rental \$7.50, USOE) Shows shunt motors and direct controllers in operation. Uses animation to illustrate a direct current faceplate controller connected to a shunt motor.

From the *Electrical Work Series*. Motor Control, No. 1

Direct Current Generators (22 min, 16mm, sd, b & w, Order No. TVK30-202, sale \$46.25, USAF) Identifies parts of basic DC generator. Defines steady DC, pulsating DC, and ripple. Identifies schematics of three main DC generator configurations. (Kinescope)

Introduction to Synchros (40 min, 16mm, sd, b & w, Order No. TVK30-706, sale \$82.25, USAF) Gives illustrations of equipment operated by remote control. Explains that each remote indicating system has two basic components--a generator and a motor. Shows how to dismantle a synchro generator and motor, and explains the purpose of each individual part. Shows how to determine, by the use of schematic diagrams, the symbols for the stator and rotor and the electrical connections between synchro generator and motor. (Kinescope)

Relays (18 min, 16mm, sd, b & w, Order No. TVK30-137, sale \$38.50, USAF) Discusses some uses of relays, and explains their construction and purpose. Shows the symbols used to identify types of relays, and finally, how a relay operates. (Kinescope)

Repulsion Induction Motor - General Overhaul (25 min, 16mm, sd, b & w, 1945, Order No. OE397, sale \$43.75, rental \$10.00, USOE) Shows how to check a repulsion-induction motor for electrical and mechanical faults, dismantle it, remove a damaged coil, wind and insulate a new coil, and assemble and lubricate the motor.

From the *Electrical Work Series*. Motor Maintenance And Repair, No. 6

Servo Analysis (40 min, 16mm, sd, b & w, Order No. TVK30-709, sale \$82.25, USAF) Shows how the need for a servo system is established and a block diagram of a system is analyzed. Discusses error voltages. (Kinescope)

Split-phase Motor Principles (17 min, 16mm, sd, b & w, 1945, Order No. OE386, sale \$30.50, rental \$7.50, USOE) Shows construction of stator and rotor, comparison of winding in two-phase stator with split-phase stator, effects of winding resistances and inductive reactances, and use of capacitor to produce phase displacement.

From the *Electrical Work Series*. Electrical Machinery, No. 4

Split-phase Motor - Rewinding (28 min, 16mm, sd, b & w, 1945, Order No. OE394, sale \$48.75, rental \$10.00, USOE) Shows how to test a split-phase motor for electrical and mechanical faults, dismantle and strip the stator, rewind the stator, form and install skein windings and insulate. Explains how to lace, dip and bake the stator, and how to assemble, lubricate and test motors.

From the *Electrical Work Series*. Motor Maintenance And Repair, No. 3

Squirrel-cage Rotor Principles (10 min, 16mm, sd, b & w, 1945, Order No. OE385, sale \$17.50, rental \$5.00, USOE) Describes the laws of magnetism and induced EMF. Explains electron flow in squirrel-cage rotor setting up magnetic poles which create torque. Shows the construction of squirrel-cage rotors.

From the *Electrical Work Series*. Electrical Machinery, No. 3

Three-phase Motor, Pt 1, Preparing to Rewind (17 min, 16mm, sd, b & w, 1945, Order No. OE395, sale \$30.50, rental \$7.50, USOE) Shows how to interpret and record nameplate data of a three-phase motor, identify the line and finish leads. Remove coils and determine coil span, use a coil winding machine, and end-tape machine wound coils.

From the *Electrical Work Series*. Motor Maintenance And Repair, No. 4

Three-phase Motor, Pt 2, Rewinding (17 min, 16mm, sd, b & w, 1945, Order No. OE396, sale \$30.50, rental \$7.50, USOE) Shows how to insert mush coils and separators, fold, trim, and wedge slot insulation around windings, insert phase insulation and make a delta connection.

From the *Electrical Work Series. Motor Maintenance And Repair*, No. 5

Transformers (30 min, 16mm, sd, b & w, Order No. TVK30-207, sale \$62.50, USAF) Defines transformer action, step-up and step-down, turns ratio, and coefficient of coupling. Gives examples of determining the step-up or step-down ratio and coefficient of coupling. Describes and illustrates the relationship between the magnitude of voltage and current in a transformer. Shows the symbols of power, audio, RF, and auto-transformers. Demonstrates the procedure for testing a transformer for opens and shorts, and how to identify a step-up or a step-down type transformer. (Kinescope)

Use of Ammeter (30 min, 16mm, sd, b & w, Order No. TVK30-114, sale \$62.50, USAF) Demonstrates the procedure for setting up the multimeter (PSM-6) for use as an ammeter. In addition, shows the method of adjusting the meter to read values in the range of milliamperes to amperes, and how to connect the meter into a DC circuit to measure current. Stresses the safety precautions to be observed by setting the range switch and connecting the leads properly. Explains the effects of disregarding various precautions and the possible damage which can result to the meter. (Kinescope)

Use of Ohmmeter (37 min, 16mm, sd, b & w, Order No. TVK30-112, sale \$76.25, USAF) Demonstrates the procedure for setting up the PSM-6 multimeter for use as an ohmmeter, how to adjust the range selector switch for the most accurate reading of a resistor, how to zero the meter, and how to connect the instrument to read the ohmic values of resistors. Stresses the precautionary steps for using the meter and the effects if they are not observed. In addition, gives the general care of the PSM-6. Demonstrates the procedure for determining the condition of resistors, whether good, open, or shorted. Also, compares the measured values to the indicated values. (Kinescope)

Use of Voltmeter (38 min, 16mm, sd, b & w, Order No. TVK30-113, sale \$78.50, USAF) Demonstrates the proper procedure for setting up the multimeter (PSM-6) for use as a voltmeter. Shows how to connect the instrument into a DC circuit and how to adjust and read the meter for different values of voltage. Demonstrates and stresses the safety precautions to be observed by setting the range switch and the correct method of connecting the leads into the circuit. Explains the effects of disregarding various precautions. Shows how the meter is used to obtain a number of voltage readings in circuits containing different components. (Kinescope)

Vibrators (25 min, 16mm, sd, b & w, Order No. TVK30-138, sale \$52.50, USAF) Illustrates the purpose of vibrator-changing steady DC current to pulsating current. Then points out the parts of a vibrator and explains what makes it work. Shows the schematic of a vibrator in a circuit and, discusses the two vibrator output characteristics-square wave pulsating DC, and frequency varies with rate of opening and closing the contacts. (Kinescope)

Voltage Dividers (21 min, 16mm, sd, b & w, Order No. TVK30-123, sale \$44.50, USAF) Explains and demonstrates how voltages are developed at the taps with respect to ground. Ground is explained both as a reference point and as a current conduction path. Sample problems show the relationship of positive and negative voltage to ground. (Kinescope)

INSTALLATION

Cable Surface Wiring (17 min, 16mm, sd, b & w, 1944, Order No. OE377, sale \$30.50, rental \$7.50, USOE) Illustrates how to make an electrical entrance to a building, install nonmetallic sheathed cable, handle and install porcelain fittings, support and connect cable, and prepare and connect wires for service.

From the *Electrical Work Series. Wiring*, No. 10

Electrical Circuit Faults (19 min, 16mm, sd, b & w, 1945, Order No. OE375, sale \$33.75, rental \$7.50, USOE) Shows how to test for and locate common circuit faults, such as grounds, resistance deterioration and interference in circuits.

From the *Electrical Works Series. Wiring*, No. 6

Identifying and Precutting Cable (19 min, 16mm, sd, b & w, 1945, Order No. OE112, sale \$40.50, rental \$7.50, USOE) Describes characteristics of VCLA cable used in merchant ships. Tells how to compute cable size for identification and how to identify and precut cable.

From the *Shipbuilding Skills Series. Marine Electricity*, No. 3

Installing and Connecting Teletale Panel (15 min, 16mm, sd, b & w, 1945, Order No. OE116, sale \$30.50, rental \$7.50, USOE) of closed circuit television on a campus-wide basis. from cable, reinsulate conductors and cable, and connect conductors to the multiconnection box.

From the *Shipbuilding Skills Series. Marine Electricity*, No. 7

installing conduit (25 min, 16mm, sd, b & w, 1945, Order No. OE381, sale \$43.75, rental \$10.00, USOE) Shows how to bend electrical metallic tubing, install tubing runs, bend rigid conduit, install rigid conduit runs and use flexible conduit.

From the *Electrical Work Series. Wiring*, No. 12

Installing Surface Metal Raceway (22 min, 16mm, sd, b & w, 1945, Order No. OE380, sale \$38.50, rental \$7.50, USOE) Shows how to install a molding raceway run to ceiling outlet, from ceiling outlet to wall switch, from ceiling outlet to wall fan, and to floor outlet.

From the *Electrical Work Series. Wiring*, No. 11

Joining Solid Conductors (22 min, 16mm, sd, b & w, 1945, Order No. OE369, sale \$38.50, rental \$7.50, USOE) Shows how to make a Western Union, pigtail, plain tap, 'Wrapped Tap' or Britannia, loop tap and fixture joints. Explains how to use a blowtorch, flux and solder joints, and insulate joints.

From the *Electrical Work Series. Wiring*, No. 1

Laying Out and Installing Main Wireway (21 min, 16mm, sd, b & w, 1945, Order No. OE111, sale \$43.25, rental \$7.50, USOE) Tells how to determine from the blueprint the route the cables are to follow and the size of the hangers to be used. Describes how to lay out the raceways, install flat bars and hangers, and lay out penetration holes to be cut.

From the *Shipbuilding Skills Series. Marine Electricity*, No. 2

Porcelain Protected Surface Wiring (19 min, 16mm, sd, b & w, 1944, Order No. OE376, sale \$33.75, rental \$7.50, USOE) Tells how to make an electrical entrance to a building, install wiring and porcelain fittings, support and insulate wires, and prepare and connect wires for service.

From the *Electrical Work Series. Wiring*, No. 9

Power Bending Conduit (17 min, 16mm, sd, b & w, 1945, Order No. OE382, sale \$30.50, rental \$7.50, USOE) Depicts assembly and operation of a floor bender and a portable bender. Shows how to make a 45 degree bend in a 3-inch conduit, make an offset in 1 1/2-inch conduit, and make an offset in conduit already installed.

From the *Electrical Work Series. Wiring*, No. 13

Preparing Old Buildings for Wiring (21 min, 16mm, sd, b & w, 1945, Order No. OE378, sale \$37.00, rental \$7.50, USOE) Discusses how to plan the wiring paths, visualize the obstructions, and prepare the paths for the wiring runs.

From the *Electrical Work Series*. Wiring, No. 7

Pulling and Installing Cable and Packing Terminal Tubes (16 min, 16mm, sd, b & w, 1945, Order No. OE113, sale \$33.25, rental \$7.50, USOE) Tells how to pull, strap, and straighten cable. Describes how to prepare cable for pushing and for pulling with a rope, and pack terminal tubes.

From the *Shipbuilding Skills Series*. Marine Electricity, No. 4

Roughing-in Nonmetallic Sheathed Cable (24 min, 16mm, sd, b & w, Order No. OE373, sale \$42.25, rental \$10.00, USOE) Tells how to determine the location of required runs, install an offset bar hanger and ceiling outlet box and rough-in a circuit run. Describes how to make up connections for switches, receptacles, and fixtures.

From the *Electrical Work Series*. Wiring, No. 3

Soldering Lugs and Splicing Stranded Conductor (18 min, 16mm, sd, b & w, 1945, Order No. OE371, sale \$32.00, rental \$7.50, USOE) Demonstrates how to splice stranded conductors and how to make a severed cable splice. Shows the use of soldering tongs, blowtorch, and solder pot and ladle to solder a lug.

From the *Electrical Work Series*. Wiring, No. 2

Three-wire Service Entrance (24 min, 16mm, sd, b & w, 1945, Order No. OE374, sale \$42.25, rental \$10.00, USOE) Describes how to mount and connect an outdoor meter connection box and a service control box, ground a three-wire service entrance installation and install a concentric service entrance cable.

Wiring Old Building with Armored Cable (22 min, 16mm, sd, b & w, 1945, Order No. OE375, sale \$38.50, rental \$7.50, USOE) Shows how to install outlet boxes, cut and strip armor from cables, attach cable to outlet boxes, run armored cable, repair openings in walls and join conductors at ceiling outlet.

From the *Electrical Work Series*. Wiring, No. 8

Wiring Telltale Panel (17 min, 16mm, sd, b & w, 1945, Order No. OE115, sale \$35.75, rental \$7.50, USOE) Describes the purpose of telltale units. Tells how to strip cable, form and lace conductors on a jig, strip the ends of conductors and put on lugs, and hook up conductors and test the connections.

THEORY

Basic Circuit Symbols and Components (32 min, 16mm, sd, b & w, 1965, Order No. TVK30-110A, sale \$66.50, USAF) Describes and illustrates the three requirements for a practical electrical circuit. Shows a schematic diagram of a simple circuit with symbols used to represent the electrical components and measuring instruments. Explains what electrical ground is and how it is used. Gives the function of a fuse and switch in a circuit. Gives the use, symbol and description of various electrical measuring instruments. Finally, shows examples of circuit schematic diagrams, each containing different combinations of components which can be used. (Kinescope)

Basic Electricity - AC Parallel Circuits (4 min, 16mm, sd, b & w, 1958, Order No. MN08018D, sale \$9.50, USNU) Shows the elements of an AC parallel circuit, examines the effects of current, and shows what the generator sees in the following circuits, where X_1 exceeds X_c , X_c exceeds X_1 , and X_c and X_1 are equal.

Basic Turbine Theory (12 min, 16mm, sd, color, 1969, Order No. MN10649, sale \$50.50, USNU) Traces the development of the turbine engine from steam power to the jet turbine.

Current Flow, What It Is (4 min, 16mm, sd, b & w, 1954, Order No. MN08016C, sale \$9.50, USNU) Shows that electrons move in chain reactions due to repulsion between electrons and attraction between electrons and positive atoms. Demonstrates that in a wire when an electron moves at one point an electron moves at every other point and shows that the amount of current depends upon the number of electrons per second moving past a point.

DC Circuit Parameters (33 min, 16mm, sd, b & w, Order No. TVK30-108, sale \$68.25, USAF) Defines and discusses characteristics of current, electromotive force, and resistance. Lists five common sources of electromotive force and demonstrates each. Discusses and demonstrates factors affecting the resistance of a wire conductor. (Kinescope)

DC Series Resistive Circuits (27 min, 16mm, sd, b & w, Order No. TVK30-119, sale \$56.50, USAF) Describes the features of a series 'DC' resistive circuit and shows how to solve for total resistance, current and voltage using Ohm's and Kirchoff's Laws. Demonstrates the effect on current when voltage or resistance is changed. (Kinescope)

Definition and Analysis of Alternating Current (32 min, 16mm, sd, b & w, Order No. TVK30-200, sale \$66.50, USAF) Defines alternating current and explains related phenomena. (Kinescope)

Electromagnetism (25 min, 16mm, sd, b & w, Order No. TVK30-136, sale \$52.50, USAF) Discusses the characteristics of electromagnetism, and then explains the characteristics of a magnetic field around a current carrying conductor demonstrated with iron filings and a compass. Then shows the 'left-hand' rule for determining current flow in an electromagnet. Illustrates the use of a 'dot' and a 'cross' to designate current flow. Gives the two characteristics of a magnetic field around a current-carrying coil and the two factors which determine the strength of the magnetic field. (Kinescope)

Ohm's Law (20 min, 16mm, sd, b & w, Order No. TVK30-118, sale \$42.50, USAF) Defines Ohm's law, and discusses three forms of the formula. Explains the terms (unknowns) of E, I, and R. Demonstrates methods of finding current (I), voltage (E), or resistance (R) when the other two quantities are known. (Kinescope)

Parallel RC, RL, And RCL Circuits (Graphic Solutions) (32 min, 16mm, sd, b & w, Order No. TVK30-222, sale \$66.50, USAF) Using Ohm's law and vectors, shows how to solve for branch current, total current, total impedance and phase angle in parallel RC, RL and RCL circuits. (Kinescope)

Parallel RC, RL, And RCL Circuits (trigonometric Solutions) (39 min, 16mm, sd, b & w, Order No. TVK30-224, sale \$80.25, USAF) Shows how circuit values are computed by trigonometric functions. First the phase angle is determined from a trigonometric table and the values of known current through the parallel circuit. Next theta is computed and from this the total current is found. The power factor is pointed out as the same value as the cosine of theta. Then the procedure of solving for total impedance by Ohm's law is presented. After solving for phase angle, total current, total impedance and power factor in an RC parallel circuit, RL and RCL circuits are considered. (Kinescope)

Parallel Resistive Circuits (33 min, 16mm, sd, b & w, Order No. TVK30-126A, sale \$68.25, USAF) Explains and shows the requirements for a parallel circuit. Then points out the relationship of the voltage across each parallel branch and explains how to measure and compute the voltage across each branch, as well as the total voltage. Next, gives the rule for computing current in a parallel circuit and demonstrates how to measure current in a parallel circuit. Shows the formula for computing resistance in a parallel circuit and how to measure the resistance. (Kinescope)

Parallel Resistive Circuits - Circuit Analysis (22 min, 16mm, sd, b & w, Order No. TVK30-126B, sale \$46.25, USAF) Defines the principles of Ohm's and Kirchoff's laws as they apply to solving the problems related to branch currents, resistances, and applied voltage. Actual problems are used as a means of proving the principles of parallel circuitry. (Kinescope)

Parallel Resistive Circuits - Circuit Analysis (33 min, 16mm, sd, b & w, Order No. TVK30-126C, sale \$68.25, USAF) Shows the effect that adding or removing a resistor from a parallel circuit has on the total current and total resistance. Also demonstrates the effect on total current and total resistance when the value of one branch resistor is increased or decreased. In addition, shows what effect increasing or decreasing the applied voltage has on the total current. (Kinescope)

Parallel Resistive Circuits - DC Power (14 min, 16mm, sd, b & w, Order No. TVK30-128, sale \$30.75, USAF) Using a simple circuit, demonstrates the distribution of power in a parallel circuit. By use of appropriate formulas, methods of determining the power dissipated in the individual branches and total power are discussed. (Kinescope)

Parallel Resistive Circuits - Troubleshooting (21 min, 16mm, sd, b & w, Order No. TVK30-129, sale \$44.50, USAF) Discusses symptoms produced by open and shorted parallel resistors. Shows how an ammeter and voltmeter are used to detect such troubles. (Kinescope)

Reduced Voltage Starters (23 min, 16mm, sd, b & w, 1945, Order No. OE390, sale \$40.50, rental \$10.00, USOE) Explains the principle of the transformer. Shows the operation of a manual starting compensator, thermal overload relay and automatic starting compensator. From the *Electrical Work Series*. Motor Control, No. 3

Repulsion Motor Principles (11 min, 16mm, sd, b & w, 1945, Order No. OE387, sale \$19.25, rental \$5.00, USOE) Shows construction of a repulsion motor. Explains rotor circuits and effect of brush position, short-circuiting and brush-lifting mechanism, and applications of repulsion motors. From the *Electrical Work Series*. Electrical Machinery, No. 5

Resistive Bridge Circuits (26 min, 16mm, sd, b & w, Order No. TVK30-134, sale \$54.75, USAF) Identifies a simple resistive bridge circuit and discusses the specific characteristics of resistance ratio, voltage distribution, and current flow. Differentiates between balanced and unbalanced bridges. Verifies voltage distribution and current flow direction, and describes the application of the Wheatstone bridge. (Kinescope)

Rotating Magnetic Fields (13 min, 16mm, sd, b & w, 1945, Order No. OE384, sale \$23.75, rental \$7.50, USOE) Explains a rotating magnetic field pattern, three-phase winding in a demonstration stator, factors that cause rotation of the magnetic field, and the construction of polyphase motors.

From the *Electrical Work Series*. Electrical Machinery, No. 2

Series Resistive Circuits - DC Power (29 min, 16mm, sd, b & w, Order No. TVK30-121, sale \$60.50, USAF) Defines electrical power in terms of 'work' and 'rate.' Discusses the three formulas for computing power (power equals voltage times current, power equals current squared times resistance, and power equals voltage squared divided by resistance). Gives problems to solve, using the power formulae. (Kinescope)

Series-parallel Resistive Circuits - Circuit Analysis (40 min, 16mm, sd, b & w, Order No. TVK30-131A, sale \$82.25, USAF) Shows various combinations of series, parallel, and series-parallel circuits. Explains how to identify the type of circuit and how to solve for resistance of individual components and total resistance. Next, discusses the method of solving for voltage across each component and how to solve for total voltage of the circuit. Explains the method of calculating current. As a final step, describes and explains the procedure for constructing an equivalent circuit of a series-parallel circuit. (Kinescope)

Single-phase and Polyphase Circuits (17 min, 16mm, sd, b & w, 1945, Order No. OE383, sale \$30.50, rental \$7.50, USOE) Explains a single-phase synchronous generator, the use of sine curves to illustrate flow changes, a two-phase system and three-phase system, and ways of simplifying wiring.

From the *Electrical Work Series*. Electrical Machinery, No. 1

Voltage Doubler (30 min, 16mm, sd, b & w, Order No. TVK30-405, sale \$62.50, USAF) Develops, through analogy and demonstration, the theory of a voltage doubler circuit. Traces the charge and discharge paths for the capacitors, computes peak output voltage and ripple frequency, and relates malfunctions in a voltage doubler circuit to the symptoms. (Kinescope)

Wire Sizes and Voltage Drop (13 min, 16mm, sd, b & w, 1945, Order No. OE372, sale \$23.75, rental \$7.50, USOE) Discusses factors influencing the ability of conductors to carry electron flow, measurement of wire size, voltage drop and Ohm's law.

From the *Electrical Work Series*. Wiring, No. 4

Wound Rotor Controllers (17 min, 16mm, sd, b & w, 1945, Order No. OE391, sale \$30.50, rental \$7.50, USOE) Discusses wound rotor motor principles, operation of a faceplate controller, drum-type non-reversing controller, drum-type reversing controller and automatic magnetic starter for a wound rotor motor.

From the *Electrical Work Series*. Motor Control, No. 4

ELECTRONICS

COMMUNICATIONS

AFN - The American Forces Network (29 min, 16mm, sd, b & w, 1962, Order No. TV583, sale \$59.50, USA) Reports on largest military radio broadcasting network in Europe. (Cleared for TV)
From the *Big Picture Series*.

AN/TCC-7 System, Pt 2 - Initial Adjustments on Carrier Telephone Terminal (23 min, 16mm, sd, b & w, 1958, Order No. TF11-2696, sale \$48.75, USA) Shows adjustments of terminal plate voltage, test circuit, transmit circuit, signal path of message channels, transmitted line-up frequencies, and power supply. (Cleared for TV)

Army Research and Development - Progress Report 8 (23 min, 16mm, sd, b & w, 1964, Order No. R & DPR8, sale \$94.00, USA) Describes development and application of two new radio systems, AN/VRC 12 and AN/VRC 25, adopted by Army to meet changing tactical requirements. (Cleared for TV)

Automatic Voice Network - AUTOVON (20 min, 16mm, sd, b & w, 1964, Order No. MF11-5177, sale \$42.50, USA) Describes the features, capability and operation of the Automatic Voice Network (AUTOVON) in the Defense Communication System. (Cleared for TV)

Balanced Modulator and Crystal Filters (40 min, 16mm, sd, b & w, 1965, Order No. TVK30-612, sale \$82.25, USAF) Gives the requirements for single sideband transmission, a detailed analysis on how the carrier frequency is eliminated in the balanced modulator and how one sideband is eliminated in the crystal filter. Shows a block diagram of a single sideband transmitter, emphasizing the location and function of the balanced modulator. (Kinescope)

Bridge Rectifiers (34 min, 16mm, sd, b & w, 1965, Order No. TVK30-236, sale \$70.50, USAF) Traces the development of the bridge rectifier, showing how the output voltage is affected by the various rectifier configurations. Components are identified and labeled. Current flow is traced and output waveshape is shown using a trainer and oscilloscope. Circuit voltages are computed, symptoms of malfunction are illustrated using the trainer and oscilloscope, and probable causes of these symptoms are discussed. (Kinescope)

Composition of an AM Wave (27 min, 16mm, sd, b & w, Order No. TVK30-527, sale \$56.50, USAF) Discusses the frequencies in an amplitude modulated wave. Shows how frequencies are determined by applying an AM wave to a selective filter circuit. The output of the filter circuit is applied to a scope, the filter is tuned through a given frequency range, and the frequencies contained in the AM wave are displayed on the scope. Defines terms such as upper and lower sideband, and compares the power contained in the carrier, using different percentages of modulation. (Kinescope)

Diode and Crystal Detectors (16 min, 16mm, sd, b & w, Order No. TVK30-522B, sale \$34.25, USAF) Discusses the operation of a diode detector, employing a crystal diode as the rectifier. Emphasizes the operating characteristics of the circuit and the proper handling techniques of a crystal diode. Shows output waveshapes on the oscilloscope, and explains how the output is affected if the values of R and C are not correct. Compares the vacuum tube diode detector and the crystal diode detector. (Kinescope)

Introduction to Amplitude Modulation (26 min, 16mm, sd, b & w, Order No. TVK30-525, sale \$54.75, USAF) Gives a brief history of major developments in the communications field to point out why amplitude modulation came into being. Explains how intelligence can be transmitted by amplitude modulating a high frequency wave

with an intelligence signal. Defines such terms as modulation, intelligence signal and carrier wave. Discusses a basic block diagram of an AM transmitter to show the method of producing an amplitude modulated wave. (Kinescope)

Introduction to Detection (14 min, 16mm, sd, b & w, Order No. TVK30-521, sale \$30.75, USAF) Explains what 'detection' is and why it is needed. Gives a general explanation of detector functions through discussion of basic circuit operation. (Kinescope)

Introduction to Receivers (23 min, 16mm, sd, b & w, 1965, Order No. TVK30-609, sale \$48.75, USAF) Identifies each block in a block diagram of a super-heterodyne receiver. Discusses the purpose of each stage and shows output signals from each stage on an oscilloscope. (Kinescope)

Introduction to Single Sideband (26 min, 16mm, sd, b & w, Order No. TVK30-611, sale \$54.75, USAF) Compares a conventional amplitude modulated wave to the single sideband wave, through the use of an oscilloscope and associated equipment. Explains the characteristics of single sideband communication, and gives the two requirements of a single sideband transmitter. (Kinescope)

Percentage of Modulation (29 min, 16mm, sd, b & w, Order No. TVK30-526, sale \$60.50, USAF) Explains what is meant by percentage of modulation. Explains over, under, and complete (100 percent) modulation and gives the advantages and disadvantages of each. Explains in detail how to determine the percentage of modulation, and illustrates by working several problems. (Kinescope)

Pulse Modulation (26 min, 16mm, sd, b & w, Order No. TVK30-902, sale \$54.75, USAF) Discusses the basic principles of pulse modulation with emphasis on these terms--pulse repetition frequency, pulse width, peak power, average power, duty cycle, and pulse repetition time. Through the use of graphics, explains the block diagram of a pulse modulated transmitter showing the waveshapes out of each block. (Kinescope)

Reactance Tube Modulator (24 min, 16mm, sd, b & w, Order No. TVK30-606, sale \$50.75, USAF) Points out the principles of operation of the reactance tube modulator and identifies and states the purpose of each component. (Kinescope)

Receiver Alignment (37 min, 16mm, sd, b & w, Order No. TVK30-623, sale \$76.25, USAF) Demonstrates the troubleshooting of a superheterodyne receiver. Shows how, after finding and replacing the defective component, the receiver is aligned using a signal generator for the signals. Explains proper test equipment and how alignment is reaccomplished using a local radio station for a signal. (Kinescope)

Transistor FM Detector (35 min, 16mm, sd, b & w, Order No. TVK30-622, sale \$72.50, USAF) Discusses the characteristics of a symmetrical transistor and reviews phase relationship of voltage and current in a transformer. Using the vector analysis, explains the operation of the FM detector at the center frequency of the input, at frequencies above the center frequency, and at frequencies below the center frequency. (Kinescope)

Transistor FM Oscillator (29 min, 16mm, sd, b & w, Order No. TVK30-607, sale \$60.50, USAF) Compares the transistor FM oscillator and the reactance tube modulator. Reviews the characteristics of a simple PN junction, before explaining the operation of the circuit, explaining how the depletion region is established and how it can be used as a variable capacitance under a changing reverse bias. Shows how the voltage variable capacitor can be used in conjunction with an oscillator to make up a transistor FM oscillator. Explains the operation of the FM oscillator, emphasizing the fact that a positive input decreases the output frequency and a negative input increases the output frequency. (Kinescope)

Trapezoidal Sweep Generator - TSTR (33 min, 16mm, sd, b & w, Order No. TVK30-820, sale \$68.25, USAF) Using a diagram, shows how the transistor trapezoidal sweep generator can be identified. Explains the purpose of the circuit components and develops a step-by-step analysis of the circuit's operation. Shows and explains the effect on the output waveform, to emphasize the responsibility of the two output components. Constructs and discusses input and output waveforms. (Kinescope)

Trapezoidal Sweep Generator - VT (39 min, 16mm, sd, b & w, Order No. TVK30-819, sale \$80.25, USAF) Explains a typical radar indicator and television receiver, making specific reference to the type of deflection used in each system. Continues by developing the required waveform necessary for electromagnetic deflection. Shows the circuit used to produce a trapezoidal waveform, explains the purpose of each component, analyzes circuit operation, and develops output waveforms. Shows waveforms with the aid of an oscilloscope. (Kinescope)

MAINTENANCE

Basic Circuit Symbols and Components - Battery Circuits (23 min, 16mm, sd, b & w, Order No. TVK30-110B, sale \$48.75, USAF) Demonstrates the method of connecting batteries in series to obtain an increase in voltage. Explains why the voltage is increased and shows how to calculate the amount of voltage. Then describes how to connect batteries in parallel to obtain an increase in current, why current is increased, and how to calculate the amount of current. Shows the method of connecting batteries in combinations of series-parallel. Illustrates schematic representations of each combination, and explains the method of calculating the total voltage and current for each combination. (Kinescope)

Filters and Power Supplies - Power Supply Troubleshooting (26 min, 16mm, sd, b & w, Order No. TVK30-304, sale \$54.75, USAF) Shows how to diagnose the troubles in a half-wave rectifier when the symptoms are given by using a schematic. Explains the effect on the output voltage, peak inverse voltage, ripple amplitude, and frequency when any component in the circuit is open or shorted. (Kinescope)

Receiver Troubleshooting Procedure (21 min, 16mm, sd, b & w, 1965, Order No. TVK30-610, sale \$44.50, USAF) Explains general troubleshooting procedures for receivers, stage-by-stage and half-split methods of troubleshooting, and identifies basic test equipment. (Kinescope)

Series Resistive Circuits - Troubleshooting (35 min, 16mm, sd, b & w, Order No. TVK30-122, sale \$72.50, USAF) Discusses the process of locating faults or troubles in a circuit. First, shows how 'opens' are located by use of a voltmeter and ohmmeter, and emphasizes the symptoms. Then, discusses 'shorts,' points out the symptoms, and demonstrates the procedure for locating shorts with a voltmeter. (Kinescope)

Synchroscope (38 min, 16mm, sd, b & w, Order No. TVK30-618, sale \$78.50, USAF) Shows the block diagram of the vertical and horizontal channels of a typical synchroscope, and traces a signal through both channels. Uses the Tektronix 502A oscilloscope to demonstrate how the various controls affect signal presentation. (Kinescope)

Use of the Oscilloscope (21 min, 16mm, sd, b & w, Order No. TVK30-212A, sale \$44.50, USAF) Shows on an oscilloscope screen, various waveshapes of different frequencies, amplitudes, and phase relationships. Gives the general operation of the oscilloscope, and a demonstration of the uses of the oscilloscope to find frequency and voltage amplitude. (Kinescope)

SYSTEMS

AN/TPS-25 Ground Surveillance Radar, The (30 min, 16mm, sd, b & w, 1963, Order No. TF06-3251, sale \$62.50, USA) Shows features and surveillance capability, modes of operation, application in target identification, automatic search, automatic range, manual search, manual track audio, and manual track video.

AN/TPS-25 Ground Surveillance Radar, The - Moving Target Detection (21 min, 16mm, sd, b & w, 1962, Order No. TF06-3184, sale \$44.50, USA) Features audio returns picked up by AN/TPS-25 from walking personnel, light and heavy wheeled vehicle, vehicle dispersion maneuver, tracked vehicle, and tanks.

Electronics - Special Circuits and Devices Waveguides (18 min, 16mm, sd, b & w, Order No. MN08814A, sale \$38.50, USN) Illustrates the theory of energy propagation down a waveguide.

Radar Set AN/PPS-5 - Operation and Manpacking (25 min, 16mm, sd, color, 1968, Order No. TF11-3932, sale \$105.75, USA) Shows components, assembly, and emplacement of the set. Tells how it is operated to detect, locate, identify moving targets through visual and aural radar signals. Shows disassembly and manpacking the equipment for movement to next surveillance site.

Waveguides (29 min, 16mm, sd, b & w, Order No. TVK30-905, sale \$60.50, USAF) Explains the inadequacy of transmission lines, other than waveguides, at microwave frequencies. Stresses factors determining the power handling capability and the frequency handling capability of waveguides. Shows how a loop or probe is used to inject or extract energy from a waveguide. Explains the use of electromagnetic energy to show the operation of a waveguide. Shows how to ascertain the polarization of a waveguide. (Kinescope)

X-ray Inspection (21 min, 16mm, sd, b & w, 1944, Order No. OE173, sale \$37.00, rental \$7.50, USOE) Discusses the use of radiographs in industry, the generation of X-rays in the X-ray tube and the wave nature of X-rays. Explains how radiographs are made and how they are interpreted for defects in metal. From the *Engineering Series*.

THEORY

Amplifier Distortion (22 min, 16mm, sd, b & w, Order No. TVK30-325, sale \$46.25, USAF) Defines harmonics and square wave, and explains the frequency content of a square wave. Defines and explains what causes frequency, amplitude, and phase distortion. Identifies waveshapes of each type of distortion. (Kinescope)

Amplifier Principles (35 min, 16mm, sd, b & w, 1965, Order No. TVK30-414, sale \$72.50, USAF) Identifies and compares voltage and power amplifiers. Explains class A, AB, B, and C amplifiers as to their operating point on the characteristic curve as determined by their bias. Discusses a third method of classifying amplifiers, that of frequency. Compares the efficiency and fidelity of each class of amplifier, and gives the configuration of the three types of amplifier circuits. (Kinescope)

Amplifier Principles - Classification, Pt 1 (20 min, 16mm, sd, b & w, 1965, Order No. TVK30-323A, sale \$42.50, USAF) Discusses frequency response, voltage and current amplification, and classes of operation. Defines fidelity, selectivity, sensitivity, and efficiency. (Kinescope)

Amplifier Principles - Classification, Pt 2 (20 min, 16mm, sd, b & w, 1965, Order No. TVK30-323B, sale \$42.50, USAF) Identifies class A, AB, B and C amplifiers from their characteristic curves. Compares

their efficiency, fidelity, and demonstrates how bias and magnitude of input signal determine the class of operation. (Kinescope)

Amplifier Principles - Coupling, Pt 1 (27 min, 16mm, sd, b & w, 1965, Order No. TVK30-324A, sale \$56.50, USAF) Illustrates and explains direct coupling of amplifier stages. Gives the limitations and the main advantage of direct coupling. Discusses RC coupling, showing the schematic and explaining the purpose of the components. Shows and traces the path of an AC signal through the RC coupling network. (Kinescope)

Amplifier Principles - Coupling, Pt 2 (25 min, 16mm, sd, b & w, 1965, Order No. TVK30-324B, sale \$52.50, USAF) Shows the difference between RC and impedance coupling. Discusses the function of the components and the reason for impedance coupling having a high gain. Shows the schematic diagram and traces the AC signal through the circuit. Gives a schematic of a transformer coupled amplifier, explains the action of a transformer coupled amplifier, and traces the current flow through the circuit. Compares the frequency response curves for RC, transformer, and impedance coupled amplifiers, and determines the relative voltage gain and frequency response. (Kinescope)

Antenna Matching Devices (25 min, 16mm, sd, b & w, Order No. TVK30-603, sale \$52.50, USAF) Discusses feeding of the antenna and impedance matching--discusses feeding with both resonant lines and nonresonant lines. Explains feeding with the coaxial and the twisted pair line. Discusses delta matching, quarterwave stub matching and quarterwave matching transformer. (Kinescope)

Antennas (32 min, 16mm, sd, b & w, Order No. TVK30-601, sale \$66.50, USAF) Defines 'antenna,' and explains the physical construction and the electrical characteristics of a single dipole antenna. Describes half and quarter wave antennas. Defines induction fields and radiation fields. (Kinescope)

Artificial Transmission Lines (30 min, 16mm, sd, b & w, Order No. TVK30-901, sale \$62.50, USAF) Introduces the artificial transmission line as a device to delay a signal. Identifies the various signals used in ATL's. Develops the charge and discharge paths of the capacitors and inductors in a multi-section artificial transmission line, and concludes by showing how the artificial transmission line can be used as a pulse-forming network in a simple pulse modulator. (Kinescope)

Astable Multivibrator - TSTR (40 min, 16mm, sd, b & w, Order No. TVK30-809B, sale \$82.25, USAF) Deals with the transistor astable multivibrator. Gives the purpose of each of the various components in the circuit, and shows the construction of a time amplitude graph of significant waveforms. The waveforms are developed by taking the circuit, step by step, through a complete cycle of its operation. Following the construction of the graph, shows how frequency stability in the circuit can be maintained by returning the base resistor to vcc instead of to ground. Uses diagrams of the base waveforms to explain exactly how the frequency stability is maintained. (Kinescope)

Audio Amplifiers (28 min, 16mm, sd, b & w, Order No. TVK30-415, sale \$58.50, USAF) Shows how a schematic diagram of a single-ended audio amplifier is drawn. Demonstrates three methods of connecting audio amplifiers in cascade. Based on some symptoms of malfunctions, gives a list of possible troubles, with an analysis of how to locate the trouble. Explains why phase inversion occurs in a grounded cathode amplifier. Points out how the amount of bias will affect gain and fidelity in an audio amplifier circuit. (Kinescope)

Audio Amplifiers Principles, Pt 1 (21 min, 16mm, sd, b & w, Order No. TVK30-327A, sale \$44.50, USAF) Illustrates a schematic of an audio amplifier and identifies the biasing components. Traces the current flow through the circuit and compares the phase relationship

between the input and output signals. Shows how to calculate the gain of a single stage audio amplifier and give the effect different values of components have on gain. (Kinescope)

Audio Amplifier Principles, Pt 2 (12 min, 16mm, sd, b & w, Order No. TVK30-327B, sale \$26.75, USAF) Discusses and presents examples of various types of coupling used with audio amplifiers in cascade configuration. Explains the procedures for calculating power gain of a two stage amplifier. Lists symptoms of malfunctions which may occur in an audio amplifier circuit. Identifies and traces the most likely trouble for each on a schematic diagram. (Kinescope)

Bi-Stable Multivibrator - TSTR (40 min, 16mm, sd, b & w, Order No. TVK30-813, sale \$82.25, USAF) Reviews the basic action of the transistorized bi-stable multivibrator and outlines some of its uses. Emphasizes factors that identify the circuit and explains the purpose of each component. Plots characteristic waveshapes graphically and shows actual waveshapes. As the waveshapes are developed, the input to output frequency ratio is emphasized. (Kinescope)

Bi-Stable Multivibrator - VT (31 min, 16mm, sd, b & w, Order No. TVK30-812, sale \$64.25, USAF) Points out the identifying features of the circuit and stresses the purpose of each component. Explains the operation of the circuit as a graph of characteristic waveshapes is developed, and emphasizes the input-output frequency ratio. (Kinescope)

Biased Clampers (21 min, 16mm, sd, b & w, Order No. TVK30-540, sale \$44.50, USAF) Reviews basic diode clamper theory. Explains uses and basic characteristics of components and adds bias to the basic circuit. (Kinescope)

Blocking Oscillator (36 min, 16mm, sd, b & w, Order No. TVK30-804, sale \$74.50, USAF) Identifies the blocking oscillator and points out one use of the circuit. Explains the theory of operation, by use of the circuit, and shows significant waveshapes. Defines under, over, and critical damping and shows the proper amount of damping for the blocking oscillator. Shows waveshapes on an oscilloscope. (Kinescope)

Blocking Oscillator - TSTR (39 min, 16mm, sd, b & w, Order No. TVK30-806, sale \$80.25, USAF) Gives a detailed explanation of the circuit operation, stressing the purposes of each component. Shows output waveshapes, emphasizing phase relationships and the effect of varying circuit components on frequency, pulse width, and rest time. (Kinescope)

Blocking Oscillator - VT (36 min, 16mm, sd, b & w, Order No. TVK30-805, sale \$74.50, USAF) Discusses characteristics of rectangular pulses. States purpose of circuit components and explains operation of circuit. Makes detailed analysis of circuit waveshapes, defines three types of damping, and explains two methods of explaining frequency stability. (Kinescope)

Bridge Rectifier - Vacuum Tube (26 min, 16mm, sd, b & w, Order No. TVK30-402, sale \$54.75, USAF) Develops a knowledge of the vacuum tube bridge rectifier by comparing it to the solid state bridge rectifier. Circuit components are discussed and current flow is traced. Computed voltages include peak in, peak of the secondary, peak output, and peak inverse. Shows the most common symptoms of malfunction in the circuit. (Kinescope)

Capacitors (38 min, 16mm, sd, b & w, Order No. TVK30-209, sale \$78.50, USAF) Defines electrostatic field and dielectric. Describes air, paper, oil, electrolytic, and ceramic type capacitors as to their construction and general usage. Gives the unit for measuring capacitors, the 'Farad,' and examples of computing capacitance. Discusses the factors of dielectric, plate area, and distance between plates which affect the value of capacitance, and their effect on capacitance. Defines voltage ratings and explains the factors which affect the voltage ratings of capacitors. (Kinescope)

Capacitors - DC-AC Action (20 min, 16mm, sd, b & w, Order No. TVK30-210A, sale \$42.50, USAF) Describes the action of a capacitor when DC is applied and when AC is applied. Describes and illustrates the phase relationship between voltage and current in a capacitor when AC is applied. Compares the voltage and current relationship in an inductive and capacitive circuit. (Kinescope)

Capacitors - Reactance and Total Capacitance (26 min, 16mm, sd, b & w, Order No. TVK30-210B, sale \$54.75, USAF) Defines capacitive reactance and gives its symbol. Gives the formula and various examples for computing capacitive reactance when frequency and capacitance are known. Shows the method of solving for total capacitance in both series and parallel circuits. (Kinescope)

Cathode Follower (26 min, 16mm, sd, b & w, Order No. TVK30-434, sale \$54.75, USAF) Discusses the purpose of a cathode follower and describes its identifying features. Explains purpose of a resistor and capacitor in the plate circuit. Shows the phase relationship of the input and output signals, and problems to determine voltage and power gain are solved. Shows the frequency response and reasons for the wide frequency response. (Kinescope)

Cavity Resonators (28 min, 16mm, sd, b & w, Order No. TVK30-908, sale \$58.50, USAF) Defines a cavity resonator and shows the step-by-step development of a cylindrical cavity resonator. Explains how the physical dimensions and shape of the cavity determine the primary resonant frequency. Explains that energy in a cavity is comprised of electric fields and magnetic fields, and how to distinguish between the two. Using a model of a cavity resonator, demonstrates capacitive and inductive tuning of a cavity resonator. (Kinescope)

Characteristics of Crystals (22 min, 16mm, sd, b & w, Order No. TVK30-513, sale \$46.25, USAF) Stresses the importance of frequency stability and introduces the crystal controlled oscillator as a possible device used to obtain this stability. Explains the piezoelectric effect of a crystal, lists types of crystals having the piezoelectric effect, and points out the relationship between crystal thickness and frequency. Explains and shows graphically the various crystal cuts. Explains the Q of the crystal circuit and discusses both the physical dimensions and electrical characteristics of a typical crystal. (Kinescope)

Diode Tubes - Emission and Space Charge (21 min, 16mm, sd, b & w, Order No. TVK30-400, sale \$44.50, USAF) Defines different types of electron emission, explains emitter construction, analyzes and discusses space charge in a diode vacuum tube. Explains saturation in a diode tube and describes the effect of varying plate voltage and heater voltage on plate current. (Kinescope)

Diode, The - Principles and Applications (17 min, 16mm, sd, b & w, 1945, Order No. OE176, sale \$30.50, rental \$7.50, USOE) Demonstrates principles of electron flow across a gap, and basic features of the diode tube. Shows how electron flow is controlled in diode tubes, photoelectric cells, and X-ray tubes. Shows the diode as a rectifier. From the *Engineering Series. Electronics, No. 2*

Diodes and Rectifier Circuits - Full-wave Rectifiers (30 min, 16mm, sd, b & w, Order No. TVK30-235B, sale \$62.50, USAF) Shows a full-wave rectifier circuit, with parts labelled, direction of current flow through each part of the circuit indicated, and the output waveshape drawn. Shows and explains how to calculate the peak, and average voltage outputs--from this the ripple frequency is determined. Gives malfunctions, and from the symptom, shows how the probable trouble is identified. (Kinescope)

Diodes and Rectifier Circuits - Half-wave Rectifiers (32 min, 16mm, sd, b & w, Order No. TVK235A, sale \$66.50, USAF) Demonstrates the effect of half-wave rectification and then shows and discusses the schematic. Explains and measures the front-to-back ratio of a

semiconductor. Defines the term 'Load,' and shows how the direction of current flow through a semiconductor is determined. Gives an analysis of a signal applied to this circuit to explain why the output waveshape is pulsating DC. Defines and explains 'ripple frequency.' Finally, shows the method of calculating the peak, inverse peak, and average output voltage. (Kinescope)

Diodes and Rectifier Circuits - Metallic Rectifiers (19 min, 16mm, sd, b & w, Order No. TVK30-234, sale \$40.50, USAF) Identifies the types of metallic rectifiers. Explains the construction and rectifying action of selenium rectifiers, points out the voltage limitation of rectifiers and how 'stacking' provides some protection against damage due to excessive AC voltage. Explains 'inverse peak' voltage and 'breakdown.' (Kinescope)

Diodes and Rectifier Circuits - Solid State Diodes (27 min, 16mm, sd, b & w, Order No. TVK30-232, sale \$56.50, USAF) Explains the joining of Pform a solid state diode, and gives the types of diodes. Identifies the two elements of a junction diode as the 'emitter' and 'collector.' Gives the schematic symbol of a solid state diode. Discusses the operation of a junction diode. Explains forward and reverse bias, its effect, and the relationship of majority and minority carriers to N material. Shows current flow. Finally, explains the effect of excessive forward or reverse bias. (Kinescope)

Directional Antennas (40 min, 16mm, sd, b & w, Order No. TVK30-604, sale \$82.25, USAF) Develops graphically, and with animation the bi-directional radiation pattern of the end fire array. Shows how changing the spacing of the antenna elements, changing the number of elements, using the different types of elements, and changing the shape of the reflector affects antenna directivity. Lists the three types of elements and explains the results and purposes of each. (Kinescope)

Directional Coupler (24 min, 16mm, sd, b & w, Order No. TVK30-907, sale \$50.75, USAF) Explains the uses of a typical directional coupler, the physical construction, and the purpose of each component. Explains, by animation, how and why the directional coupler will detect incident energy but not reflected energy. Briefly explains the bi-directional coupler and how it detects both incident and reflected energy. (Kinescope)

Double Input Mixers (27 min, 16mm, sd, b & w, Order No. TVK30-621, sale \$56.50, USAF) Identifies the components of a pentagrid tube, explains the construction used in the mixer, and discusses the two inputs and connections to the elements of the tube. Explains the operation of the circuit and its adaptability to a receiver, and discusses symptoms of component failure. (Kinescope)

Duo-diode Limiter - TSTR (27 min, 16mm, sd, b & w, Order No. TVK30-505, sale \$56.50, USAF) Discusses the complete operation of the duo-diode limiter, and explains how the amount of bias affects the amount of limiting. By using a mock-up of the duo-diode limiter, demonstrates how the circuit operation is affected when a component is opened or shorted. Uses an oscilloscope to show the normal output of the circuit compared to the output when a component is defective. (Kinescope)

Electron, The - An Introduction (16 min, 16mm, sd, b & w, 1944, Order No. OE175, sale \$28.50, rental \$7.50, USOE) Describes the nature of electrons, electron flow in solid conductors, electromotive force, types and control of electron flow, electron flow and magnetic fields, and induced electron flow. From the *Engineering Series. Electronics, No. 1*

Electron Coupled Oscillator (37 min, 16mm, sd, b & w, Order No. TVK30-532, sale \$76.25, USAF) Shows the need for a buffer amplifier and its position in an oscillator circuit. Points out the purpose of each component and explains the operation of the electron coupled oscillator. Discusses frequency multiplication, with the results

obtained in the output when tuning the buffer amplifier. Discusses frequency stability and output power of the circuit. (Kinescope)

Electronic Voltage Regulators (28 min, 16mm, sd, b & w, Order No. TVK30-431, sale \$58.50, USAF) States the purpose of each component in an electronic voltage regulator. Explains the effect on the output voltage, and on the voltage across each component when the voltage adjust is varied, the load is varied, and the input voltage is varied. (Kinescope)

Electrostatic Cathode-ray Tube (38 min, 16mm, sd, b & w, Order No. TVK30-425, sale \$78.50, USAF) Gives a pictorial view of a cathode-ray tube, and identifies the three components necessary to form the tube. Labels the various parts and then states the function of the components. Shows the relative potential between the elements of the cathode-ray tube, and using the schematic, identifies the focus and intensity controls, and the vertical and horizontal deflection plates. (Kinescope)

Electrostatic Principles - Atomic Structure of Matter (30 min, 16mm, sd, b & w, Order No. TVK30-104, sale \$62.50, USAF) Defines matter and discusses the various states of matter. Defines elements, compounds, atoms, and molecules. Discusses and shows the physical relationship between atomic nucleus and protons, and orbital electrons. Defines 'valence electrons' and describes negative and positive ions. (Kinescope)

Electrostatic Principles - Charged Bodies (29 min, 16mm, sd, b & w, Order No. TVK30-106, sale \$60.50, USAF) Relates the effect of charged bodies to each other and lists the three possible electrical conditions of a charged body. States and discusses the law of attraction and repulsion between charged bodies. Describes the conduction and the induction process of charging an object, and then shows and discusses the distribution of charges on the surface of a sphere and irregularly shaped objects. Defines the term 'Coulomb' in terms of quantity of electrons. Finally, describes and illustrates an example of electrical force in the form of lightning and its effects. (Kinescope)

Electrostatic Principles - Conductors and Insulators (18 min, 16mm, sd, b & w, Order No. TVK30-105, sale \$38.50, USAF) Discusses the atomic construction of conductors and then defines 'conductor' in these terms. Follows with a discussion of current flow in a conductor. Identifies the materials which comprise conductors and lists the more important ones. In last part of lesson, discusses the materials which are insulators and gives a list of them. (Kinescope)

Feed Back (35 min, 16mm, sd, b & w, Order No. TVK30-508, sale \$72.50, USAF) Discusses the effects of regenerative and degenerative feedback on amplifier circuits. Lists three common methods of obtaining degenerative feedback, and shows input and output signals. Defines neutralization and discusses methods used to neutralize. (Kinescope)

Filters and Power Supplies (20 min, 16mm, sd, b & w, Order No. TVK30-301A, sale \$42.50, USAF) Explains use of filters in power supplies. Identifies L type choke and capacitor input filters and traces the charge and discharge paths within the filter networks. States the effect of the L type filter on output voltage and regulation. (Kinescope)

Filters and Power Supplies - Filter Action, Pt 1 (27 min, 16mm, sd, b & w, Order No. TVK30-300A, sale \$56.50, USAF) Defines a filter and demonstrates rectifier action on an oscilloscope. Illustrates the wave-shape of a rectifier containing both AC and DC. Demonstrates how a filter removes voltage variation and smooths it out by use of capacitors and inductors. Shows and explains the schematic of a capacitance filter and its operation and traces the current flow through the circuit. Discusses charge and discharge time of filter

capacitors. Gives the schematic of an inductor used as a filter, and explains its action. (Kinescope)

Filters and Power Supplies - Filter Action, Pt 2 (18 min, 16mm, sd, b & w, Order No. TVK30-300B, sale \$38.50, USAF) Shows the relationship of long and short time constants on filter operation. Defines RC time constants and explains the effect of varying the resistance or capacitance on the time constant. Discusses the effect of the time constant on the output voltage and ripple frequency. (Kinescope)

Filters and Power Supplies - 'Pi' Type Filters (27 min, 16mm, sd, b & w, Order No. TVK30-301B, sale \$56.50, USAF) Identifies 'Pi' type filters. Shows the components, their relationship for LC and RC 'Pi' type filters, and explains their purpose. Traces the charge and discharge paths of both RC and LC 'Pi' filters and gives the advantages and disadvantages of each. (Kinescope)

Filters and Power Supplies - Voltage Doublers (36 min, 16mm, sd, b & w, Order No. TVK30-307, sale \$74.50, USAF) Explains why a voltage doubler is called a doubler, and why it doubles the input voltage. Shows a schematic diagram and discusses the operation of the doubler circuit. Traces the charge and discharge paths, and shows how to calculate the peak output voltage and the ripple frequency. Gives a number of symptoms and explains the possible causes. (Kinescope)

Full-wave Magnetic Amplifier (40 min, 16mm, sd, b & w, Order No. TVK30-702, sale \$82.25, USAF) Explains the purpose of each part of the full-wave magnetic amplifier. Shows a simplified circuit and how a small change in DC bias can control a larger AC input. With the help of hysteresis loops, shows how the output of the circuit is developed with three different amounts of DC control bias. Shows a review of the material covered. (Kinescope)

Full-wave Rectifiers - Vacuum Tube (32 min, 16mm, sd, b & w, Order No. TVK30-403, sale \$66.50, USAF) Shows construction of a full-wave rectifier from a half-wave rectifier, the schematic of a full-wave rectifier, labels each component, traces the current through the circuit, and draws the output waveshape. Demonstrates how to calculate the peak, effective, average, and inverse peak voltages for a full-wave rectifier. Determines the ripple frequency from the input frequency. (Kinescope)

Gas Tubes (26 min, 16mm, sd, b & w, Order No. TVK30-429, sale \$54.75, USAF) Defines and compares 'hard' and 'soft' tubes. Shows the drawing of the schematic symbol of a gas diode and triode (thyatron) tube. Describes the construction of the thyatron grid, and states the effect it has in controlling plate current. Shows the schematic symbol of a neon glow tube, a VR (voltage regulator) tube, interprets the designation of a VR tube, and an analysis of a VR tube based on its characteristic curve. (Kinescope)

Grid Limiter (28 min, 16mm, sd, b & w, Order No. TVK30-538, sale \$58.50, USAF) Explains the purpose of each component in biased and unbiased grid limiters. Explains how limiting occurs and shows output waveshapes on an oscilloscope. Using a mock-up of a grid limiter and an oscilloscope, demonstrates the effect on limiting when bias is changed. (Kinescope)

Half-wave and Full-wave Rectifiers - Vacuum Tube (36 min, 16mm, sd, b & w, Order No. TVK30-402, sale \$74.50, USAF) Discusses circuit operation of half-wave and full-wave rectifiers using diode vacuum tubes. Shows how to calculate voltages, output frequency, and peak inverse voltage of each circuit. (Kinescope)

Inductance (31 min, 16mm, sd, b & w, Order No. TVK30-205, sale \$64.25, USAF) Discusses the physical factors of a coil which affect inductance values. Gives definitions and symbols of inductance and types of induction. Demonstrates electromagnetic principles and

relates these principles to the principles of induction. Solves for total inductance in series and parallel connections. (Kinescope)

Inductive Reactance (24 min, 16mm, sd, b & w, Order No. TVK30-206A, sale \$50.75, USAF) Describes and shows the symbols for audio, RF, and power chokes. Discusses the physical characteristics of chokes, and shows and explains the relationship between voltage and current in an inductor. Concludes with a discussion of the three types of power losses. (Kinescope)

Inductive Reactance (25 min, 16mm, sd, b & w, Order No. TVK30-206B, sale \$52.50, USAF) Discusses the methods of compensating for power losses in inductors. Defines 'inductive reactance.' Presents the formula for computing inductive reactance, and gives examples of solving for inductive reactance. Discusses how frequency and inductance affect inductive reactance. (Kinescope)

Intermittent Transistor Sawtooth Generator (34 min, 16mm, sd, b & w, Order No. TVK30-818, sale \$70.50, USAF) Develops a sawtooth generator and explains the operation of the circuit and waveforms, and the purpose of each component. (Kinescope)

Introduction to Discriminators (38 min, 16mm, sd, b & w, 1965, Order No. TVK30-608, sale \$78.50, USAF) Defines discrimination and lists the three basic requirements of a discriminator. Discusses the block diagram of a typical FM receiver, emphasizing the operation of a simple stagger tuned discriminator as the input frequency varies above and below the center frequency. (Kinescope)

Introduction to Heterodyning (35 min, 16mm, sd, b & w, Order No. TVK30-619, sale \$72.50, USAF) Defines the terms heterodyning, local oscillator, and mixer. Shows a mixed wave constructed graphically, and lists the frequencies produced by beating two electrical signals together. Uses tuning forks to demonstrate the heterodyning (or mixing) of two sound waves. Discusses the requirements of mixing and the methods of extracting the desired output frequency. (Kinescope)

Introduction to LC Oscillators (29 min, 16mm, sd, b & w, Order No. TVK30-536, sale \$60.50, USAF) Shows the action of a mechanical oscillator (pendulum)--defines an oscillation, determines the frequency and amplitude of the oscillations, and shows damping in the mechanical oscillator. Shows how damping can be prevented and how to change the frequency of oscillations. Defines the electronic oscillator, and uses a battery, a switch, coil, and a capacitor to show the flywheel effect in a tank. Using this circuit, develops the four requirements for an oscillator. Defines regenerative feedback, and shows how the loading effect on a tank is determined. (Kinescope)

Introduction to Multivibrators (38 min, 16mm, sd, b & w, Order No. TVK30-808, sale \$78.50, USAF) Defines a multivibrator, identifies the components in a multivibrator circuit and discusses applications of waveforms produced by the circuit. Demonstrates what happens when two amplifiers are RC coupled and how the output waveforms from a multivibrator are produced. Discusses the three classes of multivibrators--astable, monostable, and bistable, and shows how each class is determined. (Kinescope)

Introduction to Phantastron (23 min, 16mm, sd, b & w, Order No. TVK30-814, sale \$48.75, USAF) Points out the significant features of the phantastron circuit, discusses the purpose of each component, and then uses a block diagram to explain how the phantastron circuit works in target discrimination. Illustrates this, by showing pictorially, signals being picked up on a scope. Explains briefly how the phantastron is used to produce a linear sweep. (Kinescope)

Introduction to Reactance Tube Modulator (35 min, 16mm, sd, b & w, Order No. TVK30-605, sale \$72.50, USAF) Gives the purpose of the components in the reactance tube modulator and the operating characteristics of the circuit. Explains how the phase-shifting network

can cause the reactance tube to act both inductively and capacitively. (Kinescope)

Klystrons (34 min, 16mm, sd, b & w, Order No. TVK30-910, sale \$70.50, USAF) Shows the purpose of components and the operation of a two-cavity klystron. Traces a signal through the circuit and points out the differences between velocity and density modulation, showing how the input cavity alters the electron velocity and how the output cavity intercepts the energy from the bunched electrons. Shows the operation of the klystron as an amplifier and oscillator. (Kinescope)

Lissajous Figures (27 min, 16mm, sd, b & w, Order No. TVK30-212B, sale \$56.50, USAF) Shows Lissajous figures on an oscilloscope. Discusses them in terms of their general use of phase and frequency determinations, and demonstrates their use. (Kinescope)

Loaded Voltage Dividers (33 min, 16mm, sd, b & w, Order No. TVK30-133, sale \$68.25, USAF) Defines and illustrates 'load.' Then shows how to determine the voltage at each tap and the current through the loads and voltage dividers. Leads the student through a problem of calculating the voltage and current through a loaded voltage divider. Then shows how the direction of current flow and the polarity of the voltages across each resistor is determined. (Kinescope)

Magnetism, Pt B (34 min, 16mm, sd, b & w, Order No. TVK30-135B, sale \$70.50, USAF) Discusses magnetic terms--permeability, retentivity, flux, reluctance, residual magnetism, and magnetic shielding. Explains the characteristics of temporary and permanent magnets, concluding with a presentation of the basic shapes in which magnets are generally found. (Kinescope)

Magnetron (40 min, 16mm, sd, b & w, Order No. TVK30-913, sale \$82.25, USAF) Explains basically, how the traveling wave magnetron operates. Discusses the filters that exist in the magnetron and their effects on electron motion. Reviews the basic requirements of an oscillator, and shows how the magnetron meets these requirements. Points out factors that determine power and frequency, and emphasizes the effects of varying magnetic field

Monostable Multivibrator - TSTR (40 min, 16mm, sd, b & w, Order No. TVK30-811, sale \$82.25, USAF) Shows how the transistorized monostable multivibrator can be identified, and explains the purpose of each component. Discusses pulse width stabilization and explains factors that affect the output frequency. Shows characteristic waveshapes generated graphically and compares to actual waveshapes on an oscilloscope. During the demonstration, varies certain components and points out the effect. (Kinescope)

Monostable Multivibrator - VT (34 min, 16mm, sd, b & w, Order No. TVK30-810, sale \$70.50, USAF) Gives illustrations of the use of the monostable multivibrator, and explains the circuit operation, after having reviewed the purpose of each component. Illustrates the factors that determine output frequency by showing actual waveshapes on an oscilloscope. (Kinescope)

Parallel Resonant Circuits (29 min, 16mm, sd, b & w, Order No. TVK30-229A, sale \$60.50, USAF) Shows how to calculate for resonant frequency, and then make a comparison of the magnitude of current at and off resonance. This is followed by differentiating between tank and line currents at resonance. (Kinescope)

Parallel Resonant Circuits (24 min, 16mm, sd, b & w, Order No. TVK30-229B, sale \$50.75, USAF) Shows how to compare the impedance curves of parallel and series RCL circuits, and then compare the current curves. Shows how the line current of a parallel resonant circuit is compared to that of a series resonant circuit. Then, illustrates how to solve for 'Q' and how to determine the bandwidth and bandpass of a parallel resonant circuit. (Kinescope)

Pentode Crystal Oscillator (30 min, 16mm, sd, b & w, Order No. TVK30-514, sale \$62.50, USAF) Explains the importance of stability in the pentode crystal oscillator and discusses the importance of each component. Explains how correct amount and phase of feedback voltage is obtained. Demonstrates correct tuning procedure for most stable operation. (Kinescope)

Pentodes and Pentagrids (28 min, 16mm, sd, b & w, Order No. TVK30-419, sale \$58.50, USAF) Illustrates the schematic of a pentode tube and identifies the elements. Explains the purpose of the suppressor grid. Demonstrates the effect an AC signal has on the current and voltage through each branch of the circuit. Shows next the schematic of a pentagrid tube and explains the purpose of the second control grid and the additional screen grid. Discusses multi-unit tubes, explaining what they are and how they work, and identifies the parts of the tubes by using schematic diagrams. (Kinescope)

Phantastron (26 min, 16mm, sd, b & w, Order No. TVK30-815, sale \$54.75, USAF) Identifies phantastron circuit and states purpose of each component. Constructs a time amplitude graph during explanation of circuit operation. (Kinescope)

Phase Shift Oscillator - VT (34 min, 16mm, sd, b & w, Order No. TVK30-429, sale \$70.50, USAF) Describes the principle characteristics of the phase shift oscillator, with emphasis on its frequency range, stability, and economy. Explains the purpose and operation of each component within the circuit. Describes the class of operation as well as the minimum number of RC networks required to obtain the proper phase shift for sustained oscillations. Explains the effect of varying feedback as well as the frequency characteristics of the phase shift oscillator. (Kinescope)

Plate-coupled Multivibrator - VT (40 min, 16mm, sd, b & w, Order No. TVK30-809A, sale \$82.25, USAF) Discusses the purpose of each component in the plate-coupled multivibrator circuit, the construction of a waveform graph, and how to maintain stability. (Kinescope)

Plate Detector (30 min, 16mm, sd, b & w, Order No. TVK30-523, sale \$62.50, USAF) Discusses the purpose of each component in the plate detector circuit and explains how the circuit recovers the intelligence from a modulated wave. Discusses the advantages and limitations of the plate detector with reference to selectivity, sensitivity and signal handling ability. Using an actual plate detector trainer and a synchroscope, demonstrates output waveshapes from the plate detector. (Kinescope)

Power and Power Factor (34 min, 16mm, sd, b & w, Order No. TVK30-218, sale \$70.50, USAF) Explains the difference between true power and apparent power in a series RC or RL circuit. Then gives the power factor, with the equations for both true and apparent power. Explains a few examples of computing the power factor, true power, and apparent power. (Kinescope)

Power Supplies (20 min, 16mm, sd, b & w, Order No. TVK30-303, sale \$43.00, USAF) Solves for peak inverse voltage in half and full wave rectifier circuits using a capacitor input filter. Defines bleeder resistor and states the purpose of a permanent load. States which type of filter would be used for high voltage low current, moderate voltage low current, and moderate voltage at high current. (Kinescope)

Push-pull Amplifier (32 min, 16mm, sd, b & w, Order No. TVK30-328, sale \$66.50, USAF) Lists the requirements for push pull operation. Explains how bias affects class of operation and compares classes as to fidelity, harmonics, and efficiency. Discusses two methods of obtaining inputs to push-pull amplifiers (paraphase amplifiers and transformers) and compares these two devices. (Kinescope)

Push-pull Amplifier (30 min, 16mm, sd, b & w, Order No. TVK30-416, sale \$62.50, USAF) Illustrates the schematic of a power amplifier, the push-pull type, and discusses the purpose and identity of its components. Shows the output waveshape and signal flow, and compares the three classes of operation (A, B, and C) to fidelity, harmonics, and efficiency. Shows how the probable trouble is determined, based on the various symptoms. (Kinescope)

Radio Antennas - Creation and Behavior of Radio Waves (12 min, 16mm, sd, b & w, 1942, Order No. TF01-0474, sale \$26.25, USAF) Explains electric and magnetic fields, generation of electro-magnetic waves, behavior of radio waves in space, ground waves, reflection and refraction, the ionosphere, and causes of fading.

RC Transients (34 min, 16mm, sd, b & w, Order No. TVK30-801, sale \$70.50, USAF) Gives several illustrations showing the importance of timing in radar circuits. Gives definitions for--transient voltage, transient current, transient interval, and wave shape. Illustrates the meaning of each of these terms, using a simple circuit consisting of a battery, switch, resistor and capacitor. Demonstrates the effect on charge time when the value of capacitance and resistance is changed, and briefly explains the universal time constant chart. (Kinescope)

Reflex Klystron (40 min, 16mm, sd, b & w, Order No. TVK30-911, sale \$82.25, USAF) Uses a mock-up to give a pictorial view of the construction and components of the reflex klystron. Shows the operation of the tube, emphasizing the bunching and catching action of the cavity. Shows how repeller plate voltage can be changed to obtain the different modes of operation. Points out how the repeller plate is used as a fine tuning control and how a tuning strut or screw is used as a coarse frequency control. (Kinescope)

Resistors - Color Code (33 min, 16mm, sd, b & w, Order No. TVK30-109B, sale \$68.25, USAF) Gives the purpose of color coding resistors, then explains and shows the relationship of the colors on a resistor. Gives the color code and describes the value indicated by each color. Explains how to use the color code chart and how to read the color code on a resistor, and shows numerous examples. (Kinescope)

Resistors - Construction (21 min, 16mm, sd, b & w, Order No. TVK30-109A, sale \$44.50, USAF) States the purpose of resistors and gives the types. The construction and uses of fixed, adjustable, and variable resistors is discussed and demonstrated. Explains which materials are most commonly used in the construction of resistors. Describes and shows the schematic symbols for fixed and variable resistors. (Kinescope)

Resonant Lines (30 min, 16mm, sd, b & w, Order No. TVK30-614, sale \$62.50, USAF) Explains open and shorted resonant lines. Develops and explains standing waves through use of animation. Shows and explains the phase relationship of the incident and reflected waves of current and voltage. Shows graphically the location of the loops and nodes of the standing wave of current and voltage, and explains the electrical length between the loops and nodes. (Kinescope)

Resonant Sections and Matching Devices (25 min, 16mm, sd, b & w, Order No. TVK30-616, sale \$52.50, USAF) Discusses the uses of resonant sections of transmission lines. Through the use of diagrams and pictorial representations, defines and explains the operation and gives applications of the following devices--even harmonic filters (series and shunt), metallic insulators, quarter wave matching transformer, half wave matching transformer, line balance converter (bazooka), and capacitive coupled joint. (Kinescope)

RF and IF Amplifiers, Pt 1 (21 min, 16mm, sd, b & w, Order No. TVK30-506, sale \$44.50, USAF) Discusses the single tuned RF amplifiers using capacitive and transformer coupling. Explains circuit operation with respect to a parallel resonant tank in the plate circuit

of the capacitance coupled amplifier. Explains circuit operation with respect to a series resonant tank in the grid circuit of the transformer coupled amplifier's second stage. Plots a typical response curve of an amplifier, and requires the students to determine the bandwidth. Prior to this lesson, the student should have a good working knowledge of series and parallel resonant circuits and know the meaning of the following terms--frequency response, bandwidth, selectivity, half power point, and sensitivity. (Kinescope)

Rheostats and Potentiometers (23 min, 16mm, sd, b & w, Order No. TVK30-124, sale \$48.75, USAF) Defines a rheostat and a potentiometer. Discusses the characteristics of a rheostat and how it can be used. Gives the characteristics and use of a potentiometer. Concludes with a demonstration of how each of these units are connected in a circuit. (Kinescope)

RL Transients (13 min, 16mm, sd, b & w, Order No. TVK30-802, sale \$28.50, USAF) Determines the values of voltage and current at various time intervals in a series RL circuit with a DC voltage applied. Shows time constant chart. (Kinescope)

Saturable Reactors (23 min, 16mm, sd, b & w, Order No. TVK30-701, sale \$48.75, USAF) Develops a hysteresis loop through the use of an applied AC sine wave to a coil containing a core material. The production includes the core's control on the loop shape, the effect on switching action, and how the loop is associated with the operation of a saturable reactor. A very basic saturable reactor is used to show how saturation of the reactor core controls the voltage applied to a series load. (Kinescope)

Series RC, RL, and RCL Circuits (37 min, 16mm, sd, b & w, Order No. TVK30-214, sale \$76.25, USAF) Explains what a vector quantity is. Demonstrates the manner in which reactive circuits differ from resistive circuits, and explains why this difference exists and how it affects such factors as impedance and phase angle. (Kinescope)

Series RC, RL, and RCL Circuits Trigonometric Solutions (40 min, 16mm, sd, b & w, Order No. TVK30-216, sale \$82.25, USAF) Explains the method of solving for the phase angle and impedance by the use of trigonometric functions. Shows use of trigonometric tables. Gives problems requiring Z to be determined when Xc or Xl is known. (Kinescope)

Series RCL Quality and Selectivity (28 min, 16mm, sd, b & w, Order No. TVK30-221, sale \$58.50, USAF) Explains quality factor and develops formula. Determines relationship between reactance and resistance in series RCL circuits. Explains selectivity, band pass and bandwidth and develops a chart showing how each is related to the other. Reviews all of series RCL circuits. (Kinescope)

Series Resonant Circuits (31 min, 16mm, sd, b & w, Order No. TVK30-220, sale \$64.25, USAF) Calculates the resonant frequency of a series RCL circuit, compares the magnitude of current and impedance, and vectorially analyzes the series RCL circuit as capacitive, inductive, or resistive. (Kinescope)

Shock Excited Oscillator (36 min, 16mm, sd, b & w, Order No. TVK30-807, sale \$74.50, USAF) Gives the purpose of each component in the shock excited oscillator circuit, explains the circuit operation, and shows the input and output waveshapes graphically. Using a trainer, explains how L and C of the duration of the input gate determine the frequency and duration of the output. (Kinescope)

Shunt Hartley Oscillator - VT (28 min, 16mm, sd, b & w, 1965, Order No. TVK30-518, sale \$58.50, USAF) Shows the shunt hartley oscillator circuit, pointing out the identifying features and explaining the purpose of each component. Explains circuit operation through the use of an animated graphic. Explains the use of shunt hartley oscillators in high power circuits and lists the symptoms that would appear when each component is opened and shorted. (Kinescope)

Simple Voltage Regulators (22 min, 16mm, sd, b & w, Order No. TVK30-430, sale \$46.25, USAF) Identifies the purpose of each component in a simple voltage regulator circuit and shows the current paths. Explains the circuit operation when the input voltage and the load are changed. Discusses the effect of placing VR tubes in the series. (Kinescope)

Solid State Principles (26 min, 16mm, sd, b & w, Order No. TVK30-231, sale \$54.75, USAF) Identifies the relative energy level of electrons, and identifies chemically active and chemically stable atoms. Defines 'Electron Pair Band' (covalent band) and lattice structure, and differentiates between conductor, semiconductor and insulator. Describes the effect of donor and acceptor atoms on chemically stable lattice structures, and defines and identifies 'P' and 'N' type materials. (Kinescope)

Special Purpose Tubes - Remote Cutoff and Beam Power Tubes (18 min, 16mm, sd, b & w, Order No. TVK30-422, sale \$38.50, USAF) Discusses the distinguishing characteristics, operation, and advantages of remote cutoff tubes. Compares remote and sharp cutoff tubes, and discusses the operation of a sharp cutoff tube. Gives the purpose of remote cutoff tubes, discusses the beam power tube construction and how the beam forming plates overcome disadvantage of secondary emission, thereby making it an ideal tube for power amplification. (Kinescope)

Thyratron Sawtooth Generator (25 min, 16mm, sd, b & w, Order No. TVK30-816, sale \$52.50, USAF) Shows an electron beam moving across the face of an oscilloscope, and points out that the thyratron sawtooth generator produces the waveshapes required to move the electron beam. Gives a detailed analysis of the circuit operation and constructs a time-amplitude graph of the sawtooth waves, explaining its physical and electrical length. (Kinescope)

Transistor Tetrodes and Field Effect Transistors (14 min, 16mm, sd, b & w, Order No. TVK30-321A, sale \$30.75, USAF) Introduces transistor tetrodes and discusses their fundamental characteristics and elements. Introduces the field effect transistor and covers its basic characteristics. (Kinescope)

Transistor Triode Characteristics (26 min, 16mm, sd, b & w, Order No. TVK30-319, sale \$54.75, USAF) Illustrates how to draw load lines from characteristic curves for CE and CB configurations. Defines 'alpha' and 'beta' as they pertain to transistors. Shows how to solve for actual current gain, voltage gain, and power gain for CB configuration, using characteristic curves and load lines. (Kinescope)

Transistor Triodes (7 min, 16mm, sd, b & w, Order No. TVK30-309, sale \$15.00, USAF) Explains derivation of the word 'Transistor', identifies the elements of a PNP and an NPN transistor, by using block diagrams. Discusses a method of remembering the transistor element. (Kinescope)

Transistor Triodes and Special Purpose Devices - Bias I (27 min, 16mm, sd, b & w, Order No. TVK30-310, sale \$56.50, USAF) Discusses and illustrates forward and reverse bias of a PN junction and requires the student to draw a block diagram with forward bias and one with reverse bias. Shows how an NPN transistor is forward and reverse biased for efficient operation. Explains and illustrates the reason for forward and reverse biasing the emitter and collector respectively, and discusses the effect of improper biasing. (Kinescope)

Transistor Triodes and Special Purpose Devices - Bias II (27 min, 16mm, sd, b & w, Order No. TVK30-312, sale \$56.50, USAF) Discusses the depletion area at the junctions of a transistor, followed by an explanation of the effect of forward and reverse biasing on the majority and minority carriers in both P shows the schematic symbol for NPN and PNP transistors and explains the reason for forward-biasing the emitter and reverse-biasing the collector. (Kinescope)

Transistor Triodes and Special Purpose Devices - Common-base Configurations (29 min, 16mm, sd, b & w, Order No. TVK30-316, sale \$60.50, USAF) Shows and discusses the schematic representation of a common-base transistor circuit, giving the identifying characteristics for a PNP and an NPN type. Explains the purpose of each component. Discusses the effect of the input signal on the current, voltage in the circuit, polarity of the output signal, and demonstration of the phase relationship between the input and output signal.

Transistor Triodes and Special Purpose Devices - Common-collector Configuration (16 min, 16mm, sd, b & w, Order No. TVK30-318, sale \$34.25, USAF) Provides information designed to enable the student to identify and state the purpose of various elements in NPN and PNP transistor common collector circuits. Draws schematic diagrams of the circuits, traces the AC signal paths through them, and states the polarity of the DC reference output from each. (Kinescope)

Transistor Triodes and Special Purpose Devices - Common-emitter Configuration (40 min, 16mm, sd, b & w, Order No. TVK30-317, sale \$82.25, USAF) Shows a schematic representation of the common-emitter transistor configuration and explains how an input signal affects the current and voltage in the circuit. Discusses the purpose of each component. Gives the polarity of the output for both an NPN and a PNP type circuit, and discusses the phase relationship between the input and output voltages. (Kinescope)

Transistor Triodes and Special Purpose Devices - Operation (21 min, 16mm, sd, b & w, Order No. TVK30-314, sale \$44.50, USAF) Illustrates the three configurations of transistor circuits (common base, common emitter, and common collector) and traces the current flow. Explains the amount of current in each part of a transistor circuit and the effect of an increase in total current in a transistor circuit. Discusses the purpose of a 'swamping' resistor, and gives the various symbols which are used to identify current and voltage values. (Kinescope)

Transistorized Hartley Oscillator (40 min, 16mm, sd, b & w, 1965, Order No. TVK30-519, sale \$82.25, USAF) Discusses the transistorized version of both the series and shunt Hartley oscillators. Compares the two while emphasizing the following points--circuit identification, purpose of each component, direct current paths, feedback paths and the effects of varying feedback. Also discusses the effect of a buffer amplifier on the oscillator's output. (Kinescope)

Transistorized Regulated Power Supply (24 min, 16mm, sd, b & w, Order No. TVK30-100, sale \$50.75, USAF) Explains the advantages of a regulated supply, how regulation is accomplished using simplified schematics, and the purpose of each control, as well as suggested operating procedure. (Kinescope)

Transistors, Pt 1, Introduction (17 min, 16mm, sd, b & w, 1961, Order No. TF11-3046, sale \$40.00, USA) Explains elements and operations of NPN and PNP transistors. Shows application and operation of high, medium, and low powered transistors and describes their capabilities. (Limited to professional groups)

Transistors, Pt 2, Semiconductors and Semiconductor Diodes (27 min, 16mm, sd, b & w, 1962, Order No. TF11-3047, sale \$56.50, USA) Illustrates composition and properties of crystal diodes and depicts semiconductor materials used in their manufacture. (Limited to professional groups)

Transistors, Pt 3, NPN Transistors (23 min, 16mm, sd, b & w, 1963, Order No. TF11-3048, sale \$52.00, USA) Depicts construction and properties of NPN transistors. Shows how they function in basic transistor circuits and explains how current flow and amplification are achieved. (Limited to professional groups)

Transistors, Pt 4, PNP Transistors (26 min, 16mm, sd, b & w, 1962, Order No. TF11-3049, sale \$59.75, USA) Explains the characteristics of PNP transistors and compares their capabilities and functioning to NPN types. Explains flow of current through the circuit. (Limited to professional groups)

Transistors, Pt 5, Transistor Amplifier and Oscillator Circuits (30 min, 16mm, sd, b & w, 1962, Order No. TF11-3050, sale \$68.75, USA) Explains and illustrates features and operations of class A and B and tuned amplifier circuits and oscillator circuits. Includes the Armstrong and Hartley types. (Limited to professional groups)

Transistors, Pt 7, Troubleshooting Transistor Circuits (31 min, 16mm, sd, b & w, 1962, Order No. TF11-3052, sale \$71.00, USA) Shows how to check, search, localize and isolate malfunctions. Also covers safety measures. (Limited to professional groups)

Transistors, Pt 8, Repairing Transistor Circuits (28 min, 16mm, sd, b & w, 1962, Order No. TF11-3053, sale \$64.50, USA) Presents equipment and techniques for repairing soldered joints, cracks and delaminated conductors. Shows how to test circuits and remove and replace lead and flush-mounted circuit components. (Limited to professional groups)

Transmission Lines (20 min, 16mm, sd, b & w, Order No. TVK30-613, sale \$42.50, USAF) Discusses the types of transmission lines such as--the open two-wire line, the twin lead line, the twisted pair, flexible coaxial cable, and rigid coaxial line. Explains the major types of losses occurring in transmission lines--radiation, dielectric and copper, (including skin effect) losses, and the particular loss or losses associated with each type of line. (Kinescope)

Traveling Wave Tube (24 min, 16mm, sd, b & w, Order No. TVK30-912, sale \$50.75, USAF) Points out some of the uses of the traveling wave tube. Explains purpose of each component and explains the basic operation of the tube as an amplifier. Discusses advantages and limitations of the tube. (Kinescope)

Triode, The - Amplification (14 min, 16mm, sd, b & w, 1945, Order No. OE177, sale \$25.50, rental \$7.50, USOE) Gives principles of the diode and triode, electric fields, a triode amplifier circuit, amplification of DC voltage changes, alternating voltages, distortion, and amplification of audio frequency signals.
From the *Engineering Series*. Electronics, No. 3

Triode Limiters (24 min, 16mm, sd, b & w, Order No. TVK30-504, sale \$50.75, USAF) Discusses how limiting is accomplished using a triode tube. Describes the characteristics and operation of the cut-off limiter, the saturation limiter, and the over-driven limiter, and explains the effect on limiting when bias is changed. (Kinescope)

Triode Vacuum Tubes - Construction and Characteristics (16 min, 16mm, sd, b & w, Order No. TVK30-407, sale \$34.25, USAF) Presents the theory of operation of the triode amplifier, using electrostatic fields as a means of explaining electron movement when the grid potential ranges from a negative to a positive state. Demonstrates the effect on plate current and voltage when the grid has a small AC signal on it. (Kinescope)

Tuned Base Oscillator (30 min, 16mm, sd, b & w, Order No. TVK30-515, sale \$62.50, USAF) Compares the tuned base oscillator circuit and the tuned grid oscillator. Points out how each of the four requirements for oscillation is met in the tuned base oscillator. Explains the checks for oscillation and the symptoms which would occur for each component failure. (Kinescope)

Tuned Plate Oscillator (19 min, 16mm, sd, b & w, 1965, Order No. TVK30-516, sale \$40.50, USAF) Develops and explains the major differences between an RF and an audio oscillator. Shows the purpose of each component in the schematic diagram. Circuit analysis points out the values of circuit components in an RF oscillator, the

feedback path, and three methods of checking for oscillations. (Kinescope)

Unijunction Sawtooth Generator (29 min, 16mm, sd, b & w, Order No. TVK30-817, sale \$60.50, USAF) Explains the physical and electrical operating characteristics of the unijunction transistor, and identifies the sawtooth generator circuit using a unijunction transistor, and explains the purpose of each component. Explains the circuit operation in detail, showing current flow through the use of animation. Constructs time-amplitude graphs of significant waveforms and explains the terms 'physical length' and 'electrical length.' (Kinescope)

Unijunction Transistor and Tunnel Diode (9 min, 16mm, sd, b & w, Order No. TVK30-321B, sale \$19.00, USAF) Introduces the unijunction transistor and tunnel diode. Discusses their fundamental characteristics and identifies component parts. (Kinescope)

Uses of Resonant Sections (22 min, 16mm, sd, b & w, Order No. TVK30-617, sale \$46.25, USAF) Shows the use of resonant sections of transmission lines as circuit elements. Develops the lecher line oscillator, and explains how a shorted quarter wave-length section of transmission line can be used as a parallel resonant circuit. (Kinescope)

Vacuum Tubes - Bias in Triodes (18 min, 16mm, sd, b & w, Order No. TVK30-408, sale \$38.50, USAF) Explains the term 'bias'. Discusses fixed bias and shows the schematic of a fixed bias network. Identifies the components and gives their purpose. Traces an AC signal through the circuit. (Kinescope)

Vacuum Tubes - Triodes - Cathode Self Bias (17 min, 16mm, sd, b & w, Order No. TVK30-409, sale \$36.75, USAF) Defines 'cathode self-bias,' and shows an amplifier circuit schematic with cathode-bias. Identifies the components, gives the function of the components, traces the charge and discharge paths of Ck, and defines 'degeneration.' (Kinescope)

Vacuum Tubes - Triodes - Grid Leak Bias (27 min, 16mm, sd, b & w, Order No. TVK30-410, sale \$56.50, USAF) Shows a grid-leak bias network, identifies the components which comprise the circuit, and explains how the network functions. Traces the charge and discharge paths of Cg and the AC signal through the circuit. States the

purpose of Rg and discusses the four factors which determine the amount of grid-leak bias. (Kinescope)

Video Amplifier (25 min, 16mm, sd, b & w, Order No. TVK30-329, sale \$52.50, USAF) Describes the frequency range and states the function of each component of the video amplifier. Explains methods used to obtain low and high frequency response. (Kinescope)

Video Amplifiers (29 min, 16mm, sd, b & w, Order No. TVK30-421, sale \$60.50, USAF) Explains why a pentode tube is used in video amplifiers rather than triode tubes. Shows the schematic of a video amplifier, and identifies and gives the purpose of each of the components. Lists and discusses the various troubles which certain symptoms indicate. (Kinescope)

Voltage Regulators (15 min, 16mm, sd, b & w, Order No. TVK30-331, sale \$32.50, USAF) Discusses the operation, use, representation, and characteristic curve of zener diodes. Shows the schematic of a circuit with a zener diode, and discusses its operation or function in the circuit. (Kinescope)

Waveguide Plumbing (26 min, 16mm, sd, b & w, Order No. TVK30-906, sale \$54.75, USAF) covers the 90 degree 'E' and 'H' bend in rectangular waveguides by explaining the effect on the fields within the guide. Discusses twists, flexible waveguide, and improper bends. Explains the choke and rotating joint both physically and electrically, and the actions of the feedhorn and dummy load, by means of mockup and cellomatic visuals. Shows actual bends, twists, choke joints, flexible waveguide, feedhorn and dummy load. (kinescope)

Waveshaping Networks (34 min, 16mm, sd, b & w, Order No. TVK30-803, sale \$70.50, USAF) Shows how to determine the amount of capacitor charge applied to an RC network. Discusses differentiated and integrated waves. Gives definitions for short, medium and long time constant circuits, and shows how the waveforms for each circuit can be recognized. (Kinescope)

Wein Bridge Oscillator (21 min, 16mm, sd, b & w, Order No. TVK30-534, sale \$44.50, USAF) Explains the theory of operation of the Wein bridge vacuum tube oscillator and states the purpose of each component. Explains the action when the size of the frequency determining components are changed and gives the formula for finding the operating frequency. (Kinescope)

HEALTH AND MEDICAL

ADDICTION

Anything for Kicks (Rev Ed) (8 min, 16mm, sd, color, 1969, sale \$44.75, USSRS) Depicts in film-a-graph style the problem of youthful drug addicts.

Are Drugs the Answer (20 min, 16mm, sd, color, 1970, sale \$96.00, USNIMH) Discusses the nature and harmful effects of various kinds of drugs, such as the psychedelics, speed and marijuana. Dr Alan Cohen, a former disciple of Timothy Leary and now a crusader against drug abuse, tells why he turned away from the drug scene.

Current Trends in the Therapy for Narcotic Addiction (29 min, 16mm, sd, b & w, 1970, Order No. T-1704, sale \$60.50, USNMAC) Points out Dr Casriel's theory that narcotics addiction is basically withdrawal behind a chemical as a response to stress, a condition requiring intensive psychotherapy. Dr Jaffe questions the psychiatric approach and discusses the methadone treatment of addicts in Chicago. (Kinescope)

From the *Concepts and Controversies in Modern Medicine* Series.

Day in the Death of Donny B, A (14 min, 16mm, sd, b & w, 1970, sale \$32.50, USNIMH) Dramatizes narcotic addiction among youths in the urban ghetto.

Hangup, The (32 min, 16mm, sd, color, 1968, Order No. SFP1762, sale \$129.00, USAF) Shows effects of unauthorized use of drugs including barbiturates, amphetamines, marijuana and LSD. Depicts a 'bad trip' experience from using lsd and shows how its sudden recurrence can jeopardize a vital mission and lives of others. Also points out how a serviceman's career is permanently damaged because of a conviction on narcotics charges.

Here's Help (29 min, 16mm, sd, color, 1970, sale \$115.50, USNIMH) Summarizes treatment and rehabilitation programs for drug abusers.

LSD (29 min, 16mm, sd, color, 1967, Order No. MN10507B, sale \$113.50, USN) A short version of LSD (MN10507A). Outlines how LSD was discovered, the dangers of its misuse, and its effects on the brain and body. Features Walter Miner, Lcdr, Medical Corps, USN.

LSD (37 min, 16mm, sd, color, 1967, Order No. MN10507A, sale \$149.00, USN) Outlines how LSD was discovered, the dangers of its misuse, and its effects on the brain and body. Features Walter Miner, Lcdr, Medical Corps, USN.

Marijuana, LSD and the Mind - A Dilemma for Medicine and Society (90 min, 16mm, sd, b & w, Order No. T-1878-X, sale \$187.00, USNMAC) Analyzes psychopharmacology by a panel discussion of drugs from different standpoints, including-who takes them and why, and some philosophical observations, perturbations, and possible therapeutic uses. Points out that even those drugs such as marijuana and LSD are poorly understood and widely feared. States that problems of research and control will increase, as will public concern. Panel includes Joseph H Brenner, MD, and Alfred Koumans, MD, Massachusetts Institute of Technology, Robert Coles, MD, Harvard University Health Service, and Nicholas Malleson, MD, University of London, London, England. (Kinescope)

Narcotic Deaths, Pt 1 (27 min, 16mm, sd, b & w, Order No. T-1898A, sale \$56.50, USNMAC) Describes the types of narcotic deaths encountered, types of drugs used, and symptomatic changes found

externally as well as internally. Discusses and demonstrates the implements involved in using narcotic drugs and shows slides of victims of narcotic overdosage and the effects of narcotic intravenous injections on veins and subcutaneous tissue. (Kinescope)

Restricted to professional audiences--Residents, other medical professional personnel, and research and social workers in the field of medicine. Cleared for use on educational closed-circuit television only.

Narcotic Deaths, Pt 2 (21 min, 16mm, sd, b & w, Order No. T-1898B, sale \$44.50, USNMAC) Describes the types of narcotic deaths encountered, types of drugs used, and symptomatic changes found externally as well as internally. Discusses and demonstrates the implements involved in using narcotic drugs and shows slides of victims of narcotic overdosage and the effects of narcotic intravenous injections on veins and subcutaneous tissue. (Kinescope)

Restricted to professional audiences--residents, other medical professional personnel, and research and social workers in the field of medicine. Cleared for use on educational closed-circuit television only.

ANATOMY

Dissection of the Block of Organs - Dissection Of Adrenals, Aorta, and Inferior... (21 min, 16mm, sd, color, Order No. M-2004-X, sale \$86.00, USNMAC) Full title - Dissection of the Block of Organs - Dissection of Adrenals, Aorta, and Inferior Vena Cava - Separation into Thoracic, Abdominal, and Pelvic Regions.

From the *Autopsy Dissection Technique A Cinematographic Atlas* Series.

Dissection of the Diaphragm, Pericardium Aorta, and Lungs (11 min, 16mm, sd, color, Order No. M-2008-X, sale \$44.75, USNMAC)

From the *Autopsy Dissection Technique A Cinematographic Atlas* Series.

Dissection of the Esophagus, Stomach, Liver, Spleen, Pancreas, and Biliary System (16 min, 16mm, sd, color, Order No. M-2009-X, sale \$66.00, USNMAC)

From the *Autopsy Dissection Technique A Cinematographic Atlas* Series.

Dissection of the Female Pelvic Organs and Kidneys (14 min, 16mm, sd, color, Order No. M-2011-X, sale \$58.25, USNMAC)

From the *Autopsy Dissection Technique A Cinematographic Atlas* Series.

Dissection of the Heart (12 min, 16mm, sd, color, Order No. M-2007-X, sale \$50.50, USNMAC)

From the *Autopsy Dissection Technique A Cinematographic Atlas* Series.

Dissection of the Male Pelvic Organs and Kidneys (13 min, 16mm, sd, color, Order No. M-2010-X, sale \$54.50, USNMAC)

From the *Autopsy Dissection Technique A Cinematographic Atlas* Series.

Dissection of the Parathyroid and Thyroid Glands (10 min, 16mm, sd, color, Order No. M-2005-X, sale \$41.00, USNMAC)

From the *Autopsy Dissection Technique A Cinematographic Atlas* Series.

Dissection of the Thoracic Duct (10 min, 16mm, sd, color, Order No. M-2006-X, sale \$41.00, USNMAC)

From the *Autopsy Dissection Technique A Cinematographic Atlas* Series.

Ears, The (18 min, 16mm, sd, color, Order No. M-1719, sale \$74.25, USNMAC) Examines the auricles, external auditory canals, and tympanic membranes.

Eyes and Ears of the Medical World, The (90 min, 16mm, sd, b & w, Order No. T-1869-X, sale \$187.25, USNMAC) Describes menieres disease and positional vertigo of the benign paroxysmal as common types of vertigo of the inner ear. Explains that both are episodic and relatively easy to diagnose. Encourages diagnosis to avoid unnecessary and useless treatment. Discusses manifestations, diagnostic criteria, and therapy. Participants in the discussion include Doctors William H Baker, David G Cogan, Harold F Schuknecht, Shirley H Wray, and Earle M Chapman of the Harvard Medical School. (Kinescope)

Nose, The (14 min, 16mm, sd, color, Order No. M-1718, sale \$58.25, USNMAC) Presents an appraisal of the external appearance, vestibule, mucosa, nasal septum, and structures of the lateral wall.

BACTERIOLOGY, GENERAL

Isolation and Identification of Enteric Bacteria (25 min, 16mm, sd, b & w, Order No. T-1496, sale \$52.50, USNMAC) Provides a review of enteric bacteria. Shows a grouping of pathogenic enteric bacteria, lactose fermentation, selective plating media, acid base indicators, growth and reactions on selected media, MAC, (SS), triple sugar iron agar reactions, differentiations, escherichia coli, klebsiella pneumoniae, serratia marcescens, providence, and citrobacter. (Kinescope)

From the *Clinical Pathology Series*.

Life History of the Rocky Mountain Wood Tick (18 min, 16mm, sd, color, 1969, sale \$74.25, USNMAC) Depicts the two-year life-cycle of the Rocky Mountain wood tick. Shows the biology of the various stages-adults, eggs, larvae, and nymphs, and includes such features as adaptability to environment, host requirements, and natural controlling factors.

BIOLOGY AND ZOOLOGY

Biology and Control of Domestic Mosquitoes (Spanish) (22 min, 16mm, sd, color, 1960, Order No. M-0357-SP, sale \$89.75, USPHS) Stresses the need for local health departments, civic and service groups and individuals to co-operate with the United States Public Health Service in the control of domestic mosquitoes.

Insects as Carriers of Disease (10 min, 16mm, sd, color, 1945, sale \$41.00, rental \$7.50, USDO:AA) Shows the fly, mosquito and louse as carriers of dysentery, malaria and typhus. Illustrates how these insects spread disease and what should be done to get rid of them. An animated film.

From the *Health For the Americas Series*.

Story of Rocky Mountain Spotted Fever, The (29 min, 16mm, sd, color, 1969, Order No. M-1715-X, sale \$117.50, USNMAC) Shows the tick life-cycle, rodent poisoning, cattle dipping and tick parasite, and liberation. Demonstrates the discovery of the yolk sac vaccine and the advent of the therapeutic antibiotics. Shows epidemiologic studies undertaken, diagnostic services rendered to physicians, and recommendations for protection of exposed people.

Ticks and Tick-borne Diseases (Spanish) (19 min, 16mm, sd, color, Order No. M-0346-SP, sale \$78.00, USNMAC) Discusses ticks and their importance in transmitting diseases, the biology of ticks, and how to control them.

Urban Rat Surveys (10 min, 16mm, sd, color, Order No. M-1700, sale \$41.00, USNMAC) Presents rat survey techniques.

Winged Scourge (10 min, 16mm, sd, color, 1943, sale \$41.00, rental \$7.50, USIA) Uses animation to trace the life-cycle of the malaria-carrying anopheles mosquito. Demonstrates various means for combating the mosquito.

From the *Health For the Americas Series*.

CANCER

Cancer Chemotherapy - Practical Considerations, Pt 1 (40 min, 16mm, sd, b & w, Order No. T-1832-X, sale \$77.50, USNMAC) Theorizes that cancer chemotherapeutic agents are capable of palliating symptoms and prolonging lifespan in patients with an increasing number of cancer types. Discussed by Sidney Farber, MD, Melvin Tefft, MD, Harvard Medical School, and Thomas C Hall, MD, Children's Cancer Research Foundation. (Kinescope)

Cancer Chemotherapy - Practical Considerations, Pt 2 (40 min, 16mm, sd, b & w, Order No. T-1833-X, sale \$77.50, USNMAC) Explains that chemotherapy, though not a cure, can effect a significant prolongation of a symptom-free lifespan in over eighty percent of children with acute leukemia. Stresses that adults are less responsive, but may react to a combination of agents. Discussed by Sidney Farber, MD, Melvin Tefft, MD, Harvard Medical School, Thomas C Hall, MD, Children's Cancer Research Foundation, and William C Moloney, MD, Tufts University School of Medicine. (Kinescope)

Daddy Can't Find My Socks (28 min, 16mm, sd, color, 1970, sale \$111.75, USHSMH) Acquaints women with the necessity of having an annual pap test. Designed for the general public.

Diagnosis and Surgical Treatment of Occlusive Cerebral Vascular Disease (40 min, 16mm, sd, b & w, Order No. T-1824-X, sale \$81.00, USNMAC) Discusses strokes resulting from occlusive disease in the extracranial arteries. Considers incidence of death, disability, and clinical patterns of carotid and vertabrabasilar artery insufficiency. Discussion is by Allen D Callow, MD, John F Sullivan, MD, and Paul Kahn, MD, Tufts University School of Medicine. (Kinescope)

Management of Carcinoma of the Uterine Cervix (90 min, 16mm, sd, b & w, Order No. T-1974-X, sale \$173.75, USNMAC) Discusses several approaches to the problem of management of carcinoma of the uterine cervix, as presented to the 1967 American Radium Society meeting in Toronto, Canada. Panel members include Doctors Gilbert Fletcher of Houston, Texas, Fernando Bloedorn of Boston, Massachusetts, Alexander Brunschwig and S B Gusberg of New York City, David G Decker of Rochester, Minnesota, and Felix N Rutledge and Fred Y Durrance of Houston, Texas. (Kinescope)

CARDIOVASCULAR SYSTEM

Angiography as a Diagnostic Procedure (90 min, 16mm, sd, b & w, Order No. T-1872-X, sale \$187.00, USNMAC) Illustrates and evaluates indications for applying angiographic procedures to the study of clinical problems in man. Discussed by Herbert L Abrams, MD,

Douglass F Adams, MD, James J Pollard, MD, and Robert A Nebsar, MD, of the Harvard Medical School, and Paul C Kahn, MD, Tufts University School of Medicine. (Kinescope)

Angiography, Pt 1 (30 min, 16mm, sd, b & w, Order No. T-1855-X, sale \$60.50, USNMAC) Presents the consideration and performance of angiographic techniques which have proved most useful and least hazardous. Presented by Allan D Callow, MD, and Paul C Kahn, MD, Tufts University School of Medicine. (Kinescope)

Angiography, Pt 2 (30 min, 16mm, sd, b & w, Order No. T-1856-X, sale \$60.50, USNMAC) Discusses the significance of angiographic techniques and the lesions which they delineate. Considers angiography for the diagnosis of disease entities other than primary vascular lesions but which are associated with abnormal vascular patterns. Presented by Allan D Callow, MD, and Paul C Kahn, MD, Tufts University School of Medicine. (Kinescope)

Approach to Peripheral Vascular Disease, An (40 min, 16mm, sd, b & w, Order No. T-1817-X, sale \$81.00, USNMAC) Presents a patient with mild arterial insufficiency. Discusses clinical history, physical examination, search for associated conditions, and basic laboratory tests. Describes the selection of patients for arteriography and therapy. Discussed by Louis Weinstein MD, Tufts University School of Medicine. (Kinescope)

Congestive Heart Failure (40 min, 16mm, sd, b & w, Order No. T-1849-X, sale \$82.25, USNMAC) Discusses the difficulty of diagnosing congestive heart failure, particularly left-sided failure. Points out physical signs which should be given special attention in examining such patients. Participating in the discussion are Herbert J Levine, MD, Tufts University School of Medicine and Richard Gorlin, MD, Harvard Medical School. (Kinescope)

Coronary Artery Disease - Newer Dimensions (81 min, 16mm, sd, b & w, Order No. T-1871-X, sale \$167.50, USNMAC) Discusses metabolic factors associated with atherogenesis, the relevance of lipo-protein analysis, the role of diabetes mellitus and abnormal glucose tolerance, and the value and pitfalls of history taking. Presents three therapy considerations-myocardial revascularization, beta adrenergic blockade, and the management of lipid and carbohydrate disturbances. By Richard Gorlin, MD, Peter Bent Brigham Hospital, George F Cahill, MD, Elliott P Joslin Laboratory, Diabetes Foundation, Inc, Deaconess Hospital, and Warren J Taylor, MD, and Harvey G Kemp, MD, Harvard Medical School. (Kinescope)

Curable Hypertension and Primary Aldosteronism, Pt 1 (30 min, 16mm, sd, b & w, Order No. T-1865-X, sale \$60.50, USNMAC) Presents the problem of selecting patients from the hypertension group who may have primary aldosteronism. James C Melby, MD, Richard H Egdahl, MD, and William Hollander, MD, Boston University School of Medicine, discuss diagnostic methods. (Kinescope)

Curable Hypertension and Primary Aldosteronism, Pt 2 (30 min, 16mm, sd, b & w, Order No. T-1866-X, sale \$60.50, USNMAC) Discusses therapeutic trial with aldactone and adrenal arteriography as useful additions to workup of hypertension patients. Participating are Paul C Kahn, MD, Tufts University School of Medicine, and James C Melby, MD, and Richard H Egdahl, MD, Boston University School of Medicine. (Kinescope)

Heartbeat (29 min, 16mm, sd, b & w, 1964, sale \$60.50, rental \$10.00, USIA) Shows progress in combatting heart disease around the world, from surgical research in modern city hospitals to studies in rural clinics. Focuses on the work of the National Heart Institute. Filmed in Uganda, Peru, Lebanon, Japan, East Pakistan and the United States. (Co-sponsored by National Institutes of Health)

Inspection and Palpation of the Anterior Chest (52 min, 16mm, sd, b & w, 1966, Order No. K-1224A & B, sale \$109.00, USPHS) Demonstrates the techniques involved in the inspection and palpation of cardiovascular pulsations located on the anterior surface of the chest. Indicates physiological and diagnostic implications which can be derived from this type of examination.

Medical and Surgical Treatment of Valvular Heart Disease, the (90 min, 16mm, sd, b & w, Order No. T-1867-X, sale \$192.50, USNMAC) Discusses various types of acquired valvular cardiac defects including clinical and hemodynamic assessment, indications for, and results of surgery. Discussing the topic are Doctors Roman M Desanctis, W Gerald Austen, Charles A Sanders, and Peter M Yurchak of the Harvard Medical School. (Kinescope)

Pulmonary Cryptococcosis (16 min, 16mm, sd, b & w, Order No. T-1891, sale \$34.25, USNMAC) Presents a brief but comprehensive review of the epidemiology of pulmonary cryptococcosis as well as the clinical and radiologic findings. The laboratory techniques for the isolation and identification of the etiologic agent are also discussed. Cryptococcosis neoformans, and the significance of serologic studies in the diagnosis and treatment of this disease are discussed. (Kinescope)

Pulmonary Histoplasmosis (30 min, 16mm, sd, b & w, Order No. T-1892, sale \$62.50, USNMAC) Discusses pulmonary histoplasmosis, its spectrum etiology, epidemiology, distribution, clinical forms, and radiologic findings. Techniques for the isolation and identification of H capsulatum are shown and discussed as well as serologic findings, histopathology and treatment. (Kinescope)

Pulmonary Mycosis, Pt 1, Blastomycosis (12 min, 16mm, sd, b & w, Order No. T-1744, sale \$26.75, USNMAC) Systemic blastomycosis is defined as a chronic granulomatous mycosis primarily in the lungs. Early symptomatology is presented. Differential diagnosis is discussed. Epidemiology and concurrent factors, such as race, sex, age are indicated. Isolation and identification are discussed along with histopathological examination of tissue. Briefly discusses therapeutic approaches. (Kinescope)

Treatment of Cardiac Arrhythmias by Drugs and Electricity, the (90 min, 16mm, sd, b & w, Order No. T-1876-X, sale \$187.00, USNMAC) Attempts to clarify current usage of drugs and electrical devices for the control of cardiac arrhythmias. Emphasizes arrhythmias during acute myocardial infarction, application of transvenous pacemaker, indications and complications from cardioversion, and treatment of digitalis-induced arrhythmias. Discussed by Bernard Lown, MD, Harvard School of Public Health, Sidney Alexander, MD, and Warren Harthorne, MD, Harvard Medical School, Gerald Whipple, MD, Boston University School of Medicine, and Richard Whiting, MD, Peter Brent Brigham Hospital. (Kinescope)

CHEMISTRY

Clinical Pathologic Correlations of Enzymology, Pt 1 (34 min, 16mm, sd, b & w, Order No. T-1682, sale \$70.50, USNMAC) Shows classification of enzymes, categorizing the individual enzymes according to clinical usefulness, the long-standing enzymes, alkaline phosphatase, and amylase. Discusses principles, methods, sensitivity, and specificity for acid phosphatase, transaminase, and lactate dehydrogenase. (Kinescope)

Clinical Pathologic Correlations of Enzymology, Pt 2 (31 min, 16mm, sd, b & w, Order No. T-1706, sale \$63.50, USNMAC) Glycolytic enzymes (aldolase and phosphohexoisomerase) are compared with lactate dehydrogenase in terms of pathways of glucose metabolism origin, methodology, and clinical application. Isoenzymes with

specific reference to LDH are reviewed in depth in terms of organ source and clinical application as well as genetic and molecular characterization. (Kinescope)

Clinical Pathologic Correlation of Enzymology, Pt 3 (31 min, 16mm, sd, b & w, Order No. T-1721, sale \$63.50, USNMAC) Shows enzymes from the tricarboxylic acid cycles (isocitric dehydrogenase, malic dehydrogenase) as well as hexose shunt. (Kinescope)

Clinical Pathologic Correlations of Enzymology, Pt 4 (25 min, 16mm, sd, b & w, Order No. T-1722, sale \$51.75, USNMAC) Reviews 5-nucleotidase, creatinine phosphokinase, and enzymes of the formed elements of blood including glucose 6-phosphate dehydrogenase. Presents discussion of diseases diagnosed through enzyme analysis. (Kinescope)

Fundamentals of Clinical Enzymology (38 min, 16mm, sd, b & w, Order No. T-1681, sale \$78.50, USNMAC) Reviews all the components of an enzyme assay, kinetics with emphasis on zero order reactions, and pitfalls as well as details of procedure. From viewing this tape, the student should have a good grasp and comprehensive understanding of enzyme assays, but particularly lactate dehydrogenase (LDH). (Kinescope)

Oxidase Test, The (5 min, 16mm, sd, color, Order No. M-1755, sale \$21.75, USNMAC) Demonstrates a rapid method of differentiating oxidase positive from oxidase negative organisms. Includes the sensitive 'Kovac Modification.'

Specificity of Antigen-antibody Reactions, The (32 min, 16mm, sd, b & w, Order No. T-1509, sale \$66.50, USNMAC) Introduces the viewer to basic principles of immunology, giving some insight as to the chemical and physical forces that contribute to the phenomenon of immunological specificity. (Kinescope)

DENTAL, ANATOMY

Anatomy of the Head and Neck - Masseter and Temporal Muscles (14 min, 16mm, sd, color, 1959, Order No. D-108, sale \$82.25, USVA) Portrays anatomy of lateral aspect of the head. Deep dissection includes the temporal and masseter areas -illustrating muscles, tissue spaces, associated nerves and vessels. By Dr Harry Sicher, Director of Research Training Program, Professor Emeritus, Anatomy, School of Dentistry, Loyola University.

Anatomy of the Head and Neck - Pterygoid Muscles and Infra-terygoid (17 min, 16mm, sd, color, 1969, Order No. D-109, sale \$100.25, USVA) Illustrates anatomy of the lateral aspect of head deep to the pterygoid muscles and shows nerves and vessels to the base of the skull. By Dr Harry Sicher, Director of Research Training Program, Professor Emeritus, Anatomy, School of Dentistry, Loyola University.

DENTAL, DENTURES

Construction of a Five-unit Bridge - Pontic Preparation, Bridge Assembly, and Cementation (9 min, 16mm, sd, color, 1969, Order No. D-096, sale \$56.25, USVA) Demonstrates finalization of the five-unit bridge and includes adaptation of the pontic facings, bridge assembly, occlusal adjustment and cementation. Performed by Dr Samuel Guyer, professor and chairman of the Department of Fixed Prosthodontics, School of Dentistry, Washington University, St Louis, Missouri.

Cusp Gold Inlay (4 min, 16mm, sd, color, 1967, Order No. D-002, sale \$26.50, USVA) A single concept film. For a descriptive statement, see the series title.

From the *Operative Dentistry Advanced Concepts Series*.

Porcelain Inlay Technique (3 min, 16mm, sd, color, 1967, Order No. D-007, sale \$23.75, USVA) A single concept film. For a descriptive statement, see the series title.

From the *Operative Dentistry Advanced Concepts Series*.

Secondary Impressions for the Distal Extension Base Removable Partial Denture (15 min, 16mm, sd, color, 1969, Order No. D-127, sale \$88.25, USVA) Demonstrates the procedures incident to obtaining impressions of edentulous areas made on bases attached to the removable partial denture framework. These secondary impressions cover all available bearing areas, record the peripheral length, direction, and contours accurately and assure an intimate contact between the base and residual ridge. By Edmund A Travaglini, DDS, Associate Professor, Prosthodontics, Georgetown University, School of Dentistry, Washington, D C.

Silicate Cement (18 min, 16mm, sd, color, 1947, Order No. D-063, sale \$103.25, USVA) Demonstrates the importance of incorporating, rapidly, as much powder as possible into a given quantity of liquid and of protecting cement from loss or gain of water throughout the hardening period. Shows effect of technique on such cement properties as setting time, strength, shrinkage, solubility and staining. Produced jointly by the National Bureau of Standards and the Council on Dental Research, American Dental Association.

Use of Pressure-indicating Paste during the Delivery Of Dentures (15 min, 16mm, sd, color, 1970, Order No. 8D-110, sale \$89.75, USVA) Shows use of pressure-indicating pastes for developing better-fitting dentures. Shows use of these materials when delivering newly-made dentures to the patient. By Dr James E House, Head, Department of Complete Prosthodontics, Indiana University School of Dentistry, Indianapolis, Indiana.

DENTAL, DIAGNOSIS

Examination of the Mouth (8 min, 16mm, sd, color, sale \$35.25, USHSMH) Demonstrates proper technique for examination.

Examination of the Mouth (18 min, 16mm, sd, color, sale \$74.25, USHSMH) Shows the proper technique of oral cancer examination as well as demonstrates the differential diagnosis of various cancerous and non-cancerous lesions.

DENTAL, GENERAL

Complicated Exodontia - Introduction (17 min, sale \$70.25, SN) Deals with the fundamental procedures involved in the successful removal of all teeth, giving particular attention to those teeth which require more than the use of forceps alone for extraction. Demonstrates the basic principles underlying a proposed plan for treatment.

Dental Office Emergencies, Pt 1 (14 min, 16mm, sd, color, 1969, Order No. D-102, sale \$81.00, USVA) Part one of a four-part, programmed instructional course designed to teach the emergency procedures to be followed when physical and emotional crises occur. Shows the rendering of emergency treatment based upon a patient's symptoms of anxiety and tension. By Dean W Darby, DDS, Continuing Education Branch, Department of Health, Education, and Welfare, Public Health Service, San Francisco, California.

Dental Office Emergencies, Pt 2 (17 min, 16mm, sd, color, 1969, Order No. D-103, sale \$101.00, USVA) Part two of a four-part, programmed instructional course designed to teach the emergency procedures to be followed when physical and emotional crises occur. Shows the rendering of emergency treatment based upon a patient's symptoms of anxiety and tension. By Dean W Darby, DDS, Continuing Education Branch, Department of Health, Education, and Welfare, Public Health Service, San Francisco, California.

Dental Office Emergencies, Pt 3 (14 min, 16mm, sd, color, 1969, Order No. D-104, sale \$85.25, USVA) Part three of a four-part, programmed instructional course designed to teach the emergency procedures to be followed when physical and emotional crises occur. Shows the rendering of emergency treatment based upon a patient's symptoms of anxiety and tension. By Dean W Darby, DDS, Continuing Education Branch, Department of Health, Education, and Welfare, Public Health Service, San Francisco, California.

Dental Office Emergencies, Pt 4 (14 min, 16mm, sd, color, 1969, Order No. D-105, sale \$78.75, USVA) Part four of a four-part, programmed instructional course designed to teach the emergency procedures to be followed when physical and emotional crises occur. Shows the rendering of emergency treatment based upon a patient's symptoms of anxiety and tension. By Dean W Darby, DDS, Continuing Education Branch, Department of Health, Education, and Welfare, Public Health Service, San Francisco, California.

Dental Services - Practice Management (28 min, 16mm, sd, color, 1962, Order No. TF01-8201, sale \$113.50, USAF) Demonstrates principles of good management and need for balance between professional and managerial responsibilities. Emphasizes that a dental surgeon cannot have a good oral health program without manpower, money, and material.

Design for Dental Health (28 min, 16mm, sd, color, sale \$132.50, USDDH) Explains how the people of Lynch, Kentucky worked together in a community dental health project.

Instrument Exchange in Four-handed Dentistry (7 min, 16mm, sd, color, sale \$31.25, USDDH) Demonstrates the technique of dental instrument exchange between the dentist and dental chairside assistant.

Sit Down, Doctor - And Live (11 min, 16mm, sd, color, 1970, Order No. D-124, sale \$55.00, USVA) points out that 'sit-down dentistry' can prolong a dentist's useful operating life about ten years. Emphasizes the value of 'sit-down dentistry' and shows the direct approach to the four oral quadrants. By the Dental Training Center, V A Hospital, Washington, D C.

DENTAL, OCCLUSION

Dynamics of Occlusion - Mandibular Teeth (16 min, 16mm, sd, color, Order No. 8D-092, sale \$71.50, USVA) Develops the occluding relationships of posterior mandibular teeth in centric and eccentric contacts by means of negative wax carvings. By Morris Feder, CDT, Assistant in Periodontology and Arnold S Weingold, Assistant Professor, University of Pennsylvania, School of Dental Medicine.

Dynamics of Occlusion - Maxillary Teeth (11 min, 16mm, sd, color, Order No. 8D-093, sale \$50.50, USVA) Develops the occluding relationship of posterior maxillary teeth in centric and eccentric contacts by reading imprints made in wax by the opposing teeth. By Morris Feder, CDT, Assistant in Periodontology and Arnold S Weingold, Assistant Professor, University of Pennsylvania, School of Dental Medicine.

Dynamics of Occlusion - Nomenclature (16 min, 16mm, sd, color, Order No. 8D-091, sale \$71.00, USVA) Models are used to define the basic contact and functional areas of maxillary and mandibular teeth. Their application in centric and eccentric occlusion is exhibited. By Morton Amsterdam, Professor and Arnold S Weingold, Assistant Professor, University of Pennsylvania, School of Dental Medicine.

Dynamics of Occlusion - Occlusal Adjustment of Natural Detention by Selective Grinding (15 min, 16mm, sd, color, Order No. 8D-094, sale \$68.25, USVA) Demonstrates the principles and procedures used to correct occlusal disharmonies. Illustrated on articulator-mounted study casts. By Arnold S Weingold and Leonard Abrams, Assistant Professors, University of Pennsylvania, School of Dental Medicine.

Occlusal Adjustment, Pt 1, Centric (17 min, 16mm, sd, color, 1970, Order No. D-118, sale \$95.75, USVA) Shows indications, principles and methods for adjustment of occlusion to optimal freedom and stability, both in centric relation and centric occlusion. Step-by-step procedure includes articulation and intra-oral demonstration. By Sigurd P Ramfjord, LDS, PHD, Chairman, Department of Periodontics and Edward Green, DDS, MS, Associate Professor, Department of Periodontics, School of Dentistry, the University of Michigan.

Occlusal Adjustment, Pt 2, Lateral and Protrusive Excursions (12 min, 16mm, sd, color, 1970, Order No. D-119, sale \$72.50, USVA) Illustrates adjustment of occlusal interferences in various eccentric contact relations by means of mounted casts and by intra-oral recording. Explains to what extent eccentric movement patterns should be adjusted. Includes proper finish and testing of the results of the adjustment by Sigurd P Ramfjord, LDS, PhD, Chairman, Department of Periodontics and Edward Green, DDS, MS, Associate Professor, Department of Periodontics, School of Dentistry, The University of Michigan.

DENTAL, PATIENT EDUCATION

Experience in Dental Health (22 min, 16mm, sd, color, sale \$95.50, USDDH) Demonstrates a technique for the self-application of dental prophylaxis paste containing fluoride.

Oral Hygiene (17 min, 16mm, sd, color, 1960, Order No. MN08952, sale \$70.25, USN) Shows how to brush the teeth. Gives care of brushes, tips on eating habits and effects of good care and neglect.

Oral Hygiene for the Total-care Patient (14 min, 16mm, sd, color, 1970, Order No. D-115, sale \$71.00, USVA) Points out how oral hygiene is a problem for the hospitalized patient who is physically or mentally unable to care for himself. Shows value of ingestible tooth paste, completely stable stannous fluoride gel, and electric tooth brush in the oral hygiene care of these patients. Procedures for using these products are demonstrated by Harold H Niebel, DDS, Veterans Administration Dental Training Center, Washington, D C.

Preventive Dentistry - The Prevention of Oral Disease (16 min, 16mm, sd, color, 1963, Order No. MN09868, sale \$66.00, USN) Shows prevention of tooth decay and gum disease as well as beginning, progression and destruction of healthy tissue resulting from neglect.

DENTAL, PERIODONTICS

Double Papillae Repositioned Flap in Periodontal Therapy (16 min, 16mm, sd, color, 1968, Order No. D-022, sale \$95.00, USVA) Demonstrates a double papillae repositioned flap procedure performed on a maxillary canine tooth to correct the soft tissue defect. Two interdental papillae on either side of the cleft serve as donor tissue to cover the denuded root surface. The surgical techniques and post-operative results of this current periodontal concept are presented by D Walter Cohen, DDS and Stanley E Ross, DDS, University of Pennsylvania, School of Dental Medicine.

DENTAL, RADIOLOGY

Anatomic Landmarks in Panorex Radiography (Rev Ed) (17 min, 16mm, sd, color, 1970, Order No. D-017, sale \$66.00, USVA) Relates the anatomical structures of the maxilla and mandible to the radiolucencies and radiopacities seen in the panorex radiograph. Points out that the complexity of the panoramic radiograph requires knowledge of anatomy for interpretation.

Panoramic Radiography - Operating Procedure for Panorex (14 min, 16mm, sd, color, 1967, Order No. D-010, sale \$78.50, USVA) Shows function of each component part of the panorex machine--its complete cycle of operation, the method of skull measurement for obtaining optimum exposure factors, the results of incorrect technique, and the most common technical errors and their correction. Film produced by the Dental Training Center at the V A Hospital, Washington, D C.

DENTAL, SURGERY

Class III Restorations (6 min, 16mm, sd, color, 1967, Order No. D-004, sale \$37.25, USVA) A single concept film. For a descriptive statement, see the series title.

From the *Operative Dentistry Advanced Concepts Series*.

Enucleation of a Dentigerous Cyst of the Maxilla (7 min, 16mm, sd, color, 1968, Order No. D-097, sale \$41.75, USVA) Gives diagnostic and surgical procedures for treatment of a dentigerous cyst. Describes the histopathological characteristics. By Noah R Calhoun, DDS, MSD, Oral Surgeon, V A Hospital, Washington, D C.

Gingival Retraction Class V (5 min, 16mm, sd, color, 1967, Order No. D-003, sale \$34.25, USVA) A single concept film. For a descriptive statement, see the series title.

From the *Operative Dentistry Advanced Concepts Series*.

Intra-oral Fixation of Jaw Fractures, Pt 1 (14 min, 16mm, sd, color, 1958, Order No. D-099, sale \$85.25, USVA) Demonstrates methods of fixation most commonly used in management of jaw fractures. Includes the use of ligature wires, eyelets, continuous loops, single loops, horizontal levers, and arch bars. Performed at the V A Hospital, Long Beach, California.

Intra-oral Fixation of Jaw Fractures, Pt 2 (Rev Ed) (15 min, 16mm, sd, color, 1970, Order No. D-1000, sale \$89.00, USVA) Revision of 1958 edition. Shows method of fixation most commonly used in the management of jaw fractures. Includes the use of splints, circumferential wiring and direct wiring to zygomatic process and nasal spine. Performed at the V A Hospital, Long Beach, California.

Marsupialization of an Anterior Maxillary Cyst (7 min, 16mm, sd, color, 1968, Order No. D-087, sale \$44.25, USVA) Illustrates a surgical technique for the marsupialization of a maxillary cyst. Explains the advantages and indications for this procedure. Uses drawings and radiographs for clarification. By W Harry Archer, BS, MA, DDS, Professor and Head of the Department of Oral Surgery, School of Dental Medicine, University of Pittsburgh.

Operative Dentistry - Advanced Concepts-- a Series (16mm, sd, color, 1967, sale \$100.00, USVA) Depicts details of operative dentistry and emphasizes the application of operative dentistry as a rewarding experience. Edited into several single concept films by the Dental Training Center of the Veterans Administration from an original Navy production.

CLASS III RESTORATIONS	6 min
CUSP GOLD INLAY	4 min
GINGIVAL RETRACTION CLASS V	5 min
PIN LEDGE CASTINGS	4 min
PORCELAIN INLAY TECHNIQUE	3 min

Pin Ledge Castings (4 min, 16mm, sd, color, 1967, Order No. D-006, sale \$27.50, USVA) A single concept film. For a descriptive statement, see the series title.

From the *Operative Dentistry Advanced Concepts Series*.

Reduction and Fixation of Middle Third Fractures Of the Face - Lateral Orbital Rim... (13 min, 16mm, sd, color, 1969, Order No. D-101, sale \$72.50, USVA) Full title - Reduction and Fixation of Middle Third Fractures of the Face - Lateral Orbital Rim Approach - -Demonstrates the reduction of a fracture of middle third Of the face by lateral orbital approach. By dr Thomas J Pinson, Associate Dean and Professor of Oral Surgery, Dental College, Howard University and Noah R Calhoun, DDS, MSD, Oral Surgeon, V A Hospital, Washington, D C.

Reduction of Zygomatic Arch Fracture (7 min, 16mm, sd, color, 1969, Order No. D-085, sale \$44.75, USVA) Demonstrates reduction of a zygomatic arch fracture. Points out how access to the fracture is gained through an auriculotemporal incision and reduction is achieved by blind manipulation and touch. Performed by Robert L Moss, DDS, MS, Oral Surgeon, V A Hospital, Dayton, Ohio.

Surgical Endodontics (15 min, 16mm, sd, color, 1964, Order No. D-013, sale \$87.50, USVA) Explains the process of periapical inflammatory reaction and demonstrates two surgical corrective procedures--curetage and root resection. Shows techniques and precautions to be followed in surgery.

Surgical Implant of the Lost Mandibular Condyle with a Stainless Steel Mesh - ... (8 min, 16mm, sd, color, 1970, Order No. D-122, sale \$39.00, USVA) Full title - Surgical Implant of the Lost Mandibular Condyle with a Stainless Steel Mesh - Acrylic Prothesis - Points out that failure to reduce and immobilize the fractured mandibular condyle frequently results in poor articulation of the teeth, open bite, or inability to open the mouth. Shows the use of a prosthetic implant for correction of these complications. By George W Hahn, DDS, V A Hospital, Dallas, Texas.

Surgical Replacement of the Mandible with Stainless Steel Mesh (16 min, 16mm, sd, color, 1970, Order No. D-128, sale \$73.25, USVA) Demonstrates the use of cast stainless steel mesh to replace segments of the mandible which are frequently lost in intra-oral surgery. Surgery performed by George W Hahn, DDS, V A Hospital, Dallas, Texas.

Surgical Treatment for Ankylosis of the Temporomandibular Joint (10 min, 16mm, sd, color, 1969, Order No. D-107, sale \$61.25, USVA) Demonstrates a surgical corrective procedure using a tyconium prosthesis constructed to the measurements of the English penny. Performed by Edwin Miller, DDS, V A Hospital, Houston, Texas.

DIGESTIVE SYSTEM

Diagnosis of Pancreatic Disease (50 min, 16mm, sd, b & w, Order No. T-1963, sale \$105.00, USNMAC) Relates to the pathogenesis of acute pancreatitis to secretory mechanisms, and the construction of a unified concept of the etiology of inflammation within the pancreas. Evidence is accumulated from anatomic studies, manometric determinations of the intracholedochal and intrapancreatic ductal secretory pressures, physiologic investigations in experimental pancreatitis, and analyses of the clinical correlations observed in human pancreatitis. (Kinescope)

Endocrinologic Aspects of Amenorrhea (34 min, 16mm, sd, b & w, Order No. T-1738, sale \$70.50, USNMAC) Presents the various causative factors resulting in secondary amenorrhea. Emphasis is placed on differential diagnosis by clinical laboratory tests. (Kinescope)

Esophageal Problems (40 min, 16mm, sd, b & w, Order No. T-1835-X, sale \$77.50, USNMAC) Views dysphagia as the most common symptom of esophageal disease. Presents a discussion on the diagnosis and treatment of a variety of esophageal lesions. Discussed by George W B Starkey, MD and Richard Schatzki, MD, Harvard Medical School and Franz J Angelfinger, MD, Boston University School of Medicine. (Kinescope)

Hepatic Function Tests, Pt 1 (31 min, 16mm, sd, b & w, Order No. T-1779, sale \$63.50, USNMAC) Presents general aspects of and classification of liver function tests, bilirubin metabolism, and defects in various types of jaundice. (Kinescope)

Hepatic Function Tests, Pt 2 (30 min, 16mm, sd, b & w, Order No. T-1966, sale \$62.50, USNMAC) Discusses tests based on disturbances of intermediary metabolism of carbohydrates, proteins, lipids, and bile acids. (Kinescope)

Hepatic Function Tests, Pt 3 (26 min, 16mm, sd, b & w, Order No. T-1967, sale \$54.75, USNMAC) Discusses tests based on conjugating and excreting capacity of the liver. (Kinescope)

Hepatic Function Tests, Pt 4 (31 min, 16mm, sd, b & w, Order No. T-1968, sale \$64.25, USNMAC) Presents the role of serum enzyme levels in the diagnostic approach to liver disease. (Kinescope)

Hepatic Function Tests, Pt 5 (17 min, 16mm, sd, b & w, Order No. T-1969, sale \$36.75, USNMAC) Discusses relative usefulness of various types of liver function tests in diagnosis and management of hepatic disease. (Kinescope)

Pathophysiology of Pancreatic Inflammation, Th (40 min, 16mm, sd, b & w, Order No. T-1895, sale \$82.25, USNMAC) Relates the pathogenesis of acute pancreatitis to secretory mechanisms, and shows the construction of a unified concept of the etiology of inflammation within the pancreas. Evidence is accumulated from anatomic studies, manometric determinations of the intracholedochal and intrapancreatic ductal secretory pressures, physiologic investigations in experimental pancreatitis, and analyses of the clinical correlations observed in human pancreatitis. (Kinescope)

Regional Enteritis and Granulomatous Colitis (30 min, 16mm, sd, b & w, Order No. T-1860-X, sale \$61.25, USNMAC) Examines the syndrome of regional enteritis (granulomatous colitis), its diagnosis, treatment and prognosis. Discussion participants include Doctors

James F Patterson and Alice Ettinger of Tufts University School of Medicine, and Donald J Glotzer of the Harvard Medical School. (Kinescope)

Regulation of Pancreatic Secretion (28 min, 16mm, sd, b & w, Order No. T-1964, sale \$58.50, USNMAC) Relates the pathogenesis of acute pancreatitis to secretory mechanisms, and the construction of a unified concept of the etiology of inflammation within the pancreas. Evidence is accumulated from anatomic studies, manometric determinations of the intracholedochal and intrapancreatic ductal secretory pressures, physiologic investigations in experimental pancreatitis, and analyses of the clinical correlations observed in human pancreatitis. (Kinescope)

Symptomatic Postgastrectomy Patient, The (22 min, 16mm, sd, color, Order No. M-1714, sale \$89.75, USNMAC) Presents fiberoptic photographs of postoperative complications of the stomach.

Therapy in Pancreatic Inflammation (36 min, 16mm, sd, b & w, Order No. T-1965, sale \$74.50, USNMAC) Relates to the pathogenesis of acute pancreatitis to secretory mechanisms, and the construction of a unified concept of the etiology of inflammation within the pancreas. Evidence is accumulated from anatomic studies, manometric determinations of the intracholedochal and intrapancreatic ductal secretory pressures, physiologic investigations in experimental pancreatitis, and analyses of the clinical correlations observed in human pancreatitis. (Kinescope)

Ulcerative Colitis (30 min, 16mm, sd, b & w, Order No. T-1859-X, sale \$61.25, USNMAC) Examines the possible role of autoimmunity as a cause of ulcerative colitis and reviews the use of immunosuppressive agents in its therapy. Presents details of the two main types of therapy--corticosteroids and colectomy, and discusses the concept that physician and surgeon must work as a team to accomplish optimum therapeutic results. Discussed by Doctors James F Patterson, Robert S Schwartz, and Robert E Paul of Tufts University School of Medicine, and Donald J Glotzer, MD, of the Harvard Medical School. (Kinescope)

EMERGENCY CARE

Artificial Respiration (14 min, 16mm, sd, color, 1965, Order No. M-0798, sale \$56.50, USNMAC) Teaches the individual how to take care of his medical and health needs in time of disaster when medical assistance might not be readily available.

From the *Medical Selfhelp Series*.

RESTRICTIONS--Organization wishing to purchase the films must first request written permission from the Chief of Training, Division of Emergency Health Services, Health Services and Mental Health Administration, U S Department of Health, Education, and Welfare, 5600 Fishers Lane, Rockville, Maryland 20852. After permission has been obtained, the purchaser may deal directly with the General Services Administration. No sales will be made unless a statement of approval by the Division of Emergency Health Services is attached to the purchase order. Under no circumstances is the prospective purchaser to forward funds to the Division of Emergency Health Services for the procurement of the films.

Bleeding and Bandaging (28 min, 16mm, sd, color, 1965, Order No. M-0799, sale \$111.75, USNMAC) Teaches the individual how to take care of his medical and health needs in time of disaster when medical assistance might not be readily available.

From the *Medical Selfhelp Series*.

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Burns (14 min, 16mm, sd, color, 1965, Order No. M-0800, sale \$56.50, USNMAC) Teaches the individual how to take care of his medical and health needs in time of disaster when medical assistance might not be readily available.

From the *Medical Selfhelp Series*.

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Early Management of Complex Problems in Trauma (40 min, 16mm, sd, b & w, Order No. T-1826-X, sale \$81.00, USNMAC) Discusses the approach to be taken when the problem of trauma develops in a patient who has sustained multiple injuries. Emphasizes early evaluation and priorities of treatment, resuscitation, timing the operation and the conduct of the operation. Discussed by Paul S Russell, MD, Harvard Medical School. (Kinescope)

Emergency Childbirth (28 min, 16mm, sd, color, 1965, Order No. M-0806, sale \$94.00, USNMAC) Teaches the individual how to take care of his medical and health needs in time of disaster when medical assistance might not be readily available.

From the *Medical Selfhelp Series*.

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First Aid, Pt 1, Major Wounds and Fractures (33 min, 16mm, sd, color, 1957, Order No. TF08-2292, sale \$133.00, USA) Describes treatment for wounds of the chest, belly, head and face--fractures of jaw, leg, elbow, arm, ribs neck and back.

Fractures and Splinting (28 min, 16mm, sd, color, 1965, Order No. M-0801, sale \$111.75, USNMAC) Teaches the individual how to take care of his medical and health needs in time of disaster when medical assistance might not be readily available.

From the *Medical Selfhelp Series*.

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purchaser to forward funds to the Division of Emergency Health Services for the procurement of the films.

Fractures, Dislocations, And Sprains (40 min, 16mm, sd, b & w, Order No. T-1847-X, sale \$80.25, USNMAC) emphasizes prompt diagnosis and definitive treatment of musculo-skeletal injury. Presents methods of diagnosis and management of common injuries. Discussed by Thomas B. Quigley, MD, Arthur M. Pappas, MD, Harvard Medical School, and William Sullivan, MD, Peter Bent Brigham Hospital. (Kinescope)

Healthful Living in Emergencies (28 min, 16mm, sd, color, 1965, Order No. M-0797, sale \$111.75, USNMAC) Teaches the individual how to take care of his medical and health needs in time of disaster when medical assistance might not be readily available.

From the *Medical Selfhelp Series*.

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Infant and Child Care (14 min, 16mm, sd, color, 1965, Order No. M-0805, sale \$56.50, USNMAC) Teaches the individual how to take care of his medical and health needs in time of disaster when medical assistance might not be readily available.

From the *Medical Selfhelp Series*.

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Medical Self-help--a Series (16mm, sd, color, 1965, sale \$100.00, USNMAC) Set of ten (without Emergency Childbirth) sold for \$675.00. Set of eleven (with Emergency Childbirth) sold for \$750.00.

- Teaches the individual how to take care of many of his medical and health needs in time of disaster when medical assistance might not be readily available.

RADIOACTIVE FALLOUT AND SHELTER	28 min
HEALTHFUL LIVING IN EMERGENCIES	28 min
ARTIFICIAL RESPIRATION	14 min
BLEEDING AND BANDAGING	28 min
FRACTURES AND SPLINTING	28 min
TRANSPORTATION OF THE INJURED	14 min
BURNS	14 min
SHOCK	14 min
NURSING CARE OF THE SICK AND INJURED	28 min
INFANT AND CHILD CARE	14 min
EMERGENCY CHILDBIRTH	28 min

Restrictions--Organization wishing to purchase the films must first request written permission from the Chief of Training, Division of Emergency Health Services, Health Services and Mental Health Administration, U S Department of Health, Education, and Welfare, 5600 Fishers Lane, Rockville, Maryland 20852. After permission has been obtained, the

purchaser may deal directly with the National Audiovisual Center. No sales will be made unless a statement of approval by the Division of Emergency Health Services is attached to the purchase order. Under no circumstances is the prospective purchaser to forward funds to the Division of Emergency Health Services for the procurement of the films.

Mission Dustoff (Helicopter Evacuation) (12 min, 16mm, sd, color, 1969, Order No. PMF5422, sale \$50.50, USA) Depicts the role of the helicopter ambulance and its crew in evacuating battlefield casualties in Vietnam.

Nursing Care of the Sick and Injured (28 min, 16mm, sd, color, 1965, Order No. M-0804, sale \$111.75, USNMAC) Teaches the individual how to take care of his medical and health needs in time of disaster when medical assistance might not be readily available.

From the *Medical Selfhelp Series*.

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Radioactive Fallout and Shelter (28 min, 16mm, sd, color, 1965, Order No. M-0796, sale \$111.75, USNMAC) Teaches the individual how to take care of his medical and health needs in time of disaster when medical assistance might not be readily available.

From the *Medical Selfhelp Series*.

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Rescue Squad (15 min, 16mm, sd, b & w, 1952, sale \$32.50, rental \$7.50, USIA) Describes the work of a volunteer rescue squad ready at all times to render emergency assistance and first aid in case of accidents or disasters in the area. Shows some of the skills required of squad members and the squad at work at various types of emergencies.

Shock (14 min, 16mm, sd, color, 1965, Order No. M-0803, sale \$56.50, USNMAC) Teaches the individual how to take care of his medical and health needs in time of disaster when medical assistance might not be readily available.

From the *Medical Selfhelp Series*.

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Transportation of the Injured (14 min, 16mm, sd, color, 1965, Order No. M-0802, sale \$56.50, USNMAC) Teaches the individual how to take care of his medical and health needs in time of disaster when medical assistance might not be readily available.

From the *Medical Selfhelp Series*.

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ENVIRONMENTAL HEALTH

Aide to a Better Way of Life, An (18 min, 16mm, sd, color, sale \$74.25, USPHS) Depicts the work of the indigenous health educator aide, community health aide or other non-professional aide serving the inner city. Demonstrates techniques of person to person communications and follow-up and referral services as employed to achieve change. Administrative procedures are treated briefly. Shows vignettes typifying services related to childhood lead poisoning, prenatal care, and urban rat control and housing hygiene.

Aide to a Better Way of Life, An (Spanish) (18 min, 16mm, sd, color, sale \$74.25, USPHS) Depicts the work of the indigenous health educator aide, community health aide or other non-professional aide serving the inner city. Demonstrates techniques of person to person communications and follow-up and referral services as employed to achieve change. Administrative procedures are treated briefly. Shows vignettes typifying services related to childhood lead poisoning, prenatal care, and urban rat control and housing hygiene.

Beware the Wind (22 min, 16mm, sd, color, 1967, Order No. M-1707-X, sale \$89.75, USNMAC) Shows the principal sources of air pollution, including--industrial operations, burning dumps, motor vehicles, and combustion of fossil fuels like coal and oil. Describes the effects of air pollutants on animals, people and property. Shows the means of applying the available technology to bring about cleaner air. Narrated by Mr Robert Preston.

Clean Water Makes Good Health (10 min, 16mm, sd, b & w, 1953, sale \$21.00, rental \$5.00, USIA) Explains the government of India's Village Sanitation Improvement Program, especially the building of wells.

Cleaning Equipment and Containers (French) (28 min, 16mm, sd, b & w, 1946, Order No. M-1033-FR, sale \$58.50, USPHS) Demonstrates methods for cleaning and bactericidal treatment of cans, bottles, piping and other equipment following the routine of flush, scrub, rinse and sterilize.

From the *Small Milk Plant Operation Series*.

Cleaning Equipment and Containers (Spanish) (28 min, 16mm, sd, b & w, 1946, Order No. M-1034-SP, sale \$58.50, USPHS) Demonstrates methods for cleaning and bactericidal treatment of cans, bottles, piping and other equipment following the routine of flush, scrub, rinse and sterilize.

From the *Small Milk Plant Operation Series*.

Cleanliness Brings Health (8 min, 16mm, sd, color, 1946, sale \$37.25, rental \$7.50, USOIAA) Compares the way two South American families live--the clean family and the careless family. Emphasis

is on the things that can be done in the home to protect against communicable diseases.

From the *Report From America* Series.

Don't Leave It All to the Experts (16 min, 16mm, sd, color, 1969, Order No. M-1739, sale \$66.00, USNMAC) Outlines the main points of the Air Quality Act and shows a public hearing in session. Explains individual responsibility and attempts to motivate the general public to take an active part in bringing about acceptable air quality in each community.

Epidemiology of Pesticide Poisonings, The (19 min, 16mm, sd, color, Order No. M-1668, sale \$74.25, USNMAC) Describes pesticides and their use, the prevalence of pesticide poisonings, and the reasons and methods for staging an epidemiological investigation. Portrays two specific cases showing the methods used in the investigation.

Fly Control through Basic Sanitation (French) (9 min, 16mm, sd, color, 1950, Order No. M-1140-FR, sale \$37.25, USPHS) Shows conditions which favor fly breeding in a community--filth, warmth, moisture and time for development. Outlines specific procedures in urban and rural areas for basic sanitation programs, particularly the elimination of open garbage and refuse dumps.

From the *Community Fly Control* Series.

Healthier Place to Live, A (Black Cast) (11 min, 16mm, sd, b & w, 1964, Order No. M-0728, sale \$23.25, USNMAC) Focuses on housing and other environmental conditions of camps, shows safeguards workers can take against such health hazards as pests, dirt, and unsafe water. Intended to stimulate discussion of health in camps, and responsibility of each group-workers, growers, and others.

Healthier Place to Live, A (Spanish-American Cast) (11 min, 16mm, sd, b & w, 1964, Order No. M-0825, sale \$23.25, USNMAC) Focuses on housing and other environmental conditions of camps, shows safeguards workers can take against such health hazards as pests, dirt, and unsafe water. Intended to stimulate discussion of health in camps, and responsibility of each group-workers, growers, and others.

Healthier Place to Live, A (Spanish-American Cast) (11 min, 16mm, sd, color, 1964, Order No. M-0825, sale \$44.75, USNMAC) Focuses on housing and other environmental conditions of camps, shows safeguards workers can take against such health hazards as pests, dirt, and unsafe water. Intended to stimulate discussion of health in camps, and responsibility of each group-workers, growers, and others.

Healthier Place to Live, A (Spanish-American Cast - Spanish) (11 min, 16mm, sd, b & w, 1964, Order No. M-0934-SP, sale \$23.25, USNMAC) Focuses on housing and other environmental conditions of camps, shows safeguards workers can take against such health hazards as pests, dirt, and unsafe water. Intended to stimulate discussion of health in camps, and responsibility of each group-workers, growers, and others.

Healthier Place to Live, A (Spanish-American Cast - Spanish) (11 min, 16mm, sd, color, 1964, Order No. M-0934-SP, sale \$44.75, USNMAC) Focuses on housing and other environmental conditions of camps, shows safeguards workers can take against such health hazards as pests, dirt, and unsafe water. Intended to stimulate discussion of health in camps, and responsibility of each group-workers, growers, and others.

How Disease Travels (10 min, 16mm, sd, color, 1946, sale \$44.75, rental \$7.50, USOIAA) Uses animation to show how disease microbes spread by water, flies, and person-to-person contact.

From the *Health For the Americas* Series.

Keep Clean - Stay Well (Black Cast) (9 min, 16mm, sd, b & w, Order No. M-0674, sale \$19.00, USNMAC) Demonstrates how workers can carry out personal cleanliness in camps. Shows relationship between keeping clean and keeping well. Intended to promote discussion of health in camps, and responsibility of each group-workers, growers, and others.

Keep Clean - Stay Well (Spanish-american Cast) (9 min, 16mm, sd, b & w, Order No. M-0824, sale \$19.00, USNMAC) Demonstrates how workers can carry out personal cleanliness in camps. Shows relationship between keeping clean and keeping well. Intended to promote discussion of health in camps, and responsibility of each group-workers, growers, and others.

Keep Clean - Stay Well (Spanish-american Cast) (9 min, 16mm, sd, color, Order No. M-0824, sale \$37.25, rental \$7.50, USNMAC) Demonstrates how workers can carry out personal cleanliness in camps. Shows relationship between keeping clean and keeping well. Intended to promote discussion of health in camps, and responsibility of each group-workers, growers, and others.

Keep Clean - Stay Well (Spanish-american Cast - Spanish) (9 min, 16mm, sd, b & w, Order No. M-0933-SP, sale \$19.00, USNMAC) Demonstrates how workers can carry out personal cleanliness in camps. Shows relationship between keeping clean and keeping well. Intended to promote discussion of health in camps, and responsibility of each group-workers, growers, and others.

Keep Clean - Stay Well (Spanish-american Cast - Spanish) (9 min, 16mm, sd, color, Order No. M-0933-SP, sale \$37.25, USNMAC) Demonstrates how workers can carry out personal cleanliness in camps. Shows relationship between keeping clean and keeping well. Intended to promote discussion of health in camps, and responsibility of each group-workers, growers, and others.

Meet Mr Noise (26 min, 16mm, sd, color, 1962, Order No. TF01-8193, sale \$104.00, USAF) Points out hazards of working in an area of vibration and noise. Shows how noise of heightened intensity can impair hearing and general health. Demonstrates how properly fitted protective devices worn by personnel reduces adverse effects of noise.

Milk and Public Health (Spanish) (12 min, 16mm, sd, b & w, Order No. M-0007-SP, sale \$26.75, USNMAC) Points out the dangers of haphazard milk production, the resultant public health problem, and the need for regulatory legislation. and reviews the steps taken to insure healthy cows, sanitary equipment and supplies, and other hygienic methods throughout the production and processing of milk.

Refuse Disposal By Sanitary Landfills (Spanish) (13 min, 16mm, sd, color, Order No. M-0228-SP, sale \$54.50, USNMAC) Discusses the faults of disposal methods such as open dumps, and compares the vector-borne disease and nuisance hazards of these methods to those of landfills. Shows how to select a site, types of equipment used, how to construct a landfill, different types of operating procedures, and overall contributions of sanitary landfills to public health.

Safe Food (Black Cast) (9 min, 16mm, sd, b & w, 1964, Order No. M-0729, sale \$19.00, USCHS) For use with seasonal crop workers, and their families. Demonstrates methods migrant families can use in cooking, serving and storing food under camp conditions. Indicates how sound food practices help keep workers well--how poor ones lead to illness, as well as attracting flies, roaches and rats.

Safe Food (Spanish-American Cast) (9 min, 16mm, sd, b & w, 1964, Order No. M-0826, sale \$19.00, USCHS) For use with seasonal crop workers, and their families. Demonstrates methods migrant families can use in cooking, serving and storing food under camp conditions. Indicates how sound food practices help keep workers well--how poor ones lead to illness, as well as attracting flies, roaches and rats.

Safe Food (Spanish-American Cast - Spanish) (9 min, 16mm, sd, b & w, 1964, Order No. M-0935-SP, sale \$19.00, USCHS) For use with seasonal crop workers, and their families. Demonstrates methods migrant families can use in cooking, serving and storing food under camp conditions. Indicates how sound food practices help keep workers well--how poor ones lead to illness, as well as attracting flies, roaches and rats.

Safe Food (Spanish-American Cast - Spanish) (9 min, 16mm, sd, color, 1964, Order No. M-0935, sale \$37.25, USCHS) For use with seasonal crop workers, and their families. Demonstrates methods migrant families can use in cooking, serving and storing food under camp conditions. Indicates how sound food practices help keep workers well--how poor ones lead to illness, as well as attracting flies, roaches and rats.

Serving Food (Spanish) (11 min, 16mm, sd, color, Order No. M-0148F-SP, sale \$44.75, USNMAC) Portrays the hiring of a waitress and shows the orientation and induction training given her by a restaurant hostess, including instruction in the proper storage of cups, dishes, and glasses. Cleanliness, the correct ways of clearing tables, protecting the waitresses' health, and safeguards against disease are also shown.

Spraying Equipment and Procedures, Pt 1, Residual Spraying (French) (7 min, 16mm, sd, color, 1950, Order No. M-1139-FR, sale \$37.25, USPHS) Explains the meaning of residual spraying for fly control, the necessity for this type of spraying, and the methods for using hand and power spraying equipment.

EYES

Glaucoma for All Physicians (27 min, 16mm, sd, b & w, Order No. T-1851-X, sale \$55.50, USNMAC) Shows glaucoma as the chief cause of blindness in this country, other than injuries. Estimates that about one million individuals over forty have this disease, many of whom are unaware that their intraocular pressures are elevated. Edwin B Dunphy, MD, lectures. (Kinescope)

Special Eye Care for Burns (11 min, 16mm, sd, color, 1969, Order No. PMF5424, sale \$44.75, USA) Demonstrates the special eye care of patients suffering second and third degree burns of the face to prevent eye infection and corneal laceration.

FIRST AID

Management of Third Degree Burns in a Newborn (16 min, 16mm, sd, color, 1969, Order No. PMF5423, sale \$33.50, USA) Provides a clinical demonstration of the management of third degree burn of the genitalia and lower extremities suffered by a male infant within an hour after birth.

GENERAL

Animal Bites and Rabies (15 min, 16mm, sd, color, Order No. M-20-2, sale \$62.25, USNMAC) Stresses the animal bite problem and shows what steps can be taken by the individual and community to reduce the Menace. Depicts how physical and psychic trauma of rabies and other diseases can be prevented by controlling animal bites.

Applications of Insulin and Growth Hormone Assays in Clinical Medicine (29 min, 16mm, sd, b & w, Order No. T-1675, sale \$59.50, USNMAC) General principles of radioimmunoassay are described with special reference to insulin and human growth hormone. Special emphasis placed on 'Double Antibody' variant with its advantages over other variations of the technique. (Kinescope)

At the Crossroads (28 min, 16mm, sd, color, Order No. M-1601-X, sale \$113.50, USCHS) Narrated by E G Marshall. Probes the problems most U S communities face in making adequate health care accessible to all its citizens. The film was shot on location in 6 major cities and in a typical rural area. Taking the viewer on a tour of urgent problems currently under investigation by the Federal Government and private health organizations, inadequate clinics, overcrowded hospitals, antiquated facilities and equipment, and shortages of health man-power. Shows how communities can organize to remove the barriers that keep benefits of research programs from reaching many of our communities.

At the Crossroads (12 min, 16mm, sd, color, Order No. M-1602-X, sale \$50.50, USCHS) Short version of 'At the Crossroads'. Narrated by E G Marshall. Probes the problems most U S communities face in making adequate health care accessible to all its citizens. The film was shot on location in 6 major cities and in a typical rural area. Taking the viewer on a tour of urgent problems currently under investigation by the Federal Government and private health organizations, inadequate clinics, over-crowded hospitals, antiquated facilities and equipment, and shortages of health man-power. Shows how communities can organize to remove the barriers that keep benefits of research programs from reaching many of our communities.

Cancer Education (11 min, 16mm, sd, b & w, 1950, sale \$23.25, rental \$5.00, USIA) Shows the operation of a mobile X-ray clinic in the south. Includes alerting the townspeople of its arrival, X-raying of all citizens, education toward self-examination and various checks made for cancer.

Cholera Today, Pt 2, Practical Laboratory Diagnosis (18 min, 16mm, sd, color, Order No. M-1478, sale \$73.25, USNMAC) Illustrates practical and simple laboratory techniques that prove whether one is dealing with true cholera or not. This is performed with minimum equipment that should be available in any country.

Clinical Pathological Conference (45 min, 16mm, sd, b & w, Order No. T-1874-X, sale \$92.00, USNMAC) Shows clinical pathological conference of the Massachusetts General Hospital. Participating in the conference are Benjamin Castleman, MD, Roman Desanctis, MD, and William F Moncely, MD, Harvard Medical School. Also John F Stokes, MD, University of London, and Murray L Janower, MD, Massachusetts General Hospital. (Kinescope)

Concealed Homicide, The (28 min, 16mm, sd, b & w, 1970, Order No. T-1896, sale \$58.50, USNMAC) Presents an exercise in observation, through several case histories of persons who were found dead, with no obvious cause of death. The autopsy finding was concealed homicide. (Kinescope)

Restricted to professional audiences--residents, other medical professional personnel, and research and social workers in the field of medicine. Cleared for use on educational closed-circuit television only.

Controversial Aspects of Rheumatoid Arthritis (29 min, 16mm, sd, b & w, Order No. T-1379, sale \$59.50, USNMAC) Discusses such controversial questions as the diagnostic criteria of rheumatoid arthritis, including its differentiation from other syndromes, the various therapeutic regimens advocated, and the prognostic factors affecting such patients. (Kinescope)

From the *Concepts and Controversies in Modern Medicine* Series.

Current Concepts in Epilepsy, Pt 1, Infants and Children (40 min, 16mm, sd, b & w, Order No. T-1837-X, sale \$81.00, USNMAC) Discusses the definition of epilepsy versus that of seizures. Explains the different etiologies, manifestations, and prognoses. Outlines diagnostic procedures and treatments. (Kinescope)

Current Concepts in Epilepsy, Pt 2, Adults (40 min, 16mm, sd, b & w, Order No. T-1838-X, sale \$78.50, USNMAC) Stresses the importance of detailed case histories in the diagnosis of epilepsy. Discusses studies indicated if the history, EEG, or plain skull films suggest a focal or lateralized process. Discussed by Charles A Kane, MD, Boston University School of Medicine. (Kinescope)

Diagnosis and Management of Rheumatoid Arthritis (40 min, 16mm, sd, b & w, Order No. T-1820-X, sale \$81.00, USNMAC) Discusses therapeutic regimens employed over several years with rheumatoid arthritis patient. Investigates orthopedic correction of hand deformities. Discussed by Theodore B Bayles, MD and John A Mills, MD, Harvard Medical School, and James D C Gowans, MD, Tufts University School of Medicine. (Kinescope)

Diagnosis in Clinical Disorders of Calcium and Bone Metabolism, Pt 1 (19 min, 16mm, sd, b & w, Order No. T-1501, sale \$39.50, USNMAC) Presents diseases of parathyroid including primary hyperparathyroid, parathyroid dysfunction in renal failure, and hypoparathyroidism (post surgical and idiopathic). (Kinescope)

Diagnosis in Clinical Disorders of Calcium and Bone Metabolism, Pt 2 (22 min, 16mm, sd, b & w, Order No. T-1502, sale \$46.25, USNMAC) Presents a discussion by Dr Heany with emphasis on principal metabolic bone diseases including osteoporosis, osteomalacia, vitamin D deficiency, and familial hypophosphatemia. (Kinescope)

Grand Rounds (45 min, 16mm, sd, b & w, Order No. T-1873-X, sale \$92.00, USNMAC) Presents regular rounds of the Massachusetts General Hospital. By Stephen Goldfinger, MD, and William F McNeely, MD, Harvard Medical School. (Kinescope)

Indications for a Therapeutic Abortion (31 min, 16mm, sd, b & w, Order No. T-1720, sale \$64.25, USNMAC) Presents the pros and cons of more liberal abortion laws. (Kinescope)

From the *Concepts and Controversies in Modern Medicine* Series.

Infant Care and Feeding (9 min, 16mm, sd, color, 1946, sale \$37.25, rental \$7.50, USIA) Uses animation to show things mother should do during the prenatal period, while baby is nursing and when baby changes from a liquid to a solid diet.

From the *Health For the Americas* Series.

Introduction to Forensic Medicine (28 min, 16mm, sd, b & w, 1970, Order No. T-1900, sale \$58.50, USNMAC) Provides a basic introduction to the functions of the office of medical examiner, including a discussion of approaches to deductive reasoning and examination in this field. Discusses the integrity required of this position, its interpretative ambiguity, and its interrelationship with the community, the hospital, the physician, and the law. (Kinescope)

Restricted to professional audiences--residents, other medical professional personnel, and research and social workers in the field of medicine. Cleared for use on educational closed-circuit television only.

Kidney Function Tests (43 min, 16mm, sd, b & w, Order No. T-1493, sale \$88.00, USNMAC) Discusses renal function tests, including the blood urea nitrogen and the creatinine clearance tests. Underlines the usefulness of the albumin-to-creatinine clearance ratio in relation to the nephrotic syndrome. (Kinescope)

From the *Clinical Pathology* Series.

Laboratory Aspect of Diseases of the Testicle, the (35 min, 16mm, sd, b & w, Order No. T-1674, sale \$72.50, USNMAC) Discusses the subject of testicular physiology and biochemistry. Points out factors in the assessment of testicular function, Leydig cell failure, sperm production, testicular biopsy evaluation, karyotyping analysis, and plasmatestosterone levels. Provides detailed information concerning pituitary involvement, LSH, FSH, use of radioactive isotopes in determination of malfunctions of testes, and Klinefelters syndrome. (Kinescope)

Life Crises and Physical Complaints (40 min, 16mm, sd, b & w, Order No. T-1843-X, sale \$80.25, USNMAC) Illustrates how obscure physical symptomatology can be clarified when placed in the context of the patient's life situation. Leon N Shapiro, MD, Miles F Shore, MD, and Sandra L Mogil, MD, Tufts University School of Medicine discuss this topic. (Kinescope)

Nature of Human Color Change, The - Genetic, Hormonal, Neoplastic (90 min, 16mm, sd, b & w, Order No. T-1875-X, sale \$187.00, USNMAC) Depicts the importance of melanin pigmentation and its relationship to systemic disease. Demonstrates with patients, marine animals, mice, film, charts, and slides the basic science aspects, the genetic and hormonal control of melanin pigmentation, and neoplasms involving pigment cells with special attention to the recognition of early melanomas. Participating in the discussion are Thomas B FitzPatrick, MD, Wallace H Clark, Jr, MD, and Martin C Nihm, MD, Harvard Medical School, and Aaron B Lerner, MD, Yale Medical School. (Kinescope)

New Diagnostic Procedures in the Diagnosis of Pituitary Disease (35 min, 16mm, sd, b & w, Order No. T-1503, sale \$72.50, USNMAC) Shows new developments in the field of radioimmunoassay resulting in sensitive and specific methods for the measurement of all pituitary hormones except prolactin in peripheral plasma. Reviews past diagnostic procedures. (Kinescope)

New Ideas About an Old Disease - Diabetes Mellitus (40 min, 16mm, sd, b & w, Order No. T-1822-X, sale \$81.00, USNMAC) Presents many facets of diabetes, including its classification, its treatment with insulin and oral hypoglycemic agents, and the handling of the complication of peripheral vascular disease and infection. Discussed by Howard F Root, MD and Leo P Krall, MD, Joslin Clinic, New England Deaconess Hospital. (Kinescope)

Obesity (40 min, 16mm, sd, b & w, Order No. T-1844-X, sale \$80.25, USNMAC) Compares function of caloric input and expenditure in normal man and obesity. by George F Cahill, Jr, Harvard Medical School. (Kinescope)

Operating Room Deaths (28 min, 16mm, sd, b & w, 1970, Order No. T-1902, sale \$58.50, USNMAC) Discusses operating room deaths due to diagnostic or therapeutic procedures which have not been properly controlled, for example--perforation of the bowel with a barium enema, perforation of the trachea during an attempt to remove an obstruction, transfixation of the trachea during an attempt to remove an obstruction, and traumatic death due to explosion of anesthetic gases. (Kinescope)

Restricted to professional audiences--residents, other medical professional personnel, and research and social workers in the field of medicine. Cleared for use on educational closed-circuit television only.

Oral Contraceptives, The (29 min, 16mm, sd, b & w, Order No. T-1780, sale \$60.50, USNMAC) Dr Garcia defends the use of oral contraceptives, stressing the superior efficiency of this method. Dr Lasagna feels that there are other methods which are clinically more advisable. He stresses the now-emerging adverse consequences of contraceptive drugs. (Kinescope)

From the *Concepts and Controversies in Modern Medicine* Series.

Organophosphate Pesticide Poisonings - Diagnosis and Treatment (20 min, 16mm, sd, color, Order No. M-1747, sale \$82.00, USNMAC) Shows that a correct diagnosis of organophosphate poisoning and proper treatment can save lives. Based on actual cases.

Problems in Diagnosis and Management of Hypothyroidism (40 min, 16mm, sd, b & w, Order No. T-1825-X, sale \$80.25, USNMAC) Presents a patient with severe myxedema secondary to pituitary tumor. Describes the clinical procedure and laboratory findings common to primary and pituitary myxedema. Explains etiologies and importance of differential diagnosis. Discussed by Sidney H Ingbar, MD and John B Stanbury, MD, Harvard medical School. (Kinescope)

Problems in the Management of Graves' Disease (40 min, 16mm, sd, b & w, Order No. T-1816-X, sale \$81.00, USNMAC) Follows a case of exophthalmic goiter, discussing complications and therapeutics. Discussed by Sidney H Ingear, MD, Harvard Medical School, and Lewis B Braverman, MD, Tufts University School of Medicine. (Kinescope)

Sudden Natural Death (25 min, 16mm, sd, b & w, 1970, Order No. T-1776, sale \$52.50, USNMAC) Dr Helpert discusses aspects of sudden natural death, the most common cause being occlusive coronary artery disease. This program includes discussion and visual material concerning the evidence of organic disease in the body of the deceased, trauma and sudden natural deaths, and the relationships and contributing factors inherent in this peculiar problem. (Kinescope)

Restricted to professional audiences--residents, other medical professional personnel, and research and social workers in the field of medicine. Cleared for use on educational closed-circuit television only.

Technical Procedures for Diagnosis and Therapy in Children (27 min, 16mm, sd, color, 1965, Order No. MN09869A, sale \$109.50, USN) Gives step by step procedures for femoral venipuncture, internal jugular puncture, lumbar puncture, subdural tap, gastric lavage, scalp venipuncture, and cutdown. (Exhibition and sale limited to professional groups)

Testis Tumors (63 min, 16mm, sd, b & w, Order No. T-1973-X, sale \$131.50, USNMAC) Discusses several approaches to the problem of management of testicular tumors, as presented to the 1967 American Radium Society meeting in Toronto, Canada. Panel members include Doctors Milton Friedman of New York City, Frederick W George, III, of Long Beach, California, Noel Wallace of London, England, John Maier of Washington, DC, and John Broadwater of San Antonio, Texas. (Kinescope)

Threshold (27 min, 16mm, sd, color, 1969, sale \$111.75, USNIGM) Illustrates the relationship between research and medical care. Shows the broad scope of modern research-based anesthesiology--surgery, respiratory and intensive care units for the critically ill, and the diagnosis and treatment of persistent pain. Physician-scientists talk frankly about themselves and their research careers.

Traumatic and Chemical Asphyxiation, Pt 1 (28 min, 16mm, sd, b & w, 1970, Order No. T-1897A, sale \$57.50, USNMAC) Discusses natural and traumatic causes of asphyxiation, for example--strangulation, suffocation, drowning, inhalation of suffocating gases, pressure on the chest, strangulation due to food swallowing, carbon monoxide poisoning, glue sniffing, and anesthetic gases. (Kinescope) Restricted to professional audiences--residents, other medical professional personnel, and research and social workers in the field of medicine. Cleared for use on educational closed-circuit television only.

Traumatic and Chemical Asphyxiation, Pt 2 (28 min, 16mm, sd, b & w, 1970, Order No. T-1897B, sale \$56.50, USNMAC) Discusses natural and traumatic causes of asphyxiation, for example--strangulation, suffocation, drowning, inhalation of suffocating gases, pressure on the chest, strangulation due to food swallowing, carbon monoxide poisoning, glue sniffing, and anesthetic gases. (Kinescope) Restricted to professional audiences--residents, other medical professional personnel, and research and social workers in the field of medicine. Cleared for use on educational closed-circuit television only.

What Is Disease - Unseen Enemy (11 min, 16mm, sd, color, 1945, sale \$45.00, rental \$7.50, USIA) Uses animation to show how germs and microbes cause sickness and outlines simple preventive measures.

From the *Health For the Americas* Series.

HEMIC AND LYMPHATIC SYSTEMS

Antibody Specificity and Antigen Heterogeneity (28 min, 16mm, sd, b & w, Order No. T-1677, sale \$58.50, USNMAC) Discusses theories concerning antibody specificity, blood groupings concepts built around these theories, and the use of this material as a working tool in the clinical laboratory in serology and complement fixation tests. (Kinescope)

Anticoagulation Dilemma, The (29 min, 16mm, sd, b & w, Order No. T-1775, sale \$60.50, USNMAC) Dr Ebert presents a case in favor of the discriminate use of anticoagulants with myocardial infarction patients. Dr Mason presents a case against their use. From the *Concepts and Controversies in Modern Medicine* Series. (Kinescope)

Bleeding Disorders (30 min, 16mm, sd, b & w, Order No. T-1853-X, sale \$60.50, USNMAC) Graphically demonstrates extrinsic and intrinsic hemostatic mechanisms of clotting. Illustrates bleeding disorders of (1) primary vessel wall defect, (2) platelet abnormalities, and (3) abnormalities of coagulation mechanism. By Daniel Deykin, MD, and Edwin W Salzman, MD, Harvard Medical School. (Kinescope)

Cirrhosis Ward Rounds At the Lemuel Shattuck Hospital, Pt 1 (30 min, 16mm, sd, b & w, Order No. T-1845-X, sale \$60.50, USNMAC) Presents one patient with acute alcoholic hepatitis and another with intractable ascites. Discussed by Thomas C Chalmers, MD, Edward W Moore, MD, Donald E Wilson, MD, and Anne Long, RN, Lemuel Shattuck Hospital. (Kinescope)

Cirrhosis Ward Rounds at the Lemuel Shattuck Hospital, Pt 2 (30 min, 16mm, sd, b & w, Order No. T-1846-X, sale \$60.50, USNMAC) Presents one patient with acute alcoholic hepatitis and another with intractable ascites. Discussed by Thomas C Chalmers, MD, Edward W Moore, MD, Donald E Wilson, MD, and Anne Long, RN, Lemuel Shattuck Hospital. (Kinescope)

Current Status of Anticoagulant Therapy (30 min, 16mm, sd, b & w, Order No. T-1854-X, sale \$60.50, USNMAC) Describes the white, red, and mixed thrombus, and stresses implications. Graphically illustrates the action of heparin and coumarins on the clotting mechanism. Discusses the clinical use of these drugs in myocardial infarction, cerebrovascular disease, thromboembolic disease, congestive heart failure, and venous disease. Presented by Daniel Deykin, MD, and Edwin W Salzman, MD, Harvard Medical School. (Kinescope)

Diffuse Intravascular Coagulation (26 min, 16mm, sd, b & w, Order No. T-1697, sale \$54.75, USNMAC) Explains experimental and theoretical aspects of intravascular coagulation and discusses clotting

proteins and the interrelationship existing between these elements and IVC. Discusses acquired bleeding disorders. (Kinescope)

Evaluation of Proteinuria and Hematuria (40 min, 16mm, sd, b & w, sale \$81.00, USNMAC) Evaluates photos of abnormal urine sediment and kidney biopsies from a patient with proteinuria. Discusses a second patient with gross or microscopic hematuria. William B Schwartz, MD, Tufts University School of Medicine and Arnold S Relman, MD, Boston University School of Medicine participate in the discussions. (Kinescope)

Fibrinolytic Mechanism and Test of Fibrinolytic Function, the (27 min, 16mm, sd, b & w, Order No. T-1696, sale \$55.50, USNMAC) Presents pharmacology and physiology of hemostasis as well as laboratory tests for fibrinolytic function. Points up normal fibrinolytic mechanism, then discusses health effect resulting when normal function is disturbed. (Kinescope)

Hemolytic Syndrome, The (32 min, 16mm, sd, b & w, Order No. T-1506, sale \$66.50, USNMAC) Shows that this syndrome is best defined by the three major components involved in its makeup--destructive reaction jaundice, compensatory reaction reticulocytosis, and decompensation anemia. Discusses differentiation between this and other similar syndromes giving the necessary tests for making a positive diagnosis--Coombs test, bone marrow examination, and bilirubin measurement. (Kinescope)

Hemolytic Transfusion Reactions (30 min, 16mm, sd, b & w, Order No. T-1497, sale \$61.25, USNMAC) Reviews transfusion reactions from the initial source of error to their consequences. Discusses intravascular hemolysis, acute renal failure, hemorrhagic diathesis, and mannitol. (Kinescope)

Hemophiloid Disorders, Clinical, The (38 min, 16mm, sd, b & w, Order No. T-1699, sale \$78.50, USNMAC) Discusses the factors involved in hereditary bleeder states due to deficiencies of plasma procoagulants. Mentions clotting factors, common synonyms, and associated hemorrhagic disorders with emphasis on clinical patterns. (Kinescope)

Infectious Hepatitis (40 min, 16mm, sd, b & w, Order No. T-1827-X, sale \$81.00, USNMAC) Emphasizes the epidemiology of viral hepatitis with a broad discussion of the practices in the dissemination of the diseases. Describes the importance of improper hygienic practices in the dissemination of infectious hepatitis and the risk of homologous serum hepatitis after blood transfusion and tissue-penetrations with contaminated equipment. Participating in the discussion are Thomas C Chalmers, MD, Tufts University School of Medicine and Lemuel Shattuck Hospital, George F Grady, MD, Tufts University School of Medicine and Lemuel Shattuck Hospital, and Raymond S Koff, MD, Tufts University School of Medicine and U S Public Health Service. (Kinescope)

Infectious Mononucleosis (30 min, 16mm, sd, b & w, Order No. T-1850-X, sale \$60.50, USNMAC) Discusses epidemiologic studies needed in this disease, along with its unknown but probable viral etiology. Emphasizes its varied hematologic and immunologic aspects. By William Damesheck, MD, and Louis Weinstein, MD, Tufts University School of Medicine. (Kinescope)

Jaundice - Medical or Surgical (40 min, 16mm, sd, b & w, Order No. T-1815-X, sale \$61.25, USNMAC) Presents a case with diagnostic workup. Discusses cholestasis and problems in differential diagnosis. Participating in the discussion are Franz J Ingelfinger, MD, Boston University School of Medicine, and William V McDermott, MD, Harvard Medical School. (Kinescope)

Management of Hemostatic Problems (90 min, 16mm, sd, b & w, Order No. T-1870-X, sale \$188.50, USNMAC) Reviews the pathophysiology of hemostasis and coagulation. Discusses emergency bleeding problems, diagnosis and management of hemorrhage

in an anticoagulated patient, bleeding problems of the hemophiloid, and platelet disorders. Discussed by Doctors Daniel Deykin, James L Tullis, and Edwin N Salzman of the Harvard Medical School and Duncan P Thomas and Herbert S Sise of Tuft University School of Medicine as well as Frank Breen from New England Deaconess Hospital. (Kinescope)

Pathogenesis and Management of Hemochromatosis (29 min, 16mm, sd, b & w, Order No. T-1507, sale \$60.50, USNMAC) Dr Crosby presents a basic discussion of 'primary hemochromatosis,' a rare metabolic hereditary disease involving the liver and pancreas. He shows various therapeutic approaches as well as diagnostic tests for this disorder. (Kinescope)

Pathogenesis of Anemia (31 min, 16mm, sd, b & w, Order No. T-1504, sale \$63.50, USNMAC) Discusses major types of anemias, their differentiation, tests involved in establishing the specific type and some basis for therapy. Explains formula for M-IT, and shows examples of normal and various abnormal M-IT readings in several types of anemias. (Kinescope)

Physical Chemistry of Immunohematology (27 min, 16mm, sd, b & w, Order No. T-1676, sale \$56.50, USNMAC) Presents a highly structured lecture on the stages of hemmagglutination and methods used to modify conditions in order to manifest the presence of blood group antibodies. (Kinescope)

Platelet Morphology Function (28 min, 16mm, sd, b & w, Order No. T-1723, sale \$57.50, USNMAC) Describes the origin of the circulating platelet beginning with the megakaryocyte in the bone marrow. Ultrastructure of the megakaryocyte as well as the platelet is shown using electron microscope and scanning microscope illustrations. Process of platelet adhesion, and aggregation, as well as tests of platelet function are described. (Kinescope)

Problems of Anemia (40 min, 16mm, sd, b & w, Order No. T-1840-X, sale \$78.50, USNMAC) Defines anemia in terms of the signs and symptoms it may cause to the measureable deficiency of hemoglobin. Explains the classification of anemia by cause, and stresses when anemia should not be treated. Topic is discussed by Jane F Desforges, MD, William H Crosby, Jr, MD, Harry S Jacob, MD, and John P Mahoney, MD, Tufts University School of Medicine, and Frank H Gardner, MD, Harvard Medical School. (Kinescope)

Recognition and Treatment of Certain Pancreatic Disorders ITL (40 min, 16mm, sd, b & w, Order No. T-1821-X, sale \$79.25, USNMAC) Discusses the difficult problems of pancreatitis and carcinoma. Presents X-ray techniques and surgical methods based on case material. Participants--Kenneth W Warren, MD and Robert E Wise, MD, Lahey Clinic. (Kinescope)

Refractory Anemia (30 min, 16mm, sd, b & w, Order No. T-1841-X, sale \$60.50, USNMAC) Illustrates that refractory anemia is a disease of unknown etiology and that it includes patients with active bone marrow but ineffective erythropoiesis. Discussion by John F Desforges, MD, William H Crosby, Jr, MD, Harry S Jacob, MD, and John P Mahoney, MD, Tufts University School of Medicine, and Frank H Gardner, MD, Harvard Medical School. (Kinescope)

Theory of Blood Coagulation. The (26 min, 16mm, sd, b & w, Order No. T-1698, sale \$54.75, USNMAC) Explains the basic mechanism of blood coagulation, presents brief background and resume of recent experimental work being done in field, and lays ground work for series which follow. Mention is made of pathogenesis of hemorrhagic and thrombo-embolic disease. (Kinescope)

Treatment of the Hemophiloid Disorders (31 min, 16mm, sd, b & w, Order No. T-1695, sale \$64.25, USNMAC) Reviews the three most common hemophiloid disorders and treatment for each--classical

hemophilia (Factor VII deficiency), hemophilia (Factor IX deficiency), and Von Willebrand's disease (Factor VIII and long bleeding time). Stress is placed on Factor VIII fractions and plasma concentrates. (Kinescope)

HUMAN RELATIONS

Battered Child, The, Pt 1 (27 min, 16mm, sd, b & w, 1970, Order No. T-1899A, sale \$56.50, USNMAC) Discusses patterns of injuries common to the battered child syndrome and the interpretation of these patterns. Shows the external symptoms or signs, and cases with no external symptoms but with extensive internal damage which is obvious at autopsy. (Kinescope)

Restricted to professional audiences--residents, other medical professional personnel, and research and social workers in the field of medicine. Cleared for use on educational closed-circuit television only.

Battered Child, The, Pt 2 (26 min, 16mm, sd, b & w, 1970, Order No. T-1899A, sale \$54.75, USNMAC) Discusses patterns of injuries common to the battered child syndrome and the interpretation of these patterns. Shows the external symptoms or signs, and cases with no external symptoms but with extensive internal damage which is obvious at autopsy. (Kinescope)

Restricted to professional audiences--residents, other medical professional personnel, and research and social workers in the field of medicine. Cleared for use on educational closed-circuit television only.

MEDICAL & PARAMEDICAL PROFESSION

One Door (29 min, 16mm, sd, color, 1969, sale \$150.00, USCHS) Presents a detailed explanation of contemporary group medical practices. Shows four real medical groups around the country, in both urban and rural settings.

MICROBIOLOGY, BACTERIOLOGY

Catalase Test, The (6 min, 16mm, sd, color, Order No. M-1754, sale \$25.50, USNMAC) Demonstrates a simple and rapid test for differentiating catalase positive from catalase negative organisms.

Infectious Diarrheas, The (15 min, 16mm, sd, color, Order No. M-0538, sale \$62.25, USNMAC) Discusses the overall problems involved in the control of some enteric diseases. Particularly useful for the general audience.

Infectious Diarrheas, The (Spanish) (15 min, 16mm, sd, color, 1960, Order No. M-0538-SP, sale \$62.25, USPHS) Discusses the overall problems involved in the control of some enteric diseases.

Isolation and Identification of Salmonellae (22 min, 16mm, sd, b & w, Order No. T-1494, sale \$46.25, USNMAC) Presents discussion about the diseases caused by salmonellae, its epidemiology and characteristics, principles of isolation, isolation from feces--reaction on brilliant green agar--TSI reactions, biochemical reactions, and serological typing. (Kinescope)

From the *Clinical Pathology Series*.

Isolation and Identification of Shigellae (19 min, 16mm, sd, b & w, Order No. T-1495, sale \$28.50, USNMAC) Presents a lecture by Dr Boring discussing the symptoms and epidemiology of shigellae, contributing factors, seasonal incidence, causative agent, isolation, selective media, biochemical reactions, serological sub-groups, serogrouping and serotypes in the U S A. (Kinescope)
From the *Clinical Pathology Series*.

Outbreak of Salmonella Infection, An (Spanish) (14 min, 16mm, sd, color, Order No. M-0148A, sale \$58.50, USNMAC) Presents a simulated typical outbreak of food-borne illness caused by organisms of the salmonella group. Discusses source and means of contamination, factors contributing to the survival and transfer of the organism, important conditions of environment and general food handling practices, and effects of the outbreak.

Outbreak of Staphylococcus Intoxication, An (Spanish) (12 min, 16mm, sd, color, Order No. M-0148B-SP, sale \$52.50, USNMAC) Presents a case study of a typical outbreak of food-borne illness caused by staphylococcus organisms, including symptoms of the victims, tracing the source of the organisms as staphylococcus aureus in pastry filling, and the reasons for the incidence of the organisms in the food.

Recognition of Leprosy (Spanish) (13 min, 16mm, sd, color, Order No. M-0374-SP, sale \$54.50, USNMAC) Illustrates the clinical manifestations of leprosy, using patients from the Public Health Service Hospital at Carville, Louisiana. Shows the technique of taking and staining skin scrapings to demonstrate the etiologic agent, mycobacterium leprae, and the technique of taking skin biopsies to determine pathology of peripheral nerves.

Staphylococcal Infection (40 min, 16mm, sd, b & w, Order No. T-1813-X, sale \$80.25, USNMAC) Discusses three problems of staphylococcal infection--pneumonia, endocarditis, and furunculosis. Discussed by Louis Weinstein, MD, Tufts University School of Medicine. (Kinescope)

Streptococcal Infections (40 min, 16mm, sd, b & w, Order No. T-1839-X, sale \$80.25, USNMAC) Discusses grouping and typing of streptococci. Explains small, mail-in culture kits that make rapid and accurate culture facilities available to all physicians. Discussed by Joseph M Miller, MD, Harvard School of Public Health, and Stephen M Wittenberg, MD, Massachusetts Department of Public Health. (Kinescope)

Tuberculin Testing, Pt 1, Tuberculins (Spanish) (7 min, 16mm, sd, color, Order No. M-1016-SP, sale \$27.50, USNMAC) Shows briefly the procedures involved in the preparations of purified protein derivatives and in particular the preparation of PPD-s used in tuberculin testing.

MICROBIOLOGY, PARASITOLOGY

Basic Epidemiologic and Clinicopathologic Aspects Of Malaria (30 min, 16mm, sd, b & w, Order No. T-1498, sale \$62.50, USNMAC) Presents human malaria parasites and their geographic distribution. The history and derivation of malaria is also given, and the life cycle illustrated in detail. Signs and symptoms are discussed as well as complications, diagnosis and management. (Kinescope)

Hookworm (10 min, 16mm, sd, color, 1946, sale \$43.00, rental \$7.50, USOIAA) A cartoon on hookworm which tells what poor sanitation and improper living habits did to careless Charles. Prevention and treatment of hookworm are emphasized.

From the *Health For the Americas Series*.

Intestinal Parasites, Pt 1, Introduction and Techniques of Handling Specimens (29 min, 16mm, sd, b & w, Order No. T-1701, sale \$59.50, USNMAC) Reviews effects of parasites on various organ systems in man and discusses various diagnostic techniques. (Kinescope)

Intestinal Parasite, Pt 2, Intestinal Amebiasis (24 min, 16mm, sd, b & w, Order No. T-1702, sale \$50.00, USNMAC) Shows various examples of this disease entity, symptomology, typical and atypical ulcers, preparation of wet smears, and diagnostic data. (Kinescope)

Intestinal Parasite, Pt 3, Extraintestinal Amebiasis (19 min, 16mm, sd, b & w, Order No. T-1703, sale \$39.50, USNMAC) Discusses liver abscess and cutaneous amebiasis using supportive radiographic and illustrative material. (Kinescope)

MICROBIOLOGY, VIROLOGY

Coagulase and Clumping Factor Tests for Staphylococcus Aureus, the (5 min, 16mm, sd, color, 1969, Order No. M-1765, sale \$21.75, USNMAC) Demonstrates the clotting of coagulase-positive staphylococci in liquid media in the presence of coagulase plasma.

Laboratory Diagnosis of Rabies in Animals (Spanish) (Rev Ed) (30 min, 16mm, sd, color, 1961, Order No. M-1046-SP, sale \$121.25, USPHS) Demonstrates the latest laboratory techniques for examination of animals for diagnosis of rabies. Shows the preparation of brain impressions, the inoculation of animals, the serum neutralization test and the fluorescent antibody test.

Rabies Control in the Community (Spanish) (11 min, 16mm, sd, b & w, Order No. M-0183-SP, sale \$23.25, USNMAC) Shows actual cases of rabies in both humans and dogs, how apathy of dog owners can permit rabies to become a community problem, and how concerted community action can prevent rabies.

Solubility and Optochine Tests for Streptococcus Pneumoniae (8 min, 16mm, sd, color, 1969, Order No. M-1766, sale \$33.50, USNMAC) Demonstrates the differentiation of streptococcus pneumoniae from other species by the optochin test or by the addition of sodium desoxycholate.

MILITARY MEDICINE

U S Army Medical Team, The (15 min, 16mm, sd, b & w, 1955, Order No. RF08-002, sale \$32.50, USA) Gives missions and functions of various departments in the medical service. Shows vital and humane role played by medical team.

U S Army Nurses in Korea (24 min, 16mm, sd, color, 1965, Order No. SB21, sale \$98.00, USA) Deals with army nursing assignments in Korea.

NEUROLOGY

Recent Advances in Neuromuscular Disease (90 min, 16mm, sd, b & w, Order No. T-1868-X, sale \$162.50, USNMAC) Features an exposition of the pathophysiology of peripheral nerve, neuromuscular junction, and muscle diseases. Emphasizes the techniques of clinical and laboratory diagnosis. Discussed by Raymond D Adams, MD, Arthur K Asbury, MD, and Gerald E Winkler, MD, Harvard Medical School. (Kinescope)

Technique of Intracellular Perfusion of Squid Giant Axon, the (10 min, 16mm, sd, color, Order No. M-2088-X, sale \$39.00, USNMAC) Demonstrates the introduction of perfusion fluid into the inlet and outlet cannulas of the axon by means of the micromanipulator.

NURSING AND PATIENT CARE

Bed Care and Positioning of the Patient with Arthritis (8 min, 16mm, sd, color, Order No. M-2012-X, sale \$31.25, USNMAC) Demonstrates proper bed care and positioning of the patient with arthritis which will allow a more rapid and comfortable recovery as well as prevent contractures and bed sores. Points out that an integral part of good bed care is the ability to assist movement of the patient with a minimum of pain.

Care of the Cardiac Patient (33 min, 16mm, sd, b & w, 1945, Order No. OE419, sale \$56.75, rental \$10.00, USOE) Describes nursing care given a cardiac patient, including--comfort, rest, sleep, diet, feeding, elimination, cleanliness, and diversional and occupational therapy. From the *Nursing Series*.

Care of the Newborn Baby - The Nurse's Role in Instructing the Parents (31 min, 16mm, sd, b & w, 1944, Order No. OE412, sale \$53.50, rental \$10.00, USOE) Tells nurse's functions and duties in teaching parents to care for newborn babies. Shows what the nurse can do in the home, clinic, and hospital. Describes how to hold, dress, bathe, and feed a baby. From the *Nursing Series*.

Care of the Patient with Diabetes Mellitus - Complicated (23 min, 16mm, sd, b & w, 1945, Order No. OE418, sale \$40.50, rental \$10.00, USOE) Tells nurse's role in the diagnosis and treatment of coma and insulin shock. Describes the role of the nurse, doctor, dietician, and psychiatrist in assisting the patient to develop a healthy mental attitude toward his condition. From the *Nursing Series*.

Care of the Patient with Diabetes Mellitus - Uncomplicated (29 min, 16mm, sd, b & w, 1945, Order No. OE417, sale \$50.25, rental \$10.00, USOE) Describes symptoms of diabetes and tells how the nurse teaches the patient to administer insulin injections, regulate diet, and make the Benedict test for sugar in the urine. From the *Nursing Series*.

Chronic Obstructive Pulmonary Disease - The Use Of Oxygen in Physical Therapy Management (6 min, 16mm, sd, color, Order No. M-1572, sale \$25.50, USNMAC) Shows how various machines, depending on the particular need, are used on the patient with chronic obstructive pulmonary disease.

Crutch and Cane Measurement (6 min, 16mm, sd, color, 1970, Order No. M-1789, sale \$23.50, USNMAC) Shows the proper method of measuring a patient for axillary crutches, Iofstand crutches, or a cane.

Feeding the Patient (15 min, 16mm, sd, b & w, 1945, Order No. OE404, sale \$27.00, rental \$7.50, USOE) Presents factors which affect appetite and digestion, shows preparation of the environment and the patient for the meal, shows proper balance of food and arrangement of the tray, shows individualized feeding care, and describes after-care of the patient. From the *Nursing Series*.

Fundamentals of Massage (12 min, 16mm, sd, b & w, 1945, Order No. OE414, sale \$26.75, rental \$7.50, USOE) Describes techniques of fundamental massage movements--deep stroking, kneading, and friction. Gives principal physiological effects of these massage movements upon the human organism.

From the *Nursing Series*.

Handwashing in Patient Care (Spanish) (15 min, 16mm, sd, color, 1961, Order No. M-1045-SP, sale \$62.25, USPHS) Shows the importance of the conscientious practice of hand washing to avoid the transmission of pathogens.

Hemiparetic Patient, The - In and Out of Car - Patient Walking with Cane (3 min, 16mm, sd, color, 1970, Order No. M-1782, sale \$14.00, USNMAC) Demonstrates the use of a cane in entering and leaving a car.

Hemiparetic Patient, The - Transfer from Wheelchair to Car and Reverse (4 min, 16mm, sd, color, 1970, Order No. M-1781, sale \$17.75, USNMAC) Demonstrates the transfer between wheelchair and car.

Hydrotherapy (22 min, 16mm, sd, b & w, 1945, Order No. OE410, sale \$46.25, rental \$7.50, USOE) Tells how to administer sedative baths, wet-sheet packs, tonic showers, douches, sprays, special types of therapeutic baths, rehabilitation hydrotherapy in the Hubbard bath and rehabilitation pool, and describes physiological effects of hydrotherapy upon the body.

From the *Nursing Series*.

Prescription Roses (28 min, 16mm, sd, color, sale \$119.50, USHSMH) Acquaints medical and para-medical groups with the concept of comprehensive patient care.

Principles of Bed Exercising with the Arthritis Patient, the (8 min, 16mm, sd, color, Order No. M-2014-X, sale \$29.50, USNMAC) Assisting the arthritis patient with his exercise program may be time consuming, but it is essential so that he may maintain or regain use of his body during hospitalization. It may be no more than encouragement and instruction, but it often requires active assistance. Maximum benefits can be obtained with minimum discomfort.

Quadriparetic Patient, The - Transfer from Wheelchair to Car and Reverse (8 min, 16mm, sd, color, 1970, Order No. M-1786, sale \$33.50, USNMAC) Demonstrates use of the sliding board for transfer between wheelchair and car.

Teaching Crutch Walking (13 min, 16mm, sd, b & w, 1945, Order No. OE422, sale \$23.75, rental \$7.50, USOE) Demonstrates how to teach the patient to walk in a walker. Describes the various methods of crutch walking--two-point, four-point, and swinging. Tells how to sit, rise, and climb stairs and describes the safety factors involved in crutch walking.

From the *Nursing Series*.

Therapeutic Uses of Heat and Cold, Pt 1. Administering Hot Applications (21 min, 16mm, sd, b & w, 1945, Order No. OE408, sale \$37.00, rental \$7.50, USOE) Shows body reactions to heat and the use of heat in the alleviation of pain. Tells how to apply hot water bottles, electric pads, chemical pads, and paraffin bath. Describes the uses of hot soak, compresses, infra-red lamp, and shortwave diathermy.

From the *Nursing Series*.

Therapeutic Uses of Heat and Cold, Pt 2. Administering Cold Applications (22 min, 16mm, sd, b & w, 1945, Order No. OE409, sale \$38.50, rental \$7.50, USOE) Shows body responses to cold, therapeutic uses of cold, how to administer contrast baths and ice bags, how to apply ice packs as anesthesia, and how to use refrigerating blankets and cold chamber.

From the *Nursing Series*.

Transferring the Patient with Arthritis (9 min, 16mm, sd, color, Order No. M-2013-X, sale \$35.25, USNMAC) Demonstrates the proper transfer of the patient with arthritis, a technique often neglected but which can contribute much to the comfort of the

afflicted person. These fundamental principles may apply to any patient whether on medical or surgical service.

Vital Signs and Their Interrelation, The - Body Temperature, Pulse, Respiration, ... (32 min, 16mm, sd, b & w, 1945, Order No. OE406, sale \$55.25, rental \$10.00, USOE) Full title - Vital Signs and Their Interrelation, The - Body Temperature, Pulse, Respiration, Blood Pressure - Describes the physiology of the respiratory, heat regulatory, and circulatory systems and their inter-relationships. Shows how to ascertain and record the vital signs--temperature, pulse, respiration, and blood pressure.

From the *Nursing Series*.

You in OPD (22 min, 16mm, sd, color, 1969, Order No. MN10646, sale \$87.75, USN) Shows how to develop techniques for an effective relationship between staff and patients.

NUTRITION

Community Canning (17 min, 16mm, sd, b & w, 1943, Order No. OE198, sale \$36.50, rental \$7.50, USOE) Explains how to wash, snap, grade, blanch, and season beans. Describes how to prepare the cans, pack and exhaust them, label and seal the cans, use a pressure cooker or retort, and cool, dry, and store the cans.

From the *Farm Work Series*. Food Preservation, No. 1

Diet and Atherosclerotic Disease - Are They Related (29 min, 16mm, sd, b & w, Order No. T-1880, sale \$60.50, USNMAC) Dr Stamler presents statistical data to implicate diet in the pathogenesis of atherosclerotic disease, and contends that alteration of the American dietary pattern is essential if we are to abate our atherosclerotic epidemic. Dr Altschule points out numerous inadequacies in studies to date. He does not feel that a qualitative change in the American diet would benefit either the coronary patient or the healthy individual. (Kinescope)

From the *Concepts and Controversies in Modern Medicine Series*.

Food Conservation - The Dollars and Sense of Good Eating (9 min, 16mm, sd, b & w, 1956, Order No. TF10-2244, sale \$19.00, USA) Shows economic merits of taking just enough food for individual capacity. Points out that conscious avoidance of waste allows for menu extras. (Cleared for TV)

Our Food and Our Health (15 min, 16mm, sd, color, 1948, Order No. TF08-1476, sale \$62.25, USA) Illustrates importance of proper eating habits as a factor in maintaining individual soldier's health and well-being.

PHARMACOLOGY AND TOXICOLOGY

Principles of Long-term Steroid Therapy (30 min, 16mm, sd, b & w, Order No. T-1864-X, sale \$60.50, USNMAC) Studies complications and hazards of corticosteroid therapy. Suggests minimizing side effects by (1) achieving high local concentration and low systemic dosage via aerosol administration or (2) periodic administration of high doses systemically. Discussed by James Melby, MD, Boston University School of Medicine, and Frances C Lowell, MD, and John G Harter, MD, Harvard Medical School. (Kinescope)

Streptomycin (10 min, 16mm, sd, b & w, 1950, sale \$21.00, rental \$5.00, USIA) Reviews the events and work that led to the discovery of the drug, streptomycin, by Dr Waxman at Rutgers University.

Uses of Penicillins - Old and New (40 min, 16mm, sd, b & w, Order No. T-1828-X, sale \$82.25, USNMAC) Describes one observer's experiences with methicillin, oxacillin, ampicillin, and cephalosporin. Discusses the uses of penicillin G in gram-negative infections. Discussed by Louis Weinstein, MD, Tufts University School of Medicine. (Kinescope)

PHYSIOLOGY

Embryology of the Liver, Gallbladder, and Pancreas (18 min, 16mm, sd, color, 1952, Order No. TF08-0003, sale \$74.25, USA) Consists of a simple visualization of the embryology of these organs particularly focusing on anomalies and variations commonly discovered by surgeons. (Cleared for TV)

Human Body (7 min, 16mm, sd, color, 1945, sale \$41.00, rental \$7.50, USOIAA) Uses animation to explain how parts of the body function. Emphasizes the body's need for fresh air and a variety of foods.

PSYCHIATRY AND PSYCHOLOGY

Community Mental Health Center, A - The New Way (10 min, 16mm, sd, color, Order No. M-1527-X, sale \$41.00, USNMAC) Stresses the need for community mental health centers. Demonstrates how these centers tie together mental health services such as emergency care, in-patient and out-patient care, partial hospitalization, consultation and education. (an animated film.)

Community Mental Health Center, A - The New Way (Spanish) (10 min, 16mm, sd, color, Order No. M-1527-SP, sale \$41.00, USNMAC) Stresses the need for community mental health centers. Demonstrates how these centers tie together mental health services such as emergency care, in-patient and out-patient care, partial hospitalization, consultation and education. (an animated film.)

Family Doctor, Psychiatrist, And Depressed Patient (40 min, 16mm, sd, b & w, Order No. T-1834-X, sale \$78.50, USNMAC) Follows a patient through a visit with her family doctor and subsequent consultation with a psychiatrist. Discusses depression, presenting therapeutic guidelines, important symptoms, and clues in masked depressions. Stresses the role of the family doctor in handling some types of depression. By Philip Solomon, MD, Harvard Medical School, and William Taggart, MD, Chairman, Educational Academy of General Practice. (Kinescope)

Not Sick Enough (11 min, 16mm, sd, color, 1969, sale \$43.00, USSRS) Depicts the special problem of mental illness in the unthought neurotic.

REHABILITATION

Another voice (10 min, 16mm, sd, color, 1969, sale \$41.00, USSRS) Depicts the rehabilitation of the laryngectomies via esophageal speech.

Hygienic Procedures for the Amputee (6 min, 16mm, sd, color, 1970, Order No. M-1788, sale \$23.50, USNMAC) Presents the proper hygienic procedures which must be followed by the patient with an amputation for daily cleansing of the stump, stump sock or bandage, and the prosthesis itself.

Paraplegic Patient Education - Activities in Your New Life (7 min, 16mm, sd, color, 1970, Order No. M-1757-X, sale \$29.50, USNMAC) Looks at some of the problems of adjusting to a new life following a crippling disease or accident. Suggests ways to solve these problems, build self-confidence, and achieve physical and financial independence.

Paraplegic Patient Education - An Active Future (5 min, 16mm, sd, color, 1970, Order No. M-1764-X, sale \$21.75, USNMAC) Stresses the importance of setting realistic goals during the rehabilitation program in order to achieve success later. Emphasizes the necessity of maintaining good health, activity, and interest.

Paraplegic Patient Education - Joint Motion (5 min, 16mm, sd, color, 1970, Order No. M-1758-X, sale \$21.75, USNMAC) Explains methods for maintaining joint motion, including range of motion exercises, positioning, and activity.

Paraplegic Patient Education - Moving in and Out Of Your Wheelchair (5 min, 16mm, sd, color, 1970, Order No. M-1759-X, sale \$21.75, USNMAC) Explains the steps involved in the independent transfer to and from a wheelchair.

Paraplegic Patient Education - Planning Your Bowel Program (6 min, 16mm, sd, color, 1970, Order No. M-1763-X, sale \$25.50, USNMAC) Stresses the importance of a well-planned bowel program based on scheduling, diet, and stimulation.

Paraplegic Patient Education - Prevention of Bladder Problems (8 min, 16mm, sd, color, 1970, Order No. M-1762-X, sale \$33.50, USNMAC) Explains bladder dysfunction related to spinal cord injury. Stresses the importance of catheter irrigation, good drainage, and fluid intake in the prevention of calcium deposits in the bladder or kidneys.

Paraplegic Patient Education - Prevention of Skin Problems (8 min, 16mm, sd, color, 1970, Order No. M-1761-X, sale \$33.50, USNMAC) Cites causes of decubitus ulcers resulting from pressure sores. Warns of dangers involved and outlines a simple deterring program.

Paraplegic Patient Education - The Effects of Spinal Cord Injury (8 min, 16mm, sd, color, 1970, Order No. M-1756-X, sale \$33.50, USNMAC) Cites causes of spinal injuries, discusses the effect these injuries may have on the individual, and points out how best to become as independent as possible.

Paraplegic Patient Education - Walking with Braces and Crutches (5 min, 16mm, sd, color, 1970, Order No. M-1760-X, sale \$21.75, USNMAC) Stresses physical limitations, need for preparation for ambulation training, balance drills, and mobility exercises. Emphasizes that results depend on continued practice.

Paraplegic Patient, The - In and Out of Car - Patient Using Crutches (5 min, 16mm, sd, color, 1970, Order No. M-1785, sale \$21.75, USNMAC) Demonstrates the use of crutches and braces in moving in and out of a car.

Paraplegic Patient, The - Transfer from Wheelchair to Car and Reverse (4 min, 16mm, sd, color, 1970, Order No. M-1783, sale \$17.75, USNMAC) Demonstrates the transfer between wheelchair and car.

Recreational and Occupational Therapy (13 min, 16mm, sd, b & w, 1945, Order No. OE415, sale \$28.50, rental \$7.50, USOE) Depicts recreational and occupational activities fitted to the patient's condition--passive diversion during an immobile state, limited physical activities carried on in bed, individualized occupational therapy, and social recreation projects.
From the *Nursing Series*.

Someone Who Cares (11 min, 16mm, sd, color, 1969, sale \$44.75, USSRS) Depicts the rehabilitation of stroke victims.

RESPIRATORY SYSTEM

Acute or Chronic Respiratory Failure (90 min, 16mm, sd, b & w, Order No. T-1877-X, sale \$187.00, USNM MAC) Demonstrates the use of xenon to show distribution of ventilation and pulmonary blood flow. Discusses the inter-relationship of cardiac-respiratory failure and shows respiratory function tests and methods of evaluation best suited for care of patients with acute respiratory failure. Participating in the discussion are Dr Henning Potoppidan, Dr Homayoun Kazemi, and Dr Myron B Laver, Harvard Medical School. (Kinescope)

Fair Warning (28 min, 16mm, sd, color, 1970, Order No. T-2028-X, sale \$113.50, USNM MAC) Provides information that will assist the health professional in dealing with patients' smoking problems. Discusses the individual's motivation to smoke and motivation to stop smoking. Includes discussion of ways in which the health professional can intervene in smoking behavior and assist his patient to stop. By Daniel Horn, PhD, Director, National Clearinghouse for Smoking and Health and Donald Fredrickson, MD, Former Director, Smoking Control Program, New York City Department of Health.

Intensive Respiratory Care (30 min, 16mm, sd, color, Order No. M-1628-X, sale \$100.00, USNM MAC) Designed to instruct physicians in the proper techniques for diagnosing and treating acute respiratory failure. Informs physicians on the pathophysiologic approach to the treatment of respiratory failure. Includes a two-minute animated segment showing lung pathology and physiology.

Obstructive Lung Disease (40 min, 16mm, sd, b & w, Order No. T-1842-X, sale \$78.50, USNM MAC) Shows bronchitis, asthma, and emphysema as major health hazards with air pollution, smoking, and industrial irritants, infection, and allergy as the chief causes, and respiratory and cardiac failure the most serious complications. Recommends early diagnosis and hospital treatment. Discussing the topic are Robert P McCombs, MD, and John M Tyler, MD, Tufts University School of Medicine. (Kinescope)

Preoperative Evaluation of Lung Function (40 min, 16mm, sd, b & w, Order No. T-1819-X, sale \$81.00, USNM MAC) Demonstrates a practical workup and management of patients with chronic respiratory disease before, during and after surgery. By Edward Gaensler, MD, Boston University School of Medicine. (Kinescope)

Pulmonary Disease Conference, Pt 1 (30 min, 16mm, sd, b & w, Order No. T-1861-X, sale \$60.50, USNM MAC) Discusses complaints which patients usually bring to their doctors-cough, shortness of breath, chest pain, hemoptysis, or an unsuspected x-ray. Discussed by Doctors Theodore L Badger, George W B Starkey, Kenneth T Bird, and Lloyd E Hawes of the Harvard Medical School. (Kinescope)

Pulmonary Disease Conference, Pt 2 (30 min, 16mm, sd, b & w, Order No. T-1862-X, sale \$60.50, USNM MAC) Continues discussion of complaints which patients usually bring to their doctors. Discussed by Doctors Theodore L Badger, George W B Starkey, Kenneth T Bird, and Lloyd E Hawes of the Harvard Medical School. (Kinescope)

Tuberculosis (10 min, 16mm, sd, color, 1945, sale \$43.00, rental \$7.50, USIA) Demonstrates, by animation, the characteristics of tuberculosis, its method of entry into the body, and emphasizes

protective measures which the family can undertake to prevent this disease.

From the *Health For the Americas* Series.

STROKE

Stroke Patient, The, Pt 1, Gross Prognostic Evaluation (30 min, 16mm, sd, b & w, Order No. T-1829-X, sale \$60.50, USNM MAC) Demonstrates evaluation of four patients for strength, range of motion, coordination, spasticity, and sensory deficit in upper and lower extremities. Emphasizes potentialities of the stroke patient. By Charles D Bonner, MD, Boston University School of Medicine. (Kinescope)

Stroke Patient, The, Pt 2, Detailed Functional Evaluation (30 min, 16mm, sd, b & w, Order No. T-1830-X, sale \$60.50, USNM MAC) Details functional evaluation of the patient with assessment of daily living activities. By Charles D Bonner, MD, Boston University School of Medicine. (Kinescope)

SURGERY

Film Symposium of Stress Urinary Incontinence, a (61 min, 16mm, sd, color, Order No. M-2015, sale \$242.25, USNM MAC) Presents a one-hour film symposium composed of six motion pictures treating various surgical techniques for the correction of stress urinary incontinence in the female bladder neck.

From the *Autopsy Dissection Technique A Cinematographic Atlas* Series.

Prosthetic Above-knee Sockets, Pt 3 (9 min, 16mm, sd, color, 1970, Order No. M-1792, sale \$37.25, USNM MAC) Describes in detail the quadrilateral or anatomical socket used with above-knee amputations and shows the importance of having the socket fit the stump correctly. Three different methods of suspension are shown.

Prosthetic Below-knee Sockets, Pt 4 (6 min, 16mm, sd, color, 1970, Order No. M-1793, sale \$26.25, USNM MAC) Explains the various qualities of three different below-knee prosthetic sockets and shows each of these being worn by a patient.

Prosthetic Foot Components, Pt 1 (7 min, 16mm, sd, color, 1970, Order No. M-1790, sale \$29.50, USNM MAC) Reviews the various aspects of four types of foot-ankle components and presents patients wearing each of these types.

Prosthetic Knee Components, Pt 2 (8 min, 16mm, sd, color, 1970, Order No. M-1791, sale \$31.25, USNM MAC) Describes the various qualities of five different knee joints which may be used by the patient with an above-knee amputation.

Recurrent Anterior Dislocation of the Shoulder - Simplified Surgical Repair (13 min, 16mm, sd, color, 1968, Order No. TF6159, sale \$54.50, USAF) Shows surgical techniques for repairing anterior dislocation of the shoulder. Explains advantages of this operation over previous methods used. Also shows postoperative recovery of patient.

Rejection of Renal Transplant (18 min, 16mm, sd, b & w, Order No. T-1746, sale \$38.50, USNM MAC) Provides a general review of rejection theory followed by a discussion concerning types of rejections of renal homografts in man. Acute or hyperacute rejection, intermediate, and chronic rejection are discussed. A brief survey of statistical data is included. (Kinescope)

VACCINATION

Cellular and Molecular Aspects of the Immune Response (43 min, 16mm, sd, b & w, Order No. T-1508, sale \$88.00, USNMAC) Presents a lecture on various types of immune responses to different classes of antigens, and explores the cellular and molecular events involved. (Kinescope)

Defense Against Invasion (13 min, 16mm, sd, color, 1946, sale \$54.50, rental \$1000, USOIAA) Explains how vaccination makes the body immune to certain diseases. An animated film. From the *Health For the Americas* Series.

Modern Immunization Procedures in Children and Adults (40 min, 16mm, sd, b & w, Order No. T-1837-X, sale \$78.50, USNMAC) Reviews present recommendations for immunization procedures in infancy, childhood, and adult life. Emphasizes areas which are somewhat controversial, including immunizations against diphtheria, tetanus and smallpox. Participating are Sydney S Gellis, MD, Tufts University School of Medicine, Geoffrey Edsall, Md, Harvard School of Public Health, and Samuel Katz, Md, Harvard Medical School. (Kinescope)

Smallpox Vaccination - Should Our Policy Be Changed (28 min, 16mm, sd, b & w, Order No. T-1678, sale \$58.50, USNMAC) Shows pros and cons for smallpox vaccination. Indicates that children die

or suffer from vaccination complications but that our current freedom from smallpox is totally dependent on the continued use of the vaccine. (Kinescope)

From the *Concepts and Controversies in Modern Medicine* Series.

Stop Rubella (14 min, 16mm, sd, color, Order No. M-1749, sale \$58.25, USNMAC) Stresses the need for parents to get their children inoculated against rubella. Shows rubella damaged children, development of vaccine, inoculation of children, and an interview with Dr Bruce Dull of the National Communicable Disease Center. Opening and closing narration by Diahann Carroll, Lloyd Noland, an Marc Copage, of the 'Julia' television show.

VETERINARY MEDICINE

Air Force Veterinary Support for the Military Dog Program in Southeast Asia (24 min, 16mm, sd, color, 1968, Order No. TF6105, sale \$98.00, USAF) Reviews sentry dog program in Southeast Asia. Cites Veterinarian Officer's responsibilities and duties. Illustrates sentry dog clinics, treatment rooms and well constructed kennels. Shows work environment and treatment of diseases and disorders peculiar to dogs in Southeast Asia. (Cleared for TV)

HUMAN RELATIONS

CAREER OPPORTUNITIES

Cup O' Joe, A (20 min, 16mm, sd, color, 1969, Order No. MN10510, sale \$82.00, USN) Shows career opportunities, foreign travel and social life for men and women in the modern Navy.

Good Place to Start, A (28 min, 16mm, sd, color, 1970, sale \$113.50, USCSC) Shows that the Federal Government offers excellent career opportunities for high school and college graduates. Emphasizes the importance of the high school diploma. (Cleared for TV)

Horizons Unlimited, Pt 1 (37 min, 16mm, sd, color, 1969, sale \$149.00, USAEC) Describes new atomic industries and applications of atomic research which have opened up new careers in nuclear science and nuclear engineering.
From the *Careers in Nuclear Science and Nuclear Engineering Series*.

Navy Meteorology for College Graduates (15 min, 16mm, sd, color, 1967, Order No. MN10535, sale \$62.25, USN) Shows opportunities for meteorologists as officers in the Naval Weather Service.

Never Among Strangers (14 min, 16mm, sd, color, 1968, Order No. MH10436, sale \$56.50, USMC) Shows the training, job opportunities and liberty for prospective Women Marine Corps recruits.

New Job, The (20 min, 16mm, sd, b & w, 1969, sale \$42.50, rental \$7.50, USIA) Focuses on the activities of private U S corporations which provide vocational training and jobs for underprivileged and undereducated men and women who live in ghettos of the United States.

Passport to the Future (27 min, 16mm, sd, color, 1970, sale \$109.50, USCSC) Shows that the Federal Government offers excellent career opportunities for high school graduates as well as for college graduates. Meant for high school audiences, it emphasizes the importance of the high school diploma. (Cleared for TV)

Preparing for Tomorrow's World (26 min, 16mm, sd, color, 1969, sale \$105.75, USAEC) Examines career possibilities for high school science students in the field of nuclear science.

Seven Letters (19 min, 16mm, sd, color, 1957, Order No. SFP0357, sale \$78.00, USAF) Portrays factors jet pilot must consider in choosing an Air Force or civilian career. (Cleared for TV)

Very Special Man, A (20 min, 16mm, sd, color, 1968, Order No. MN10402, sale \$82.00, USN) Shows the importance of electronics to the Navy and opportunities available for recruits in advanced electronics.

Veteran Becomes a Farmer, The (28 min, 16mm, sd, b & w, 1946, Order No. OE398, sale \$57.25, rental \$10.00, USOE) Shows how individuals and groups in a farm community cooperate in giving help and counsel to a veteran wishing to become a farmer.

View from Outside, The (26 min, 16mm, sd, color, 1966, Order No. MN09622, sale \$105.75, USMC) Advantages of remaining in the Corps are compared with civilian life.

Where Have All the Students Gone (30 min, 16mm, sd, b & w, 1965, sale \$62.50, rental \$10.00, USIA) Features jobs of college students during summer vacations, from truck driving to oceanographic research.

From the *Report from America Series*.

Your Place in the Nuclear Age (26 min, 16mm, sd, color, 1969, sale \$105.75, USAEC) Gives the science student a picture of the professional environment in which he would be working if he chose a career in nuclear science or engineering. Shows the opportunities available in the field of nuclear technology.

From the *Careers in Nuclear Science and Nuclear Engineering Series*.

GENERAL

Demand to Be Heard (28 min, 16mm, sd, color, 1969, sale \$115.50, USSRS) Depicts in film-o-graph form the demands of recipients of service for a voice in planning programs which affect their lives. Shows examples of their involvement.

ECCO (7 min, 16mm, sd, color, sale \$29.50, USSRS) Depicts the financing of a neighborhood rehabilitation facility in Columbus, Ohio.

Job Appeal (13 min, 16mm, sd, color, Order No. M-1422, sale \$52.50, USNMAC) An open-end film portraying the problem of fair employment practices. A realistic situation is dramatized to effect maximum audience involvement. A young negro man, seeking a promotion, is told by his boss that another man has been selected.

Letter from a Mother (10 min, 16mm, sd, b & w, 1955, Order No. MF45-8438, sale \$21.00, USA) Shows an American mother's understanding of role her son must play in defense of his country. (Cleared for TV)

Those Who Stay Behind (16 min, 16mm, sd, color, 1969, sale \$66.00, USSRS) Shows the problems of the isolated and disadvantaged rural family and emphasizes those problems which face a family having an afflicted child.

Youth Communications (36 min, 16mm, sd, color, sale \$143.25, US-DOD) Uses illustrations from the pre-1970 era to emphasize the more important general youth communications patterns that continue to this day. Developed to assist in understanding the drug problem and to close the 'Understanding Gap' that exists between adults and today's youthful media audience.

REHABILITATION

Beating the Averages (27 min, 16mm, sd, color, 1969, sale \$109.50, USSRS) Depicts problems of wheelchair victims attempting to move about in conventionally-designed homes, office buildings, and factories. Narrated by Raymond Burr.

Born a Man (21 min, 16mm, sd, b & w, 1964, sale \$44.50, rental \$7.50, USIA) A documentary account of the rehabilitation of an electrician who is totally and permanently blinded by an accident. Shows how his courage and efforts help him to complete training under federal, state and private programs which enables him to return to his job.

Continuity of Rehabilitation Services (10 min, 16mm, sd, color, 1969, sale \$41.00, USSRS) Depicts the rehabilitation role of an insurance company in Newark, New Jersey.

Gap, The (27 min, 16mm, sd, color, 1969, sale \$109.50, USSRS) Depicts problems remaining in the delivery of welfare and rehabilitation services. Shows successful approaches to the problem.

Rehabilitation of the Blind (10 min, 16mm, sd, b & w, 1951, sale \$21.00, rental \$5.00, USIA) Pictures processes used in the United States in rehabilitation of the blind, including eating and direction training, emphasis upon other senses, training for trades and occupations, and the importance of psychological adjustment by the blind.

Where There Is Hope (20 min, 16mm, sd, color, 1968, sale \$82.00, USSSA) Points out that help is available for retarded children from both private and government agencies. Shows the facilities of the John F Kennedy Institute which is associated with the Johns Hopkins Medical Facilities of Baltimore.

SUPERVISION

Character Guidance (29 min, 16mm, sd, b & w, 1958, Order No. TV429, sale \$59.50, USA) Explores the Army's character guidance program. (Cleared for TV)
From the *Big Picture* Series.

Establishing Working Relations for the Disabled Worker (14 min, 16mm, sd, b & w, 1946, Order No. OE401, sale \$25.50, rental \$7.50, USOE) Dramatizes case study of workers being overly solicitous of a new one-handed lathe operator, of his resentment at being considered a 'freak,' and of the supervisor's successful handling of the situation.
From the *Problems in Supervision* Series.

Every Minute Counts (10 min, 16mm, sd, b & w, 1944, Order No. OE161, sale \$17.50, rental \$5.00, USOE) Shows the problems of a new supervisor in handling lateness, loafing, and absenteeism. Tells how he learns to deal with individual cases.
From the *Problems in Supervision* Series.

How to Conduct a Meeting (20 min, 16mm, sd, b & w, 1951, sale \$42.50, rental \$7.50, USIA) Shows the proper parliamentary procedures to be followed in conducting a meeting to insure that the decisions will represent the majority.

Improving the Job (9 min, 16mm, sd, b & w, 1944, Order No. OE163, sale \$15.75, rental \$5.00, USOE) Shows a supervisor asking an employee for work-improvement suggestions. The employee talks the problem over with his father and sister, obtains their advice, and makes some worthwhile suggestions.
From the *Problems in Supervision* Series.

Instructing the Blind Worker on the Job (14 min, 16mm, sd, b & w, 1944, Order No. OE166, sale \$30.50, rental \$7.50, USOE) Shows how a supervisor trains a blind worker to operate a drill press.
From the *Problems in Supervision* Series.

Instructing the Disabled Worker on the Job (14 min, 16mm, sd, b & w, 1946, Order No. OE400, sale \$25.50, rental \$7.50, USOE) Dramatizes instances of poor and good instruction of disabled workers, and shows how a one-armed worker successfully learns to operate a drill press.
From the *Problems in Supervision* Series.

Instructing the Worker on the Job (14 min, 16mm, sd, b & w, 1944, Order No. OE155, sale \$25.50, rental \$7.50, USOE) Dramatizes how not to instruct a new worker and the results of poor on-the-job instruction. Tells how such instruction should be done.
From the *Problems in Supervision* Series.

Introducing the New Worker to His Job (16 min, 16mm, sd, b & w, 1944, Order No. OE154, sale \$28.50, rental \$7.50, USOE) Dramatizes how not to orient a new employee and get him started on his job. Tells what should have been done.

From the *Problems in Supervision* Series.

Maintaining Good Working Conditions (9 min, 16mm, sd, b & w, 1944, Order No. OE152, sale \$15.75, rental \$5.00, USOE) Two supervisors describe specific ways which they used in improving working conditions.

From the *Problems in Supervision* Series.

Maintaining Workers' Interest (13 min, 16mm, sd, b & w, 1944, Order No. OE159, sale \$23.75, rental \$7.50, USOE) Dramatizes instances of employees doing poor work because their jobs do not interest them, and shows what the supervisor should do to detect and remedy such situations.

From the *Problems in Supervision* Series.

New Supervisor Takes a Look at his Job, A (13 min, 16mm, sd, b & w, 1944, Order No. OE150, sale \$23.75, rental \$7.50, USOE) A machine tool operator is made a group leader and his plant superintendent explains to him the meaning of working with people instead of machines.

From the *Problems in Supervision* Series.

Placing the Right Man on the Job (13 min, 16mm, sd, b & w, 1944, Order No. OE156, sale \$23.75, rental \$7.50, USOE) Dramatizes cases of five different workers, unsatisfactory in particular jobs, who are reassigned to other jobs more suitable to their abilities and capacities.

From the *Problems in Supervision* Series.

Planning and Laying Out Work (10 min, 16mm, sd, b & w, 1944, Order No. OE151, sale \$17.50, rental \$5.00, USOE) Depicts a plant supervisor's talk to his son, who has built a boat in the basement too large to go through the door, about the necessity for planning a job in advance, and recounts several illustrative experiences at the plant.
From the *Problems in Supervision* Series.

Supervisor as a Leader, The, Pt 1 (14 min, 16mm, sd, b & w, 1944, Order No. OE168, sale \$25.50, rental \$7.50, USOE) Shows four dramatized episodes illustrating poor supervisory practices and the importance of the following rules--always keep promises, and never take credit for someone else's work, don't pass the buck, and don't play favorites.

From the *Problems in Supervision* Series.

Supervisor as a Leader, The, Pt 2 (13 min, 16mm, sd, b & w, 1944, Order No. OE169, sale \$23.75, rental \$7.50, USOE) Shows four dramatized instances of poor supervision leading to the following generalizations--be a leader not an authoritarian, show appreciation for a job well done, do not become angry, and protect the rights and feelings of workers.

From the *Problems in Supervision* Series.

Supervising Women Workers (11 min, 16mm, sd, b & w, 1944, Order No. OE158, sale \$19.25, rental \$5.00, USOE) Shows a plant manager advising a foreman to remember that women workers haven't the same industrial experience as men and very often have more home responsibilities, and to take these facts into account in his supervision.

From the *Problems in Supervision* Series.

Supervising Workers on the Job (10 min, 16mm, sd, b & w, 1944, Order No. OE157, sale \$17.50, rental \$5.00, USOE) Dramatizes incidents illustrating good and poor methods of supervision, including the necessity for obtaining the confidence of workers and the dangers of 'snooperising'.

From the *Problems in Supervision* Series.

Working with Other Supervisors (8 min, 16mm, sd, b & w, 1944, Order No. OE153, sale \$14.25, rental \$5.00, USOE) Shows how a supervisor fails because he does not recognize the importance of

working harmoniously with other people, particularly with his fellow supervisors.

From the *Problems in Supervision* Series.

VOCATIONAL GUIDANCE

Apprentice Training (30 min, 16mm, sd, b & w, 1953, sale \$62.50, rental \$10.00, USIA) Illustrates the major features of a planned apprentice training program in the U S construction industry and portrays the steps in advancing through apprenticeship to journeyman status in the bricklaying trade.

Employing Blind Workers in Industry (17 min, 16mm, sd, b & w, 1944, Order No. OE165, sale \$30.50, rental \$7.50, USOE) Depicts actual instances of blind workers performing jobs in industry, types of work which can be done by blind persons, and role of employment specialists in placing and training blind workers.

From the *Problems in Supervision* Series.

Employing Disabled Workers in Industry (20 min, 16mm, sd, b & w, 1946, Order No. OE399, sale \$35.25, rental \$7.50, USOE) Illustrates examples of disabled workers handling skilled industrial jobs--one-handed milking machine operator, one-handed machinist, one-armed electric welder, one-handed watch repairman, poliomyelitis-crippled jewelry maker, and one-handed secretary.

From the *Problems in Supervision* Series.

I Hear the Carpenter Singing (11 min, 16mm, sd, b & w, 1963, sale \$23.25, rental \$5.00, USIA) Tells the story of a young Mexican-American carpenter in Los Angeles, California, who earns journeyman's status through night school and on-job apprenticeship training. Presents vocational and economic opportunities which are made available through enlightened labor-management in a free enterprise system.

New Work for Greenville (8 min, 16mm, sd, color, 1969, sale \$33.50, USSRS) Shows job training for industrial survival in Greenville, Mississippi. Emphasizes the role of private industry in the rehabilitation process.

Working through College (20 min, 16mm, sd, b & w, 1951, sale \$42.50, rental \$7.50, USIA) Story of a college student and the assistance provided him by a student employment adviser in finding a job which helps meet his expenses and enables him to acquire practical experience in the field he has chosen as a career.

MACHINING

BROACHING MACHINE

Broaching an Internal Keyway (23 min, 16mm, sd, b & w, 1945, Order No. OE236, sale \$40.50, rental \$10.00, USOE) Sets forth the principles of internal broaching and of broaching tool design. Explains how to select the broaching tool for the job and set up and operate the horizontal broaching machine.

From the *Machine Shop Work Series. Operations On a Broaching Machine, No. 1*

Double Ram Vertical Surface Broaching (30 min, 16mm, sd, b & w, 1945, Order No. OE238, sale \$54.00, rental \$10.00, USOE) Tells how to assemble broaching inserts, mount and adjust the work fixtures, set trip dogs for the ram stroke, measure the workpiece after trial broaching, and surface broach at a production rate.

From the *Machine Shop Work Series. Operations On a Broaching Machine, No. 3*

Single Ram Vertical Surface Broaching (28 min, 16mm, sd, b & w, 1945, Order No. OE237, sale \$48.75, rental \$10.00, USOE) Tells how to install broaching inserts for straddle broaching, mount the tool-holder with its assembled broaching tool, mount and adjust the work fixture, and surface-broach at production rate.

From the *Machine Shop Work Series. Operations On a Broaching Machine, No. 2*

CENTER-TYPE GRINDER

Grinding a Plain Pin, Pt 1, The Grinding Wheel (17 min, 16mm, sd, b & w, 1944, Order No. OE080, sale \$30.50, rental \$7.50, USOE) Discusses the cutting action of a grinding wheel, explaining how to select the correct grinding wheel, handle and mount the wheel on the collet and true and balance the wheel.

From the *Machine Shop Work Series. Operations On the Centertype Grinder, No. 1*

Grinding a Plain Pin, Pt 2, Grinding Operation (17 min, 16mm, sd, b & w, 1944, Order No. OE081, sale \$30.50, rental \$7.50, USOE) Explains how to lubricate and set up a center-type grinder, mount and adjust the workpiece for proper tension between centers, set the table reversing dogs and rough-grind a plain pin.

From the *Machine Shop Work Series. Operations On the Centertype Grinder, No. 2*

Grinding a Slender Shaft with Back Rest (17 min, 16mm, sd, b & w, 1944, Order No. OE082, sale \$30.50, rental \$7.50, USOE) Explains how to select and set up a back rest, adjust the back rest during grinding, rough and finish-grind the long shaft, and check and adjust for taper.

From the *Machine Shop Work Series. Operations On the Centertype Grinder, No. 3*

Grinding a Taper (19 min, 16mm, sd, b & w, 1944, Order No. OE084, sale \$33.75, rental \$7.50, USOE) Shows how to prepare an arbor for grinding, mount and adjust the arbor between centers, adjust the swivel table and taper scale, rough-taper, and check with the taper ring gage and light gage.

From the *Machine Shop Work Series. Operations On the Centertype Grinder, No. 5*

Plunge Cut Grinding (15 min, 16mm, sd, b & w, 1944, Order No. OE083, sale \$27.00, rental \$7.50, USOE) Shows how to mount a bushing on a mandrel, dress the side of the grinding wheel, set a

dial snap gage for the production grinding of bushings, and rough-finish-grind a bushing. Stresses rhythm in grinding.

From the *Machine Shop Work Series. Operations On the Centertype Grinder, No. 4*

CENTERLESS GRINDING MACHINE

Endfeed Grinding a Tapered Pin (26 min, 16mm, sd, b & w, 1944, Order No. OE089, sale \$45.50, rental \$10.00, USOE) Gives principles of endfeed grinding such as how to true the regulating and grinding wheels, rough-finish-endfeed grind, use a taper collet gage and prussian blue to check work, redress the wheels for the finish grind, and correct taper error of less than .0005 Inch.

From the *Machine Shop Work Series. Operations On the Centerless Grinding Machine, No. 5*

Infeed Grinding a Shaft of Two Diameters (31 min, 16mm, sd, b & w, 1944, Order No. OE088, sale \$53.50, rental \$10.00, USOE) Explains how to profile-grind shafts by the infeed method, use cams in profiling the regulating wheel and grinding wheel, install cams, profile the wheels, set up the centerless grinding machine for the job, and rough- and finish-profile grind.

From the *Machine Shop Work Series. Operations On the Centerless Grinding Machine, No. 4*

Infeed Grinding Shouldered Work (23 min, 16mm, sd, b & w, 1944, Order No. OE087, sale \$40.50, rental \$10.00, USOE) Describes principles of infeed grinding. Tells how to use an automatic ejector, tilt the regulating wheel, adjust the end-stop, position the work for grinding, and correct work ground out of round. Tells how to check work with V block, indicator, and micrometer.

Thrufeed Grinding a Straight Pin, Pt 1 (29 min, 16mm, sd, b & w, 1944, Order No. OE085, sale \$50.25, rental \$10.00, USOE) Explains the principle of centerless grinding and describes the basic elements of the centerless grinding machine. Shows how to set up the machine and true the grinding and regulating wheels.

From the *Machine Shop Work Series. Operations On the Centerless Grinding Machine, No. 1*

Thrufeed Grinding a Straight Pin, Pt 2 (28 min, 16mm, sd, b & w, 1944, Order No. OE086, sale \$48.75, rental \$10.00, USOE) Shows how to balance the grinding wheel, position work for grinding, adjust work guides, take a trial grind, eliminate taper in the grinding wheel, use a crown cam to dress the grinding wheel and check the workpieces.

From the *Machine Shop Work Series. Operations On the Centerless Grinding Machine, No. 2*

CUTTER GRINDER

Sharpening a Form Relieved Cutter (18 min, 16mm, sd, b & w, 1944, Order No. OE093, sale \$32.00, rental \$7.50, USOE) Tells what constitutes the rake and clearance angles of the form relieved cutter, shows how to mount the correct attachment, set up for spotting the back of teeth and grind the face of the teeth.

From the *Machine Shop Work Series. Operations On the Cutter Grinder, No. 5*

Sharpening a Plain Helical Milling Cutter (16 min, 16mm, sd, b & w, 1944, Order No. OE091, sale \$28.50, rental \$7.50, USOE) Shows how to mount the helical cutter on an arbor and sharpen the secondary clearance angle. Describes how to check and adjust for taper when grinding the primary clearance angle.

From the *Precision Wood Machining Series*. Operations On the Cutter Grinder, No. 2

Sharpening a Shell End Mill (17 min, 16mm, sd, b & w, 1944, Order No. OE092, sale \$30.50, rental \$7.50, USOE) Shows how to select the correct arbor, mount the work head and adjust it for clearance settings, and set up for sharpening the outside diameter, corner and face.

From the *Machine Shop Work Series*. Operations On the Cutter Grinder, No. 3

Sharpening a Side Milling Cutter (23 min, 16mm, sd, b & w, 1944, Order No. OE090, sale \$40.50, rental \$10.00, USOE) Shows how to identify the parts of a cutter, select and mount the correct grinding wheel, mount the cutter, set up the grinder for sharpening, set the correct clearance angle and check for width of land.

From the *Machine Shop Work Series*. Operations On the Cutter Grinder, No. 1

Sharpening an Angular Cutter (15 min, 16mm, sd, b & w, Order No. OE094, sale \$27.00, rental \$7.50, USOE) Describes how to choose the correct grinding wheel, adjust the swivel table for grinding the angular teeth of the cutter, adjust for clearance angle, and check the teeth for accuracy of the angle.

From the *Machine Shop Work Series*. Operations On the Cutter Grinder, No. 4

DRILL PRESS

Countersinking, Counterboring and Spot Facing (20 min, 16mm, sd, b & w, 1942, Order No. OE048, sale \$35.25, rental \$7.50, USOE) Shows how to drill holes in steel and cast iron, to countersink holes in steel, to counterbore holes in cast iron and to spotface holes in cast iron.

From the *Machine Shop Work Series*. Operations On the Drill Press, Vertical Drill, No. 2

Drill Press, The (10 min, 16mm, sd, b & w, 1945, Order No. OE071, sale \$17.50, rental \$5.00, USOE) Describes the characteristics, basic operation and function of the drill press.

From the *Machine Shop Work Series*. Basic Machines

Drilling a Hole in a Pin (10 min, 16mm, sd, b & w, 1942, Order No. OE046, sale \$17.50, rental \$5.00, USOE) Shows two methods of drilling a hole in each end of a steel pin--drilling to a layout and drilling with a jig. Stresses the importance of following directions and of keeping machine and tools clean.

From the *Machine Shop Work Series*. Operations On the Drill Press, Sensitive Drill, No. 1

Drilling and Tapping Cast Steel (19 min, 16mm, sd, b & w, 1942, Order No. OE022, sale \$33.75, rental \$7.50, USOE) Shows how to drill and tap blind holes in cast steel on a radial drill, using a jib with a loose drill bushing to locate the holes.

From the *Machine Shop Work Series*. Operations On the Drill Press, Radial Drill, No. 1

Drilling, Tapping, Stub-boring and Reaming (22 min, 16mm, sd, b & w, 1945, Order No. OE230, sale \$38.50, rental \$7.50, USOE) Shows how to drill and machine-tap a hole, use a core drill, use a stub-boring bar for roughboring and counterboring, and use an adjustable reamer and a floating reamer.

From the *Machine Shop Work Series*. Operations On the Horizontal Boring Mill, No. 6

Drilling to a Layout and Spotfacing Cast Iron (15 min, 16mm, sd, b & w, 1942, Order No. OE023, sale \$27.00, rental \$7.50, USOE) Shows in detail the techniques used when drilling to a layout and spotfacing the under side of a flange. Describes the method of mounting work on a table and explains the need for clamping it securely in place.

Drilling, Boring, and Reaming Work Held in Chuck (11 min, 16mm, sd, b & w, 1941, Order No. OE009, sale \$19.25, rental \$5.00, USOE) Shows how to drill a workpiece held in a lathe chuck, bore a tapered hole, check the accuracy of the hole.

From the *Machine Shop Work Series*. Operations On the Engine Lathe, No. 4

Locating Holes, Drilling and Tapping in Cast Iron (18 min, 16mm, sd, b & w, 1942, Order No. OE047, sale \$32.00, rental \$7.50, USOE) Shows how to lay out a bolt circle having eight holes, to use the center punch as centers for drilling and to use a tapping chuck for set screws.

From the *Machine Shop Work Series*. Operations On the Drill Press, Vertical Drill, No. 1

ENGINE LATHE

Boring to Close Tolerances (17 min, 16mm, sd, b & w, 1943, Order No. OE059, sale \$30.50, rental \$7.50, USOE) Tells how to mount and adjust the brass valve bonnet in a ring fixture how to roughhub, how to rough tolerances and how to prevent bellmouth when boring.

From the *Machine Shop Work Series*. Operations On the Engine Lathe, No. 11

Cutting a Taper with the Compound Rest and with a Taper Attachment (11 min, 16mm, sd, b & w, 1941, Order No. OE008, sale \$19.25, rental \$5.00, USOE) Shows how to set the compound rest, to machine a steel taper, to set the taper attachment, to machine a small taper and to use a taper plug gage.

From the *Machine Shop Work Series*. Operations On the Engine Lathe, No. 3

Cutting an External National Fine Thread (12 min, 16mm, sd, b & w, 1941, Order No. OE010, sale \$22.25, rental \$7.50, USOE) Discusses various shapes of threads and their uses. Describes characteristics of the National fine thread. Shows procedures used to cut such a thread.

From the *Machine Shop Work Series*. Operations On the Engine Lathe, No. 5

Cutting an Internal Acme Thread (22 min, 16mm, sd, b & w, 1943, Order No. OE056, sale \$38.50, rental \$7.50, USOE) Shows how to cut a one-fourth pitch Acme thread on an engine lathe.

From the *Machine Shop Work Series*. Operations On the Engine Lathe, No. 8

Cutting an Internal Taper Pipe Thread (20 min, 16mm, sd, b & w, 1943, Order No. OE057, sale \$35.25, rental \$7.50, USOE) Explains how to use a taper attachment, bore a tapered hole to gage size for threading, thread a tapered hole to fit a gage and check pipe threads with a taper thread plug gage.

From the *Machine Shop Work Series*. Operations On the Engine Lathe, No. 9

Cutting External Acme Thread (16 min, 16mm, sd, b & w, 1942, Order No. OE045, sale \$28.50, rental \$7.50, USOE) Explains how to cut threads with and without using the threading dial, how to finish-machine the threads to size and how to check thread size with a thread gage.

From the *Machine Shop Work Series. Operations On the Engine Lathe, No. 7*

Lathe, The (15 min, 16mm, sd, b & w, 1942, Order No. OE068, sale \$27.00, rental \$7.50, USOE) Describes the characteristics and basic operations of the engine lathe.
From the *Machine Shop Work Series. Basic Machines*

Machining Work Held in Chuck - Use of Reference Surfaces (24 min, 16mm, sd, b & w, 1944, Order No. OE060, sale \$42.25, rental \$10.00, USOE) Explains how to select and machine surfaces to be used for reference, how to set up a workpiece accurately to the reference surfaces in a lathe chuck and how to use a boring bar to machine several internal surfaces.
From the *Machine Shop Work Series. Operations On the Engine Lathe, No. 12*

Rough Turning Between Centers (15 min, 16mm, sd, b & w, 1941, Order No. OE006, sale \$27.00, rental \$7.50, USOE) Shows how to set up an engine lathe, operate the controls, grind clearances on cutting tools, and roughturn round bar stock to a specified diameter.
From the *Machine Shop Work Series. Operations On the Engine Lathe, No. 1*

Turning a Taper with the Tailstock Set Over (17 min, 16mm, sd, b & w, 1942, Order No. OE044, sale \$30.50, rental \$7.50, USOE) Shows how to calculate tailstock offset for cutting tapers, how to offset the tailstock and how to turn a taper with the tail stock set over.
From the *Machine Shop Work Series. Operations On the Engine Lathe, No. 6*

Turning Work Held on a Fixture (21 min, 16mm, sd, b & w, 1944, Order No. OE058, sale \$37.00, rental \$7.50, USOE) Shows how to mount an irregularly shaped casting which can't be held in a chuck, mount and center the fixture on a lathe, select and mount tools, and turn, face, bore, counterbore and ream surfaces of a valve bonnet.
From the *Machine Shop Work Series. Operations On the Engine Lathe, No. 10*

Turning Work Held on a Mandrel (20 min, 16mm, sd, b & w, 1943, Order No. OE061, sale \$35.25, rental \$7.50, USOE) Describes the uses of the mandrel. Shows how to fit a mandrel into the workpiece, how to cut a bevel, using the compound rest, how to calculate speed and feed, and how to set the controls.
From the *Machine Shop Work Series. Operations On the Engine Lathe, No. 13*

Turning Work of Two Diameters (14 min, 16mm, sd, b & w, 1941, Order No. OE007, sale \$25.50, rental \$7.50, USOE) Demonstrates the use of roughing, finishing, facing and radius tools.
From the *Machine Shop Work Series. Operations On the Engine Lathe, No. 2*

Using a Boring Bar between Centers - Work Held on Carriage (22 min, 16mm, sd, b & w, 1944, Order No. OE064, sale \$38.50, rental \$7.50, USOE) Shows how to set up, mount, adjust and use a boring bar between centers of the lathe, how to clamp an irregular workpiece on a lathe carriage and how to align the workpiece center with the lathe centerline.
From the *Machine Shop Work Series. Operations On the Engine Lathe, No. 16*

Using a Follower Rest (21 min, 16mm, sd, b & w, 1943, Order No. OE063, sale \$37.00, rental \$7.50, USOE) Illustrates the use of a follower rest in the turning of a long shaft into two diameters.
From the *Machine Shop Work Series. Operations On the Engine Lathe, No. 15*

Using a Steady Rest (25 min, 16mm, sd, b & w, 1943, Order No. OE062, sale \$43.75, rental \$10.00, USOE) Describes the steady rest and its uses. Shows how to spot the work for the location of the

steady rest, how to mount the steady rest on the lathe and how to adjust the jaws of the rest to the work.

From the *Machine Shop Work Series. Operations On the Engine Lathe, No. 14*

Using a Steady Rest When Boring (21 min, 16mm, sd, b & w, 1944, Order No. OE065, sale \$37.00, rental \$7.50, USOE) Shows how to mount a long casting on a lathe face-plate, how to turn a true bearing spot for supporting the workpiece with a steady rest and how to perform boring turning and forming operations when work is supported by a steady rest.
From the *Machine Shop Work Series. Operations On the Engine Lathe, No. 17*

GEAR HOBBIING MACHINE

Hobbing a Helical Gear - Two Cuts Nondifferential Method (17 min, 16mm, sd, b & w, 1945, Order No. OE235, sale \$30.50, rental \$7.50, USOE) Tells how to set up change gears, adjust the swivel head to cut on the helix angle, set up the machine for the rough cut, and re-align hob and gear teeth.
From the *Machine Shop Work Series. Operations On the Gear Hobbing Machine, No. 5*

Hobbing a Spur Gear, Pt 1, - Setting Up the Change Gears (15 min, 16mm, sd, b & w, 1945, Order No. OE231, sale \$27.00, rental \$7.50, USOE) Describes selection of the hob, tells how to select change-gear combinations for speed, feed, and index. Tells how to identify the correct gears, mount the change gears, adjust for backlash, and how the change-gear trains are interrelated.
From the *Machine Shop Work Series. Operations On the Gear Hobbing Machine, No. 1*

Hobbing a Spur Gear, Pt 2, - Setting Up and Hobbing the Work (24 min, 16mm, sd, b & w, 1945, Order No. OE232, sale \$42.25, rental \$10.00, USOE) Describes how to select and mount the hob, set the swivel head angle, choose and mount the fixture, load the gear blanks, set up for depth of trial cut, and adjust for full depth of cut.
From the *Machine Shop Work Series. Operations On the Gear Hobbing Machine, No. 2*

Hobbing a Square Tooth Spline Shaft (17 min, 16mm, sd, b & w, 1945, Order No. OE233, sale \$30.50, rental \$7.50, USOE) Tells how to change hob arbors, centralize the hob with the centering gage, mount the center-type fixture and the top adjustable center, use a driving dog in mounting the spline shaft blank, set up for the trial cut, and take full depth of cut.
From the *Machine Shop Work Series. Operations On the Gear Hobbing Machine, No. 3*

Hobbing a Worm Gear - Infeed Method (18 min, 16mm, sd, b & w, 1945, Order No. OE234, sale \$32.00, rental \$7.50, USOE) Describes the angle at which to set the swivel head. Tells how to calculate and adjust the height of the hob arbor. Shows how to engage horizontal feed, centralize the hob, and cut to a center distance.
From the *Machine Shop Work Series. Operations On the Gear Hobbing Machine, No. 4*

GENERAL

Inspection of Threads (22 min, 16mm, sd, b & w, 1944, Order No. OE148, sale \$44.50, rental \$7.50, USOE) Tells how to identify different parts of an American National standard thread, inspect external threads with a roll snap gage, adjust the roll snap gage, and

inspect internal threads with a plug gage. From the Aircraft Work Series. Inspection, No. 4

HORIZONTAL BORING

Contour Face Milling (17 min, 16mm, sd, b & w, 1945, Order No. OE227, sale \$30.50, rental \$7.50, USOE) Tells how to set up the job, align workpiece square with spindle, make a rough-facing cut, and a finishfacing cut.

From the *Machine Shop Work Series. Operations On the Horizontal Boring Mill, No. 3*

Face Milling with a Fixture (17 min, 16mm, sd, b & w, 1945, Order No. OE226, sale \$28.50, rental \$7.50, USOE) Depicts how to determine speed and feed, establish reference surfaces, and make reference cut by end-milling a flange and by milling the face.

From the *Machine Shop Work Series. Operations On the Horizontal Boring Mill, No. 2*

Rough Line-boring (19 min, 16mm, sd, b & w, Order No. OE229, sale \$33.75, rental \$7.50, USOE) Tells how to install the boring bar and cutters. Describes how to bore, counterbore, and spot-face holes as well as how to reposition from one hole to another.

From the *Machine Shop Work Series. Operations On the Horizontal Boring Mill, No. 5*

Setup for Face Milling with a Fixture (20 min, 16mm, sd, b & w, 1945, Order No. OE225, sale \$35.25, rental \$7.50, USOE) Explains how the horizontal boring, drilling and milling machine operates. Shows how to install the fixture, set up the workpiece, and select and install an end mill and a face mill.

From the *Machine Shop Work Series. Operations On the Horizontal Boring Mill, No. 1*

Setup for Rough Line-boring (15 min, 16mm, sd, b & w, 1945, Order No. OE228, sale \$27.00, rental \$7.50, USOE) Shows how to position the workpiece on the table, and position the spindle for horizontal centers and for vertical centers.

From the *Machine Shop Work Series. Operations On the Horizontal Boring Mill, No. 4*

INTERNAL GRINDER

Grinding a Deep Hole (18 min, 16mm, sd, b & w, 1944, Order No. OE078, sale \$32.00, rental \$7.50, USOE) Tells how to grind the backing pins and work-holding jaws of three-jaw chuck to hold the work-piece, set length of stroke and great-through, correct for taper and bellmouth and check a deep hole with a micrometer.

From the *Machine Shop Series. Operations On the Internal Grinder, No. 2*

Grinding a Straight Hole (18 min, 16mm, sd, b & w, 1944, Order No. OE077, sale \$32.00, rental \$7.50, USOE) Tells how to use a universal chuck, select the proper grinding wheel, adjust wheel speed, set the length of the stroke, set the cross-feed for automatic grinding and use a precision cross-feed for finish-grinding.

From the *Machine Shop Work Series. Operations On the Internal Grinder, No. 1*

Grinding and Facing a Blind Hole (17 min, 16mm, sd, b & w, 1944, Order No. OE079, sale \$30.50, rental \$7.50, USOE) Shows how to mount and dress wheels on the two-spindle grinder, prepare the diaphragm chuck, plunge-grind the bore and adjust for taper, and

grind the shoulder and flange parallel and at right angles to the bore.

From the *Machine Shop Work Series. Operations On the Internal Grinder, No. 3*

METAL CUTTING BAND SAW

Filing an Internal Irregular Shape (27 min, 16mm, sd, b & w, 1944, Order No. OE240, sale \$47.00, rental \$10.00, USOE) Explains how to make file selection, set up a metal cutting band saw machine for filing, file a die, lay out a punch using a die as a template, file a punch, check the filing with a die and fine-finish file.

From the *Machine Shop Work Series. Operations On the Metal Cutting Band Saw, No. 2*

Sawing an Internal Irregular Shape (32 min, 16mm, sd, b & w, 1944, Order No. OE239, sale \$55.25, rental \$10.00, USOE) Shows how to drill the saw-starting hole, make the saw selection, set up a band saw machine, weld saw bands, saw an internal contour shape and store a band saw.

From the *Machine Shop Work Series. Operations On the Metal Cutting Band Saw, No. 1*

Sawing Template Metal (17 min, 16mm, sd, b & w, Order No. OE128, sale \$30.50, rental \$7.50, USOE) Tells how to mount a saw blade on a band saw, select and adjust blade guides, saw to a layout line, 'chew out' metal from a notch, and remove burrs.

From the *Aircraft Work Series. Templates, No. 4*

MILLING MACHINE

Boring Holes with Offset Boring Head (28 min, 16mm, sd, b & w, 1945, Order No. OE209, sale \$48.75, rental \$10.00, USOE) Explains how to mount the workpiece on the milling machine table, how to bore with an offset boring head and how to use plug gages and a micrometer to check the center distance between the holes.

From the *Machine Shop Work Series. Operations On the Milling Machine, No. 7*

Cutting a Short Rack (18 min, 16mm, sd, b & w, 1945, Order No. OE208, sale \$32.00, rental \$7.50, USOE) Tells how to set up and align the workpiece on a milling machine table, position table and workpiece in relation to the cutter and roughworkpiece.

From the *Machine Shop Work Series. Operations On the Milling Machine, No. 6*

Cutting Keyways (15 min, 16mm, sd, b & w, 1941, Order No. OE012, sale \$27.00, rental \$7.50, USOE) Shows the operations necessary to cut a sharp and slight taper on a gear blank. Demonstrates a compound rest, the taper attachment, a protractor and a ring gage.

Cutting Teeth on a Worm Gear (17 min, 16mm, sd, b & w, 1945, Order No. OE211, sale \$30.50, rental \$7.50, USOE) Tells how to set dividing head for specified indexing, position workpiece for gashing, gash the teeth on the workpiece, position workpiece under dead center of hob, mesh gashed gear with hob and hob the teeth.

From the *Machine Shop Work Series. Operations On the Milling Machine, No. 9*

Milling a Helical Groove (28 min, 16mm, sd, b & w, 1943, Order No. OE075, sale \$14.25, rental \$10.00, USOE) Explains how to mill a helical groove in a cylindrical shaft, how to select and set the machine gears for milling a helical groove with any lead and how to use the dividing head. Explains lead and backlash.

From the *Machine Shop Work Series. Operations On the Vertical Milling Machine. No. 4*

Milling a Template (17 min, 16mm, sd, b & w, 1945, Order No. OE207, sale \$30.50, rental \$7.50, USOE) Shows how to mount the end mill in the milling machine spindle, position the table and workpiece in relation to the cutter, roughcheck for finished dimensions.

From the *Machine Shop Work Series. Operations On the Milling Machine. No. 5*

Milling Machine, The (8 min, 16mm, sd, b & w, 1941, Order No. OE011, sale \$14.25, rental \$5.00, USOE) Demonstrates a plain milling machine and shows the basic parts of the machine, names the various control levers and demonstrates the action of the table longitudinally, vertically and crosswise.

Milling Machine, The (15 min, 16mm, sd, b & w, 1944, Order No. OE069, sale \$27.00, rental \$7.50, USOE) Explains the functions, characteristics and basic operations of the milling machine.

From the *Machine Shop Work Series. Basic Machines*

Plain Indexing and Cutting a Spur Gear (26 min, 16mm, sd, b & w, 1941, Order No. OE015, sale \$45.50, rental \$10.00, USOE) Explains diametral pitch and the parts of a gear tooth, the use of the dividing head for spacing teeth and the operations of a milling machine in the cutting of a spur gear.

Straddle and Surface Milling to Close Tolerances (27 min, 16mm, sd, b & w, 1941, Order No. OE013, sale \$47.00, rental \$10.00, USOE) Demonstrates how to make surface and straddle-milling cutter setups. Shows how to surface-mill four sides of a workpiece and to machine a workpiece to a T-shape by straddle-milling.

From the *Machine Shop Work Series. Operations On the Milling Machine. No. 2*

Straddle Milling (17 min, 16mm, sd, b & w, 1941, Order No. OE014, sale \$30.50, rental \$7.50, USOE) Shows how to use an indexing fixture for production milling operations, space cutters on an arbor for straddle milling, and mill parallel bosses on connecting rods.

From the *Machine Shop Work Series. Operations On the Milling Machine. No. 3*

PLANER

Machining a Cast Iron Rectangular Block (25 min, 16mm, sd, b & w, 1942, Order No. OE020, sale \$43.75, rental \$10.00, USOE) Shows several processes, such as how to set the shaper ram stroke. Tells how to adjust the shaper table, vise, vertical feed, head feed and crossfeed, and set up a rectangular cast iron block.

From the *Machine Shop Work Series. Operations On the Shaper. No. 2*

Machining a Tool Steel V Block (21 min, 16mm, sd, b & w, 1942, Order No. OE021, sale \$37.00, rental \$7.50, USOE) Shows how to lay out work for machining on a shaper, set up and position the ram stroke, and machine "V" grooves and rectangular slots.

From the *Machine Shop Work Series. Operations On the Shaper. No. 3*

Planing a Dovetail Slice (28 min, 16mm, sd, b & w, 1945, Order No. OE067, sale \$48.75, rental \$10.00, USOE) Tells how to set up the workpiece, cutting tools, and machine. Shows how to make rough and finish cuts in the clearance slot, and make angle cuts.

From the *Machine Shop Work Series. Operations On the Planer. No. 2*

Planing a Flat Surface (22 min, 16mm, sd, b & w, 1945, Order No. OE66, sale \$38.50, rental \$7.50, USOE) Shows function of a planer, how to mount the work-piece, set the tool and table for the cut, make a first and second roughing, and a first and second finishing cut.

From the *Machine Shop Work Series. Operations On the Planer. No. 1*

Planing Rough Surfaces to Dimensions (17 min, 16mm, sd, b & w, 1945, Order No. OE301, sale \$30.50, rental \$7.50, USOE) Describes how to prepare wood for planing and how to plane stock to uniform thickness, determine the amount of cut to be made, regulate the speed of feeding and adjust the surfacer to cut straight surfaces.

SHAPER

Cutting a Keyway on End of a Finished Shaft (13 min, 16mm, sd, b & w, 1941, Order No. OE019, sale \$23.75, rental \$7.50, USOE) Shows the correct setup for a rigid arbor assembly, the calculations and operations necessary to locate the work on the table for the cut, the calculation of the speed and feed in terms of type and size of cutter and type of metal to be cut, and the use of rapid traverses and power feeds.

Shaper, The (15 min, 16mm, sd, b & w, 1945, Order No. OE070, sale \$27.00, rental \$7.50, USOE) Describes the functions, characteristics and basic operations of the shaper.

From the *Machine Shop Work Series. Basic Machines*

SURFACE GRINDING

Grinding a Parallel Bar, Pt 1, Setting Up the Machine (14 min, 16mm, sd, b & w, 1945, Order No. OE220, sale \$25.50, rental \$7.50, USOE) Shows how to mount a grinding wheel, to position the diamond tool and true the wheel, to operate a magnetic chuck and to use a grinder.

From the *Machine Shop Work Series. Operations On the Surface Grinder. No. 1*

Grinding a Parallel Bar, Pt 2, Grinding Operations (15 min, 16mm, sd, b & w, 1945, Order No. OE221, sale \$27.00, rental \$7.50, USOE) Shows how to position the parallel bar, to rough-grind the opposite sides of the bar, to rough-grind adjacent sides at exact right angles and to finish-grind.

From the *Machine Shop Work Series. Operations On the Surface Grinder. No. 2*

Grinding a Template (15 min, 16mm, sd, b & w, 1945, Order No. OE222, sale \$27.00, rental \$7.50, USOE) Shows how to mount and true the wheel, mount the sine bar on the table, set the sine bar for specified angles, set up the template on the sine bar, roughhand finish-grind the template, and check the workpiece for accuracy.

From the *Machine Shop Work Series. Operations On the Surface Grinder. No. 4*

Grinding a V Block (22 min, 16mm, sd, b & w, 1945, Order No. OE223, sale \$38.50, rental \$7.50, USOE) Explains how to set up a V block to grind the ends and the V, roughreference points for grinding the V to precision dimensions and check the work for accuracy.

From the *Machine Shop Work Series. Operations On the Surface Grinder. No. 4*

Grinding Thin Discs (15 min, 16mm, sd, b & w, 1945, Order No. OE224, sale \$27.00, rental \$7.50, USOE) Shows how to true the grinding wheel, load and operate the magnetic chuck, rough-grind the discs, finish-grind the discs to precision measurements and check for accuracy and parallelism.

From the *Machine Shop Work Series. Operations On the Surface Grinder, No. 5*

TURRET LATHE

Bar Work - Magnesium, Pt 1, Setting Up Roller Mechanism and Roller Turner (18 min, 16mm, sd, b & w, 1945, Order No. OE216, sale \$32.00, rental \$7.50, USOE) Tells how to make a rough sizing cut for the roller size, set the automatic stops, and control chip condition.

From the *Machine Shop Work Series. Operations On the Turret Lathe, No. 5*

Bar Work - Magnesium, Pt 2, Setting Up Multiple Roller Turner and Turning a Taper (17 min, 16mm, sd, b & w, 1945, Order No. OE217, sale \$30.50, rental \$7.50, USOE) Illustrates how to set up a multiple roller turner, center-drill the work so it can be supported with a center, and set up and operate a carriage taper attachment.

From the *Machine Shop Work Series. Operations On the Turret Lathe, No. 6*

Bar Work - Magnesium, Pt 3, Necking and Threading by Use of Attachment and by Die Head (23 min, 16mm, sd, b & w, 1945, Order No. OE218, sale \$40.50, rental \$10.00, USOE) Shows how to set necking and chamfering tools, how to set and cut three-fourth inch, ten-pitch thread with a tangent die head and how to cut the finished piece.

From the *Machine Shop Work Series. Operations On the Turret Lathe, No. 7*

Chuck Work, Pt 1, Setting Up Hexagon Turret Tools (18 min, 16mm, sd, b & w, 1945, Order No. OE213, sale \$38.50, rental \$7.50, USOE) Tells how to use a power chuck, set up tools for internal cuts and for multiple cuts, and set up feed stops for the hexagon turret.

From the *Machine Shop Work Series. Operation On the Turret Lathe, No. 2*

Chuck Work, Pt 2, Setting Up Tools for Combined Cuts (16 min, 16mm, sd, b & w, 1945, Order No. OE214, sale \$34.25, rental \$7.50, USOE) Tells how to set up tools for the square turret, make combined cuts, set cross-slide and carriage stops, set up the speed selector, and perform a sequence of operations efficiently.

From the *Machine Shop Work Series. Operations On the Turret Lathe, No. 3*

Setting Up and Machining Bar Stock (34 min, 16mm, sd, b & w, 1945, Order No. OE215, sale \$58.75, rental \$12.50, USOE) Describes how to set up the turret lathe for the production machining of bushings from bar stock. Tells how to install the collet, set up the hexagon turret and cross slide, and machine bar stock.

From the *Machine Shop Work Series. Operations On the Turret Lathe, No. 4*

Turret Lathe, The - An Introduction (17 min, 16mm, sd, b & w, 1945, Order No. OE212, sale \$30.50, rental \$7.50, USOE) Shows the function of the head, hexagon turret, square turret and bed, how to determine the sequence of operations, how to take a multiple cut, and how to combine cuts from the hexagon and square turrets.

From the *Machine Shop Work Series.*

VERTICAL BORING

Facing, Turning, Boring, Grooving and Chamfering - On a Vertical Turret Lathe (30 min, 16mm, sd, b & w, 1942, Order No. OE018, sale \$53.50, rental \$10.00, USOE) Demonstrates facing, turning, boring, grooving and chamfering cuts on a vertical turret lathe with the simultaneous use of both heads, securing of work in a special fixture, precautions to be observed in machining magnesium alloys, and the use of a surface gauge.

Rough-facing, Boring, And Turning a Shoulder (22 min, 16mm, sd, b & w, 1942, Order No. OE017, sale \$38.50, rental \$7.50, USOE) Shows how to set up a rough casting on a vertical turret lathe, face a flange and turn a shoulder with the sidehead turret, and face a flange and bore a hole with the vertical turret.

From the *Machine Shop Work Series.*

Rough-facing, Turning, And Drilling (31 min, 16mm, sd, b & w, 1942, Order No. OE016, sale \$53.50, rental \$10.00, USOE) Tells how to operate the controls of a vertical turret lathe, set up tools in the main turret head, rough-face and rough-turn an aluminum casting, and drill the center hole.

From the *Machine Shop Work Series. Operations On the Vertical Boring Mill, No. 1*

VERTICAL MILLING

Cutting a Dovetail Taper Slide (26 min, 16mm, sd, b & w, 1944, Order No. OE073, sale \$45.50, rental \$10.00, USOE) Shows how to machine a dovetail taper slide on the vertical milling machine, use a rotary table in milling a taper, and mill to layout lines.

From the *Machine Shop Work Series. Operations On the Vertical Milling Machine, No. 2*

Cutting a Round End Keyway (22 min, 16mm, sd, b & w, 1944, Order No. OE074, sale \$38.50, rental \$7.50, USOE) Describes how to cut a round end keyway in a steel shaft, align the spindle and workpiece by using a test bar, use a two-lip end mill to sink a hole in solid stock, set trip dogs and table stops, and check the finished dimensions of a round end keyway.

From the *Machine Shop Work Series. Operations On the Vertical Milling Machine, No. 3*

Milling a Circular T-slot (22 min, 16mm, sd, b & w, 1943, Order No. OE076, sale \$38.50, rental \$7.50, USOE) Shows how to mill a circular T-slot in solid metal, use a rotary table for continuous circular milling, use a two-lip end mill, end mill and T-slot cutter, and use a dial indicator with a test bar.

From the *Machine Shop Work Series. Operations On the Vertical Milling Machine, No. 5*

Milling a Helical Cutter (18 min, 16mm, sd, b & w, 1945, Order No. OE210, sale \$48.75, rental \$10.00, USOE) Shows how to mount arbor, cutter and arbor support, mount workpiece between centers, set dividing head for specified number of divisions, position workpiece for first cut, and rough

From the *Machine Shop Work Series. Operations On the Milling Machine, No. 8*

Using a Shell End Mill (21 min, 16mm, sd, b & w, 1943, Order No. OE072, sale \$37.00, rental \$7.50, USOE) Tells how the vertical milling machine differs from others. Shows how to make a flat surface with a shell end mill and how to use the sliding head. Explains speed and feed and how to calculate them.

From the *Machine Shop Work Series. Operations On the Vertical Milling Machine, No. 1*

MARINE

ENGINEERING

Construction of an Offshore Light Station (29 min, 16mm, sd, color, 1963, sale \$132.00, rental \$12.50, USCG) Documents construction of a new type of offshore light station which supplants Coast Guard lightships. Shows movement of parts from shipyard to the tower site and erection of the steel tower. Illustrates construction problems and facilities of the light station.

Damage Control - Effects of Weight On Stability, Pt 1, Shift of Weight (35 min, 16mm, sd, b & w, 1945, Order No. MN00061G, sale \$72.50, USN) Shows effects of vertical and athwartship shifts of weight on stability. Describes how curve of static stability can be determined mathematically.

Damage Control - Effects of Weight on Stability, Pt 2, Weight Conditions (23 min, 16mm, sd, b & w, 1945, Order No. MN00061H, sale \$48.75, USN) Shows effects of changes of weight on the stability of a cruiser in situations such as normal conditions of full load, after fuel was used from tanks below 'G', weight taken on topside, and when topside weight shifted, causing keel to rise above center of gravity.

Damage Control - Elements of Stability in Ship (37 min, 16mm, sd, b & w, 1943, Order No. MN00061F, sale \$76.25, USN) Describes principles of buoyancy and gravity. Shows the effects of loading on stability and period of roll of a ship.

Damage Control - List and Stability After Damage, Pt 1, Estimating the Situation (16 min, 16mm, sd, b & w, 1948, Order No. MN00061N, sale \$34.25, USN) Gives list of stability with proper corrective measures if list is encountered at sea.

Damage Control - Loose Water in Stability, Pt 1, in Intact Spaces (13 min, 16mm, sd, b & w, 1947, Order No. MN00061L, sale \$28.50, USN) Describes principles involving free surface. Shows that loss of 'G M' varies directly as the length of compartment, and loss of 'G M' varies as cube of width of compartment.

Damage Control - Loose Water in Stability, Pt 2, in Spaces Open to the Sea (13 min, 16mm, sd, b & w, 1947, Order No. MN00061M, sale \$28.50, USN) Shows effect of free communication on stability.

Damage Control - The Metacenter in Stability, Pt 1 (26 min, 16mm, sd, b & w, 1945, Order No. MN00061I, sale \$54.75, USN) Shows the importance of the metacenter and its relationship to stability. Describes metacenter on circular and rectangular forms, effect of shift of center of gravity with relation to the metacenter, conditions of good stability, and equilibrium and capsizing.

Damage Control - The Metacenter in Stability, Pt 2 (22 min, 16mm, sd, b & w, 1945, Order No. MN00061J, sale \$46.25, USN) Describes the effect on metacenter of changes in value of 'G', relationship of metacenter height with range of stability, and initial stability in terms of displacement. Gives example of a warship on a cruise and changes of stability due to changes of weight through depletion of stores, fuel and ammunition.

Installing Valves and Strainer on Sea Chest (12 min, 16mm, sd, b & w, 1944, Order No. OE099, sale \$26.75, rental \$7.50, USOE) Tells how studs are driven and checked for accuracy, valves are installed on sea chests, and how strainer is prepared for and installed on sea chest.

From the *Shipbuilding Skills Series*. Marine Machinery Installation, No. 5

Installing Valves in Engine Room Systems, Pt 1 (12 min, 16mm, sd, b & w, 1945, Order No. OE123, sale \$26.75, rental \$7.50, USOE) Describes identification of principal units in engineroom system and function of valves in controlling cycle of steam. Includes design and functions of gate valve, globe valve, and check valve.

From the *Shipbuilding Skills Series*. Pipefitting, No. 8

Installing Valves in Engine Room Systems, Pt 2 (16 min, 16mm, sd, b & w, 1945, Order No. OE124, sale \$33.25, rental \$7.50, USOE) Describes installation of the globe valve in main steam line, gate, angle, and swing-check valves. Shows flanged valves, and valves with threaded fittings, and valves with threaded fittings where clearance is limited.

From the *Shipbuilding Skills Series*. Pipefitting, No. 9

Laying Off Bulkheads (15 min, 16mm, sd, b & w, 1944, Order No. OE101, sale \$32.50, rental \$7.50, USOE) Tells how to measure on bulkheads from the temporary line and establish the center of bulkhead openings. Describes the purpose for laying off the bulkheads and tells when to run the permanent line.

From the *Shipbuilding Skills Series*. Marine Machinery Installation

Laying Out and Installing Compartment Fixtures (12 min, 16mm, sd, b & w, 1945, Order No. OE114, sale \$26.75, rental \$7.50, USOE) Tells how to locate installations on a planview blueprint, lay out ceiling fixtures and studs, lay out and burn a hole for the passage of cable, and install ceiling fixtures.

From the *Shipbuilding Skills Series*. Marine Electricity, No. 5

Laying Out and Installing Hangers (19 min, 16mm, sd, b & w, 1944, Order No. OE120, sale \$40.50, rental \$7.50, USOE) Shows how to measure and cut hanger legs to length. Illustrates how to install stool, angle iron bracket, strap, rod, and saddle hangers.

From the *Shipbuilding Skills Series*. Pipefitting, No. 5

GENERAL

Attack Carrier - Task Force 1 - Sea Orbit (29 min, 16mm, sd, color, 1969, Order No. MN10164, sale \$115.50, USN) An historical review covering the development of the aircraft carrier from the USS Langley to the USS Enterprise.

Sea Power - A Destiny upon the Waters (28 min, 16mm, sd, color, 1968, Order No. MN10365A, sale \$113.50, USN) A time span from the Phoenicians to the mid-18th century is bridged to show the evolution of naval power and its impact on the development of empires, and the age of exploration.

Sea Power - Seas of Liberty (28 min, 16mm, sd, color, 1968, Order No. MN10365B, sale \$113.50, USN) Illustrates the impact of sea power on the national economy, geopolitical aspects of the seas from the mid-18th century, and the necessity for freedom of the seas.

Sea Power - The Sea Is a Special Place (28 min, 16mm, sd, color, 1968, Order No. MN10365D, sale \$113.50, USN) Shows the responsibilities of command, and the demands and rewards for the people who make the complex and sophisticated naval machinery work.

Seas of Sweet Water (18 min, 16mm, sd, color, 1967, sale \$74.25, rental \$10.00, USIA) Provides an impressionistic presentation of the Great Lakes Region in North America.

Weathermen of the Sea (14 min, 16mm, sd, b & w, 1948, sale \$33.75, rental \$7.50, USCG) Presents duties and services performed by ocean weather station vessels operated by the Coast Guard. Follows activities of one vessel on its tour of duty in rough North Atlantic waters.

RESEARCH

Bathymetry - Discovering the Ocean Floor - Charting the Ocean Bottom (16 min, 16mm, sd, color, 1970, Order No. MN10408, sale \$66.00, USN) Shows the procedures for taking and submitting bathymetric reports and reasons for increasing the quality of these reports.

Ocean Phenomenon - The Deep Scattering Layer (29 min, 16mm, sd, color, Order No. MN10524, sale \$115.50, USN) Describes the search for the cause of sound reflecting layers of marine life living in the oceans of the world and how new information has helped in solving this mystery.

Planes in the Sky, Ships in the Sea (28 min, 16mm, sd, color, 1970, Order No. MN10653, sale \$113.50, USN) Portrays the role of the Naval Ships Research and Development Center and affiliated laboratories in developing modern naval ships and equipment.

Talking with Dolphins (15 min, 16mm, sd, color, 1970, Order No. 1433X, sale \$62.25, rental \$10.00, USN) Describes studies and experiments made by Naval Electronics Laboratory scientists in the area of underwater sound, using dolphins.

SHIPBUILDING

Aligning and Installing Auxiliary Machinery (17 min, 16mm, sd, b & w, 1944, Order No. OE096, sale \$35.75, rental \$10.00, USOE) Shows how to lay out foundations for machinery installation, drill bolt holes, establish centers for holes for drilling, and align machines accurately on foundations.
From the *Shipbuilding Skills Series*. Marine Machinery Installation, No. 2

Bending Copper Tubing to a Wire Template (22 min, 16mm, sd, b & w, 1944, Order No. OE102, sale \$46.25, rental \$7.50, USOE) Describes how tubing is annealed, cooled and filled with rosin, and how a wire template is made. Shows how bends are marked, made, and checked.
From the *Shipbuilding Skills Series*. Copper Smithing, No. 1

Bulkhead, The - Laying Off and Fitting a Centerline Stiffener (16 min, 16mm, sd, b & w, 1945, Order No. OE031, sale \$33.25, rental \$7.50, USOE) Shows design of a centerline bulkhead stiffener. Tells how to lay out the main stiffener bar with the water-lines and work lines. Describes how to lay out, cut, and fit a main stiffener bracket and tripping brackets.
From the *Shipbuilding Skills Series*. Work Of Shipfitter and Shipwright, No. 8

Bulkhead, The - Laying Off the Boundary Stiffeners, Waterlines, and Buttock Lines (18 min, 16mm, sd, b & w, 1942, Order No. OE030, sale \$37.50, rental \$7.50, USOE) Illustrates how to align templates to a bulkhead plate, mark off stiffener work lines on the bulkhead plate, and prepare the plate for welding the stiffeners.
From the *Shipbuilding Skills Series*. Work Of Shipfitter and Shipwright, No. 7

Bulkhead, The - Setting a Transverse Watertight Bulkhead Into the Hull (17 min, 16mm, sd, b & w, 1942, Order No. OE032, sale \$36.50, rental \$7.50, USOE) Describes how to square a transverse bulkhead to a frame line and the centerline of the ship, set the bulkhead to proper height and declivity, cut the bulkhead to fit the innerbottom, and fit the bulkhead to the hull and tack-weld it.
From the *Shipbuilding Skills Series*. Work Of Shipfitter and Shipwright, No. 9

Covering Hot and Cold Pipes (22 min, 16mm, sd, b & w, 1944, Order No. OE129, sale \$46.25, rental \$7.50, USOE) Explains how to insulate straight pipe and how to cover coupling, bend, elbow, valve and flange.
From the *Shipbuilding Skills Series*. Pipe Insulation, No. 1

Deck, The - Setting a Web Frame and a Transverse Beam (17 min, 16mm, sd, b & w, 1942, Order No. OE029, sale \$36.50, rental \$7.50, USOE) Describes how to square a web frame with the frame and buttock lines, shore up a transverse deck beam, and fair the transverse beam to the centerline and frame line of the deck.
From the *Shipbuilding Skills Series*. Work Of Shipfitter and Shipwright, No. 6

Deck Girders - Subassembly (15 min, 16mm, sd, b & w, 1942, Order No. OE028, sale \$30.50, rental \$7.50, USOE) Explains use of transverse and longitudinal girders in hull structures. Tells how to fit, weld, and rivet stiffening brackets to a transverse girder and to a longitudinal girder.
From the *Shipbuilding Skills Series*. Work Of Shipfitter and Shipwright, No. 5

Deck Plates - Regulating and Setting (16 min, 16mm, sd, color, 1942, Order No. OE033, sale \$27.75, rental \$10.00, USOE) Describes how to mark off the centerline, frame lines, and buttock lines on deck girders. Tells how to line up deck plates to the reference lines, fit square, scarfed, and V-type butt joints, and hold plates flush for welding.
From the *Shipbuilding Skills Series*. Work Of Shipfitter and Shipwright, No. 10

Filing and Installing Chocks (15 min, 16mm, sd, b & w, 1944, Order No. OE097, sale \$32.50, rental \$7.50, USOE) Tells how chocks are used in machinery installation, measurements are made for preparing chocks, Prussian blue and chalk are used for adjusting chocks, and how foundations and chocks are drilled for bolting machine.
From the *Shipbuilding Skills Series*. Marine Machinery Installation, No. 3

Fitting Tube, Shaft, And Propeller (29 min, 16mm, sd, b & w, 1944, Order No. OE342, sale \$20.25, rental \$10.00, USOE) Describes how the stern tube and tail shaft are installed, how the propeller is swung into position and lined up, how the fairwater cap and rope guard are installed, and how the tail-shaft assembly is secured for launching.
From the *Shipbuilding Skills Series*. Marine Machinery Installation, No. 9

How to Check and Surface Foundations (19 min, 16mm, sd, b & w, 1944, Order No. OE095, sale \$39.25, rental \$7.50, USOE) Tells how to check the location of machinery foundations to blueprint specifications, align and level foundations, and surface or smooth foundations.
From the *Shipbuilding Skills Series*. Marine Machinery Installation, No. 1

Innerbottom Sections - Subassembly of a Closed Floor, Subassembly of an Open Floor (18 min, 16mm, sd, b & w, 1942, Order No. OE025, sale \$37.50, rental \$7.50, USOE) Tells how the keel, longitudinal girders, transverse side stiffeners, and tank stops form the innerbottom of a ship. Shows how to lay out and install closed floor and open floor sections, and to weld stiffeners to the floors.
From the *Shipbuilding Skills Series*. Work Of Shipfitter and Shipwright, No. 2

Innerbottom, The - Setting Up Floors and Longitudinals (18 min, 16mm, sd, b & w, 1942, Order No. OE026, sale \$37.50, rental \$7.50, USOE) Tells how to fair the keel, set and fit transverse floors, and set, fit, and weld longitudinal girders.

From the *Shipbuilding Skills Series. Work Of Shipfitter and Shipwright, No. 3*

Laying Out and Installing Kickpipes and Stuffing Tubes (16 min, 16mm, sd, b & w, 1945, Order No. OE110, sale \$33.25, rental \$7.50, USOE) Tells how to locate the kickpipe or stuffing tube area, lay out the penetration area, cut or burn the penetration area, and install the kickpipe or stuffing tube.

Laying Out, Drilling and Tapping Flanges On Sea Chest (19 min, 16mm, sd, b & w, 1944, Order No. OE098, sale \$40.50, rental \$7.50, USOE) Describes component parts of a sea chest. Tells how locations of flanges are checked, flanges leveled, stud hole centers are laid out, and stud holes drilled and tapped.

From the *Shipbuilding Skills Series. Marine Machinery Installation, No. 4*

Making a Cold Bend on a Hand Powered Machine (13 min, 16mm, sd, b & w, 1944, Order No. OE108, sale \$28.50, rental \$7.50, USOE) Discusses the importance of bends in marine pipe installation. Shows how to measure pipe for bends and how to operate a hand-bending machine.

From the *Shipbuilding Skills Series. Pipefitting, No. 4*

Measuring Pipe, Tubing and Fittings (15 min, 16mm, sd, b & w, 1944, Order No. OE105, sale \$32.50, rental \$7.50, USOE) Explains how to identify types of pipe, tubing and fittings, use basic measuring tools, measure pipe for offsets and make allowances for fittings and offsets in measuring pipe.

From the *Shipbuilding Skills Series. Pipefitting, No. 1*

Pipe Fabrication with Jigs (22 min, 16mm, sd, b & w, 1944, Order No. OE122, sale \$44.50, rental \$7.50, USOE) Explains the purpose of the jig. Shows how to lay out and assemble targets for a jig, set hangers and targets using a pipe section as a template and fabricate pipe on the jig.

From the *Shipbuilding Skills Series. Pipefitting, No. 7*

Preparing and Setting a Keelblock and Bottom Cradle (18 min, 16mm, sd, b & w, 1942, Order No. OE024, sale \$37.50, rental \$7.50, USOE) Describes use of base line, vertical centerline, buttock lines, waterlines, and frame lines in checking dimensions during ship construction. Tells how to lay a keelblock, use templates to make spauls, and erect a ship cradle.

From the *Shipbuilding Skills Series. Work Of Ship Fitter and Shipwright, No. 1*

Running a Permanent Line and Boring (32 min, 16mm, sd, b & w, 1944, Order No. OE341, sale \$65.00, rental \$10.00, USOE) Tells how to run the permanent line, establish reference marks, install and adjust the boring bar, and rough-and finish-bore propeller post and various bulkheads to specifications.

From the *Shipbuilding Skills Series. Marine Machinery Installation, No. 8*

Running a Temporary Line (22 min, 16mm, sd, b & w, 1944, Order No. OE100, sale \$46.25, rental \$7.50, USOE) Describes how the propeller post is prepared for running a temporary line, how to adjust a line to the center of bulkhead openings, how to eliminate the sag when a line has been run, and how a temporary line is checked for proper position.

From the *Shipbuilding Skills Series. Marine Machinery Installation, No. 6*

Side Frames - Subassembly of a Web Frame (17 min, 16mm, sd, b & w, 1942, Order No. OE027, sale \$36.50, rental \$7.50, USOE) Shows how to lay out the main web plate from a template, fit stiffeners to the web plate, and dog the stiffeners to the plate for welding.

From the *Shipbuilding Skills Series. Work Of Shipfitter and Shipwright, No. 4*

Simple Foundation, Pt 1, Layout (28 min, 16mm, sd, b & w, 1944, Order No. MN2338B, sale \$58.50, USN) Explains through animation the layout of a simple foundation, and shows a workman performing the actual operations. Explains how to mark the template with necessary directions.

From the *Shipbuilding Skills Series. the Shipfitter, Pt 1*

SUBMARINES

Forty-one for Freedom - A Fleet Is Built (28 min, 16mm, sd, color, 1968, Order No. MN10703, sale \$113.50, USN) Shows the completion of forty-one authorized fleet ballistic missile submarines, armed with Polaris. Depicts the building of a Polaris submarine from keel laying to patrol, the complexities of the equipment, and includes an interview with Admiral Levering Smith, USN, Director of Special Projects. Narrated by Ed Reimers.

Nautilus Crosses the Top of the World. The (10 min, 16mm, sd, b & w, 1958, sale \$21.00, rental \$5.00, USIA) Recounts the four-day epic journey under the polar ice cap of the atomic-powered submarine Nautilus. Includes a description of the ship's atomic reactor by Rear Admiral Hyman Rickover, who pioneered the nuclear submarine.

NATIONAL SECURITY

CIVIL DEFENSE AND DISASTER

CD Emergency Preparedness At the Marshall Space Flight Center (15 min, 16mm, sd, color, 1969, sale \$60.00, USOCD) Includes basic elements of civil defense program, such as warning, shelters, the Emergency Broadcast System (EBS), radiological defense (RADEF), shelter manager training, communications, community shelter planning, and a simulation of persons going to shelter. Shows a mock attack exercise at the Marshall Space Flight Center at Huntsville, Alabama. (Not cleared for TV)

Hurricane Circuit (23 min, 16mm, sd, b & w, 1949, sale \$48.75, rental \$10.00, USDS) Traces the path of a hurricane through the Caribbean and the Gulf of Mexico, and explains the work of the U S Weather Bureau in predicting the course of the hurricane and issuing precautionary and emergency storm warnings.

In Time of Emergency (26 min, 16mm, sd, color, 1970, Order No. DODCD20-272, sale \$98.00, USDOD) Highlights basic lifesaving information every American needs to prepare for the possibility of nuclear attack--facts about fallout, types of public and private shelters, how to improvise fallout protection, attack warning, emergency supplies, reducing the fire hazard, and actions to take if caught in the open.

Spotlight on Recovery (15 min, 16mm, sd, color, 1964, Order No. FA-0603, sale \$64.25, USFAA) Reveals the speed with which FAA facilities in Alaska returned to normal operations following the 1964 earthquake. Recovery methods used by FAA have been lauded by the Office of Civil Defense and can be applied in a number of other emergency situations.

They Were There (29 min, 16mm, sd, b & w, 1960, Order No. TV486, sale \$59.50, USA) Portrays the Army's role in civil disaster. Reviews the Johnstown flood, San Francisco earthquake and more recent holocausts--the Chilean earthquake and the tidal wave damage inflicted on Hawaii. (Cleared for TV)
From the *Big Picture Series*.

When Disaster Strikes (17 min, 16mm, sd, color, 1970, sale \$70.25, USCE) Depicts the natural disaster operations of the U S Army Corps of Engineers and how they respond to these disasters with personnel, equipment, technical assistance, and supervision. Describes the authorities under public law which govern the Corps' assistance in natural disasters. Shows Operation Foresight and Hurricane Camille as examples of the Corps' participation in natural disaster relief.

COMMUNISM

Anatomy of Aggression, The (29 min, 16mm, sd, b & w, 1961, sale \$61.25, rental \$10.00, USIA) Reviews Communist activities during the past 15 years and emphasizes the conflicts between democracy and totalitarianism.

Communism (30 min, 16mm, sd, b & w, 1967, Order No. AFIF0165, sale \$62.50, USDOD) Traces the history of Communism and explains its objectives, strengths and weaknesses. Outlines Communism's five major assumptions and shows how history has disproved them. Studies Communist countries' advances and failures in military strength, industry, education, technology and agriculture. Compares present practices to Marx's original theory and exposes Communism's definition of peaceful coexistence.

Name, Rank and Service Number (21 min, 16mm, sd, b & w, 1965, Order No. AFIF0138, sale \$56.50, USDOD) Enacts the true story of two American officers captured by Communists. Pictures these prisoners' heroic perseverance under duress. Shows how servicemen who live by the U S fighting man's code of conduct find inner strength to resist enemy pressure and torture.

Red Nightmare (25 min, 16mm, sd, b & w, 1965, Order No. AFIF0142, sale \$64.50, USDOD) Depicts the nightmare of an American citizen, who finds himself in a Communist mock up village, awakens him to his obligations to his family and his country.

Their Choice Was Freedom (26 min, 16mm, sd, b & w, 1966, Order No. AFIF0152, sale \$66.75, USDOD) Tells the story of millions who have fled Communism to seek freedom in the free world. Highlights true stories of three such defectors--a member of the Chinese embassy in Stockholm, a Russian seaman who jumps ship, and a Russian security officer in Vienna.

Third Challenge, The - Unconventional Warfare (29 min, 16mm, sd, color, 1962, Order No. TV578, sale \$115.50, USA) Portrays Communist techniques used in situations to take over political parties, countries, create discord, and sabotage. (Cleared for TV)

From the *Big Picture Series*.

DEFENSE SYSTEMS

Aberdeen Proving Ground (17 min, 16mm, sd, b & w, 1951, Order No. FB09-0238, sale \$36.75, USA) Shows how efficient weapons are developed for U S military needs. Describes functions and operations of the ballistics research lab, development and proof services, the ordnance board, and Aberdeen Ordnance Depot. Reports on basic field research of Armed Forces materiel conducted at aerodynamic range, super sonic wind tunnel and Munson automotive test course.

Air Force Now, The (14 min, 16mm, sd, color, 1969, Order No. AFN002, sale \$56.50, USAF) Secretary of the Air Force Robert C Seamans, Jr discusses opportunities for service to nation and local community by members of the force between 18 and 28. Gen Bruce K Holloway, SAC Commander in Chief, congratulates participants in annual SAC missile competition. Col Jeanne Holm, WAF Director, comments on WAF fashion show entries featuring chic, feminine uniforms. The Air Force picks 1969's top airman entertainers as an individual entry explains her reasons for seeking the spotlight. After an A-37 pilot's last mission, he is hosed down by his buddies in the traditional dunking afforded a pilot who earned his right to go home. (Cleared for TV)

Air Force Reserve - Ready Now (22 min, 16mm, sd, color, 1969, Order No. SFPI667, sale \$89.75, USAF) Dramatizes diverse mission of the Air Force Reserve (AFRES) which encompasses some 400,000 Air Force Reservists. Covers activities of Air Force Reserve flying, medical air terminal, navigation, specialty training and logistics units. (Cleared for TV)

Air Force ROTC Comes of Age (28 min, 16mm, sd, color, 1967, Order No. SFPI684, sale \$113.50, USAF) Marks the 21st anniversary of Air Force ROTC. Traces AFROTC history, traditions and growth. Emphasizes its role in the training of future Air Force officers. Explains provisions of the scholarship program. Shows flight training, aerospace studies, and field trips to Air Force installations. Also reviews history of military training in schools and colleges during the past two centuries. (Cleared for TV)

Army Air Mobility Team, The (29 min, 16mm, sd, color, 1968, Order No. TV752, sale \$115.50, USA) Shows how today's highly mobile soldiers have modern vertical and short take-off aircraft to support them in combat operations, and examines how men and Army aviation function in difficult terrain of Southeast Asia. (Cleared for TV)
From the *Big Picture* Series.

Army Research and Development - Progress Report 7 (24 min, 16mm, sd, b & w, 1964, Order No. R & DPR7, sale \$50.75, USA) Reports on objectives, scope, and results of the Swamp Fox II tests conducted by the U S Army in cooperation with the Panamanian Government to evaluate mobility of military vehicles in the tropics. (Cleared for TV)

Battalion Commander (29 min, 16mm, sd, b & w, 1963, Order No. TV614, sale \$59.50, USA) Shows functions of a battalion commander on duty in Europe. (not cleared for TV).
From the *Big Picture* Series.

Civilian Sailor - The Story of the Naval Reserve (28 min, 16mm, sd, color, 1970, Order No. MN10905, sale \$113.50, USN) Describes the role and importance of the naval reserve to national security and the material benefits and accomplishments.

Cleared for Takeoff (14 min, 16mm, sd, color, 1969, Order No. MN10419A, sale \$58.25, USN) A U S Naval Reserve VR Squadron, on two weeks active duty, performs an important logistic task in support of U S naval efforts in South Vietnam.

CONARC, Headquarters of the U S Soldier (29 min, 16mm, sd, color, 1967, Order No. TV727, sale \$115.50, USA) Depicts how soldiers are organized and trained. (Cleared for TV)
From the *Big Picture* Series.

Crusaders of the Sky (10 min, 16mm, sd, b & w, 1967, Order No. AFMR0661, sale \$33.00, USDOD) Recalls the glory and fighting spirit of the American pilots who joined France's Lafayette Escadrille prior to U S involvement in World War I.

Eighth Army - Shield of the Free World (29 min, 16mm, sd, b & w, 1960, Order No. TV489, sale \$59.50, USA) Traces history of the Eighth Army in World War II, the Japanese occupation, and its role in Korea. (Cleared for TV)
From the *Big Picture* Series.

Embassy Marine - A Sense of Responsibility (28 min, 16mm, sd, color, 1964, Order No. MH09824, sale \$113.50, USMC) Shows the training of embassy Marines and the mission of Marine security detachments on duty at the State Department.

Engineer Mission (26 min, 16mm, sd, b & w, 1954, Order No. MF05-8279, sale \$54.75, USA) Traces accomplishments, in peace and war, of the Corps of Engineers from the revolutionary period to the post-Korean conflict.

Exercise Delaware (29 min, 16mm, sd, b & w, 1964, Order No. TV631, sale \$59.50, USA) Documents a joint U S-Iranian exercise. STRAC troops from Fort Campbell are airlifted to Iran to participate. (Cleared for TV)
From the *Big Picture* Series.

Exercise Pathfinder Express (17 min, 16mm, sd, color, 1968, Order No. FR0941, sale \$70.25, USAF) Demonstrates airborne training exercises in Europe, portrays U S and Spanish troops in hypothetical combat situation in Spain. Pictures paratroopers in mass assault to secure airfield. Depicts bull fight and reception given by Spaniards in honor of participants. (Cleared for TV)

Eyes of the North (21 min, 16mm, sd, color, 1966, Order No. SFPI287, sale \$86.00, USAF) Portrays arctic mission of Air Defense Command and pictures its space detection and tracking facilities.

Cites role of Canadian, Swedish and English Personnel in North American detection operations. Demonstrates typical scramble to intercept unidentified aircraft. (Cleared for TV)

Guerilla, U S A (29 min, 16mm, sd, b & w, Order No. TV561, sale \$59.50, USA) Shows 101st Airborne Division and Special Forces troops in maneuvers in mountains of West Virginia under realistic conditions. (Not cleared for TV)
From the *Big Picture* Series.

Heritage of the Corps (15 min, 16mm, sd, color, 1963, Order No. MH08781, sale \$62.25, USMC) Shows the Marine Corps evening parade at Marine Corps Barracks, Washington, D C, performance by the Marine Corps Band, the Drum and Bugle Corps, and the drill team and troops.

How Sleep the Brave (29 min, 16mm, sd, color, 1964, Order No. TV623, sale \$115.50, USA) Memorializes dead American servicemen. (Cleared for TV)
From the *Big Picture* Series.

I in Infantry, The - The Individual (29 min, 16mm, sd, color, 1967, Order No. TV711, sale \$115.50, USA) Describes development of an infantry soldier and shows how his unit depends upon him as an individual.
From the *Big Picture* Series.

In a Tradition of Heroes (26 min, 16mm, sd, color, 1966, Order No. MH09969, sale \$126.75, USMC) Shows the role of Marine detachments aboard ship, how and where they live, and their responsibilities as a gun crew. Depicts early history of shipboard Marines.

Marines, 1965 (15 min, 16mm, sd, color, 1966, Order No. MH10364, sale \$62.25, USMC) Highlights Marine Corps activities during 1965, including battle operations and civic action in the Dominican Republic and Vietnam.

Meeting Ground, The (15 min, 16mm, sd, color, 1969, Order No. MN10551, sale \$60.00, USMC) Shows the recruiting of prior-service Marines for enlistment in the organized Marine Corps Reserve.

Now Scene, The (14 min, 16mm, sd, color, 1969, Order No. NS1, sale \$58.25, USAF) Shows U S Air Force demonstrations and facilities - such as buildings suspended on coils inside mountains where the huge underground complex of the North American Air Defense Command (NORAD) is located, the Thunderbirds and their spectacular F4E Phantom 2 demonstrations, and life at Oxnard AFB where fighter-interceptor squadrons are trained. Depicts the life and activities of men who become our combat pilots, and highlights missions of the flight nurses. (Cleared for TV)

OCS Story, The (29 min, 16mm, sd, color, 1967, Order No. TV715, sale \$115.50, USA) Describes the special training officer candidates receive in the U S Army. Adapted from U S Army Officer Candidate Schools (TF22-3810). (Cleared for TV)
From the *Big Picture* Series.

Operation Affirmative (14 min, 16mm, sd, color, 1970, Order No. MN10419B, sale \$58.25, USN) The importance of the ready reserve is emphasized when a Naval Reserve destroyer crew is called to duty to track a Russian fishing trawler off the coast of Seattle, Washington.

Partners in Progress (29 min, 16mm, sd, b & w, 1960, Order No. TV505, sale \$59.50, USA) Relates how the Army's Corps of Engineers worked with American industry to keep America strong and free. A historical sequence demonstrates the Corps' work from the early days of western frontiers, through war and peace. (Cleared for TV)
From the *Big Picture* Series.

Patrolling (29 min, 16mm, sd, b & w, 1961, Order No. TV527, sale \$59.50, USA) Shows a combat night patrol in action. (Cleared for TV)

From the *Big Picture* Series.

Platoon Leader (29 min, 16mm, sd, color, 1967, Order No. TV733, sale \$115.50, USA) Describes the training Army platoon leaders receive.

From the *Big Picture* Series.

Point of the Spear (29 min, 16mm, sd, color, 1963, Order No. TV608, sale \$115.50, USA) Summarizes air-lift of 2nd Armored Division from Fort Hood Texas, to Germany and then into maneuvers in West Germany during October 1963. (Not cleared for TV)

From the *Big Picture* Series.

Prelude to Taps (11 min, 16mm, sd, color, 1964, Order No. AFMR0629, sale \$44.75, USDOD) Presents a display of the military pageantry in commemoration of two centuries of American heroes who died fighting for their country.

Prologue to Leadership (33 min, 16mm, sd, b & w, Order No. MF145-0188, sale \$68.25, USA) Documents objectives and scope of the 6 week summer training program conducted at ROTC camps at Indiantown Gap Military Reservation, Pa. (Cleared for TV)

Provide for the Common Defense (24 min, 16mm, sd, b & w, 1957, Order No. SFP0534, sale \$50.00, USAF) Discusses national defense and emphasizes its importance to security. (Cleared for TV)

Quiet Warrior, The (28 min, 16mm, sd, color, 1968, Order No. MN10552, sale \$111.75, USN) Shows week-end activities of the inactive Navy Reservists.

Ranger (29 min, 16mm, sd, color, 1968, Order No. TV758, sale \$115.50, USA) Points out how the small unit leader must be resourceful and capable of directing operations under many types of geographic and climatic conditions. Shows how Rangers are trained at Fort Benning, Georgia. (Cleared for TV)

From the *Big Picture* Series.

Ready 'Round the World (29 min, 16mm, sd, color, 1967, Order No. TV717, sale \$115.50, USA) Depicts America's military strength in today's world, and indicates that a nation must be able to meet any action another nation may initiate. (Cleared for TV)

From the *Big Picture* Series.

Ready - Story of the Marine Corps Reserves (15 min, 16mm, sd, color, 1966, Order No. MH10350, sale \$62.25, USMC) Visually documents the fifty-year history of the Marine Corps Reserves from World War I to World War II and Korea.

Reins of Command, The - Air Force Communications Service (28 min, 16mm, sd, color, 1966, Order No. SFP1285, sale \$113.50, USAF) Portrays mission of Air Force Communications Service and its vital role in air force operations. Depicts highly complex and sophisticated communications techniques, equipment, global communications network, and air traffic control system. Pictures use of communications in military exercises and operations. Brig Gen James Stewart narrates. (Cleared for TV)

Reverend Turner's Night Out, The - The Reserve Chaplain (19 min, 16mm, sd, color, 1968, Order No. MF16-5307, sale \$78.00, USA) Describes training and activities of the chaplains in the U S Army Reserve.

Role of Armor (29 min, 16mm, sd, b & w, 1960, Order No. TV509, sale \$59.50, USA) Presents authentic combat footage from World War II and Korea to depict the growth and development of armor from its earliest beginnings to its all-important role in today's Army. (not cleared for TV)

From the *Big Picture* Series.

SAC Numbered Air Forces - This Is the 8th Air Force (13 min, 16mm, sd, color, 1967, Order No. SFP1475A, sale \$54.50, USAF) Portrays mission of the 8th Air Force, a major arm of the Strategic Air Command. Reviews missile and aircraft inventory of the organization. Shows readiness of its personnel and equipment with footage of Minuteman launching capabilities and around-the-clock airborne operations. Also depicts testing of Sac's bombing skills through annual competitions. (Cleared for TV)

SAGE - Semi-automatic Ground Environment System (9 min, 16mm, sd, color, 1964, Order No. SFP1155, sale \$78.00, USAF) Describes mission, operations, capabilities and military importance of SAGE system. Shows how SAGE sectors electronically compute aircraft movement information which is received from networks of observer agencies. (Cleared for TV)

Salute to MATS (29 min, 16mm, sd, b & w, 1962, Order No. TV581, sale \$59.50, USA) Features four giant airlifts conducted simultaneously and shows famous airlifts of the past. (Not cleared for TV)

From the *Big Picture* Series.

Salute to the Navy (29 min, 16mm, sd, b & w, 1962, Order No. TV569, sale \$59.50, USA) Features a pictorial review of the Navy's history, its achievements and future role in the military establishment. (Cleared for TV)

From the *Big Picture* Series.

Screaming Eagles in Vietnam (29 min, 16mm, sd, color, 1967, Order No. TV714, sale \$115.50, USA) Shows the exploits of the 101st Airborne Division (Screaming Eagles) in Vietnam. (Cleared for TV)

From the *Big Picture* Series.

Senior Soldier, The (29 min, 16mm, sd, color, 1967, Order No. TV731, sale \$115.50, USA) Depicts the non-commissioned officer's role in Army leadership. (not cleared for TV)

From the *Big Picture* Series.

Silent Warriors (29 min, 16mm, sd, b & w, 1960, Order No. TV518, sale \$59.50, USA) Describes a special forces unit's training in Utah armed with deadly bows and arrows. (Cleared for TV)

From the *Big Picture* Series.

Sparrow Hawks, The (9 min, 16mm, sd, color, 1968, Order No. FR0906, sale \$37.25, USAF) Pays tribute to forward ADR controllers who fly hazardous spotting missions in Southeast Asia. Shows how pilots plan and carry out their task of searching for and marking enemy positions for immediate air strikes. (Cleared for TV)

Special Forces (29 min, 16mm, sd, b & w, 1961, Order No. TV547, sale \$59.50, USA) Documents training of the Special Forces soldier at Fort Bragg, N C, and shows the Alps in Southern Bavaria where a training mission is covered. (Cleared for TV)

From the *Big Picture* Series.

Strike Command (29 min, 16mm, sd, color, 1965, Order No. TV669, sale \$115.50, USA) Shows fighting potential of United States Strike Command--a joint command which includes fighting men of the Army, Navy, and Air Force. (Cleared for TV)

From the *Big Picture* Series.

Support from the Sky (16 min, 16mm, sd, color, 1966, Order No. MH10321, sale \$66.00, USMC) Shows operations of a Marine air group in support of ground troops.

They Clear the Way (29 min, 16mm, sd, color, 1967, Order No. TV732, sale \$115.50, USA) Describes the U S Army Engineers, whose job it is to build bridges, airfields, and roads in Vietnam in order to bring mobility to combat forces. (Cleared for TV)
From the *Big Picture Series*.

This Is the Infantry (29 min, 16mm, sd, b & w, 1961, Order No. TV539, sale \$59.50, USA) Describes activities and training at the infantry school, Ft. Benning, Georgia. (Cleared for TV)
From the *Big Picture Series*.

Time to Go (28 min, 16mm, sd, b & w, 1955, Order No. MF20-8322, sale \$58.50, USA) Covers organization, purpose and operation of Selective Service System, personnel and activities of local boards, requirements, obligations, classification and deferments of draftees, preinduction processing, induction and benefits of Army training. (Cleared for TV)

Traditions and Achievements (29 min, 16mm, sd, b & w, 1964, Order No. TV620, sale \$59.50, USA) Describes heritage of American Army from days of revolution through Korean War. (Cleared for TV)
From the *Big Picture Series*.

Trigger Squeeze M1 Rifle (5 min, 16mm, sd, b & w, 1955, Order No. TF07-2202, sale \$11.25, USA) Emphasizes proper trigger squeeze for accurate fire of M1 rifle. (Cleared for TV)

U S Army Strategic Communications Command - STRATCOM (29 min, 16mm, sd, color, 1968, Order No. MF11-5250, sale \$117.50, USA) Describes the mission, organization, resources and operations of STRATCOM.

United States Army Combat Developments Command, the - Vision to Victory (32 min, 16mm, sd, color, 1969, Order No. MF31-5368, sale \$129.00, USA) Describes mission and organization of US-ACDC, and the tools and techniques used to develop new concepts and equipment for the Army of the future.

USARPAC (29 min, 16mm, sd, color, 1968, Order No. TV738, sale \$115.50, USA) Shows the missions of our soldiers in the Far East, including--Vietnam, Korea, Okinawa, Japan, Thailand, Taiwan and Hawaii. (Cleared for TV)
From the *Big Picture Series*.

Victory Division, The - 24th Infantry (17 min, 16mm, sd, b & w, 1950, Order No. CMF130-7553, sale \$36.75, USA) Tells the history of the 24th Infantry Division in the Pacific Area during World War II.

We Build, We Fight (22 min, 16mm, sd, color, 1969, Order No. MN10386, sale \$89.75, USN) A history of the Seabees from their first 'Can Do' days of World War II to their construction and counterinsurgency activities in Vietnam. Narrated by the founder, Admiral Ben Morrell.

Your Army Reports, No. 12 (29 min, 16mm, sd, color, 1967, Order No. TV722, sale \$115.50, USA) Army Chief of Staff, General Harold K Johnson, speaks at the annual convention of the Association of the United States Army. Shows Vietnamese civilians working with the United States Army and gives a special feature on the Army combat photographer. (Cleared for TV)
From the *Big Picture Series*.

Your Army Reports, No. 13 (29 min, 16mm, sd, color, 1967, Order No. TV729, sale \$115.50, USA) Shows Army Chief of Staff, General Harold K Johnson, decorate Warrant Officer Jerome R Daley for gallantry in action. Army combat photographers move forward with 1st Cavalry Division and Vietnamese troops during an amphibious landing and search for Viet Cong. Depicts mission of harbor pilots in port of Qui Nhon. (Not cleared for TV)
From the *Big Picture Series*.

Your Army Reports, No. 14 (29 min, 16mm, sd, color, 1967, Order No. TV734, sale \$115.50, USA) Features training activities of the 205th Infantry Brigade (separate) of the U S Army Reserve as it prepares to meet its mission in defense of America. (Not cleared for TV)

From the *Big Picture Series*.

GENERAL

Aggressor, The (29 min, 16mm, sd, b & w, 1962, Order No. TV555, sale \$59.50, USA) Features role of aggressor soldiers. Emphasizes means they employ in testing defenses, security measures, and plans of the Army. (Not cleared for TV)

From the *Big Picture Series*.

Civilian Guard Services (29 min, 16mm, sd, b & w, 1959, Order No. TF19-2772, sale \$60.50, USA) Shows security procedures and devices used within and outside military installations and industrial plants. Describes duties of static, foot or vehicular patrol, escort and riot guards. (Cleared for TV)

Physical Security Surveys (30 min, 16mm, sd, b & w, 1964, Order No. TF19-3365, sale \$62.50, USA) Describes the purpose, fundamentals and procedures for a physical security survey of a military installation to uncover and correct security weaknesses. (Cleared for TV)

Resist (9 min, 16mm, sd, b & w, 1959, Order No. TF30-2564, sale \$60.50, USA) Teaches methods used by enemy to indoctrinate POW's. Shows ways in which the captured soldier can resist--don't talk, don't write, don't sign anything and always be alert to take advantage of the chance to escape. Emphasizes value of sticking together, and trusting and helping fellow soldiers. (Cleared for TV)

LAW ENFORCEMENT

Law of the Sea (29 min, 16mm, sd, color, 1970, Order No. MN10496, sale \$115.50, USN) Illustrates various legal problems that can arise at sea and their solutions.

Military Police Support in Amphibious Operations (14 min, 16mm, sd, b & w, 1953, Order No. TF19-1806, sale \$30.75, USA) Shows duties in support of combined amphibious assaults, including--landings of division and support brigade military police, traffic control of men and equipment, control and direction of beach traffic, parking and spacing of vehicles, providing escorts, directing stragglers to collection points, aiding in capturing enemy snipers and enemy paratroopers, guarding prisoners of war, helping to control movements of civilians and refugees, and guarding supplies to prevent pilferage and sabotage. (Cleared for TV)

Military Police Town Patrol, Pt 1, Foot Patrol (36 min, 16mm, sd, b & w, 1956, Order No. TF19-2111, sale \$74.50, USA) Describes planning and organization of patrols, preparation for mission, familiarization with patrol route, how to advise and assist soldiers, and how to enforce regulations. (Cleared for TV)

Most Rewarding Law, The (20 min, 16mm, sd, color, 1960, Order No. RF15-001, sale \$82.00, USA) Shows variety of opportunities provided by career in U S Army Judge Advocate General's Corps.

MP Highway Patrol in Germany (10 min, 16mm, sd, b & w, 1953, Order No. FB19-0256, sale \$21.00, USA) Demonstrates the control that military police have over traffic on the autobahn in Germany. Describes duties of military police highway patrols including traffic

patrols, services, assistance to military and civilian population, law enforcement, and first aid.

MILITARY JUSTICE

Soldiers-at-law (29 min, 16mm, sd, color, 1968, Order No. TV739, sale \$115.50, USA) Shows how responsibility for U S Army judicial and legal activities lies with the Judge Advocate General. Shows training which qualifies the civilian attorney as a judge advocate or military lawyer. Emphasizes how individual rights, which are protected by the civilian judicial system, are also guarded by military judicial system. (Cleared for TV)

From the *Big Picture* Series.

Summary Court-martial, The (45 min, 16mm, sd, b & w, 1954, Order No. TF15-1961, sale \$92.00, USA) Depicts, in four typical cases, the feasibility of summary court-martial, the rights of the accused, the relationship of the summary court-martial officer to the accused, the trial, mitigation, conviction and sentence. (Cleared for TV)

Suspects and Witnesses, Pt 4, Use of the Polygraph in Investigations (26 min, 16mm, sd, b & w, 1967, Order No. TF19-3559, sale \$54.75, USA) Presents pre-test interview with suspect, test examination procedure, analysis of polygraph indications, and post-test interrogation of suspect. (Limited to professional groups only)

PHILOSOPHY

RELIGION

Air Force Chaplaincy, The - Where the Men Are (18 min, 16mm, sd, color, 1969, Order No. SFP1704, sale \$74.25, USAF) Portrays how the chaplains serve the spiritual needs of the men and women of the air force and their dependents. Pictures their service on the flight lines, in work areas, in casualty wards, and during emergency situations. Shows many aspects of the ministry including parish programs on large installations and in isolated areas. (Cleared for TV)

Army Chaplain, The - Yesterday and Today (29 min, 16mm, sd, b & w, 1961, Order No. TV538, sale \$59.50, USA) Emphasizes Chaplain's role as a spiritual leader by spanning all American wars from the Revolutionary to the Korean War. (Cleared for TV)

From the *Big Picture Series*.

Chaplain and the Commander, The (29 min, 16mm, sd, b & w, 1962, Order No. TV532, sale \$59.50, USA) Depicts the role of the Army chaplain--his religious services, pastoral activities, and duties as a staff officer.

Rosary of the Missions (18 min, 16mm, sd, color, 1952, sale \$74.25, rental \$10.00, USIA) Tells the story of the religious missions established in California by the Spanish. Describes the artistic and architectural contributions of the missions with emphasis on the work of Fr Junipero Serra and other members of the Franciscan Order. Includes pictures of restored missions.

Washington Mosque, The (15 min, 16mm, sd, color, 1957, sale \$62.25, rental \$10.00, USIA) Depicts the architecture and decor of Washington D C's mosque. Describes religious and cultural activities of the Islamic Center which was made possible by contributions of 15 different Muslim countries.

We Call Them Chaplain (11 min, 16mm, sd, b & w, 1967, Order No. MF16-5219, sale \$23.25, USA) Explains role of the Army chaplain to new recruits.

PHYSICAL FITNESS

EXERCISES

Physical Fitness (29 min, 16mm, sd, color, 1967, Order No. TV721, sale \$115.50, USA) Shows how the army places much emphasis on physical training in developing the soldier. (Cleared for TV)
From the *Big Picture Series*.

RECREATION AND SPORTS

Appalachian Trail (11 min, 16mm, sd, b & w, 1951, sale \$23.25, rental \$5.00, USDS) Explains the development and purpose of the Appalachian Trail, and includes scenes of campers, hikers, and explorers using the trail as a mountain playground.

Final Game, The (49 min, 16mm, sd, color, 1967, sale \$199.25, rental \$17.00, USIA) Shows the exciting championship game played by the Boston Celtics, internationally-known champions of professional basketball, against their challengers, the Cincinnati Royals. Uses

slow motion, reverse motion and diagrams to demonstrate fundamental patterns of this sport which, though of U S origin, is gaining popularity throughout the world.

Making of a Champion, The (20 min, 16mm, sd, b & w, 1963, sale \$42.50, rental \$7.50, USIA) Depicts the 89-day training period spent in the United States by 30 track and field athletes from 18 countries. A closing montage gives information about the progress the individual champions have made.

Man in Sports (8 min, 16mm, sd, b & w, 1968, sale \$17.25, rental \$5.00, USIA) An imaginative treatment of the still photographic exhibit 'Man in Sports' at the Baltimore Museum of Art, January, 1968. Emphasizes the importance of sports as a common denominator among peoples and as a factor in man's development of a fuller, more creative life.

Navy Bobsled Racing Team (15 min, 16mm, sd, color, 1969, Order No. MN10672, sale \$60.00, USN) Shows phases of bobsled racing and activities of the Navy team in both domestic and international competitions.

Recreation Leadership (23 min, 16mm, sd, b & w, 1953, Order No. TF12-1808, sale \$48.75, USA) Shows steps taken by Captain of newly formed company to set up a recreation program. (Cleared for TV)

SAFETY

ACCIDENT PREVENTION

High Cost of Negligence, The (25 min, 16mm, sd, b & w, 1965, Order No. TF15-3611, sale \$52.50, USA) Describes several cases where soldiers were injured as a result of their own misconduct. In each case, the injuries were determined to be not in line of duty. (Cleared for TV)

On Post Safety (22 min, 16mm, sd, b & w, 1952, Order No. TF30-1735, sale \$46.25, USA) Promotes on-duty accident prevention philosophy, analyzes average accidents, and gives common causes of accidents and individual responsibility. (Cleared for TV)

One-hundred One Critical Days (6 min, 16mm, sd, b & w, 1968, Order No. FR1016, sale \$25.50, USAF) Cites interval from Memorial Day through Labor Day as critical period for accidents. Urges strict observance of safety rules by swimmers, boaters, and motorists. Explains need for common sense, courtesy and respect for potential accidents. (Cleared for TV)

Prevention of Cold Injuries (20 min, 16mm, sd, b & w, 1958, Order No. TF08-2524, sale \$42.50, USA) Describes the nature and symptoms of cold injuries in combat covering damage caused by dry and wet cold. Gives basic rules for preventing cold injuries in the field.

To Live in Darkness (13 min, 16mm, sd, b & w, Order No. MN01921F, sale \$28.50, USN) Dramatized incidents show three plant workers who lost their sight through carelessness.

Restraint for Survival (8 min, 16mm, sd, color, 1967, Order No. FA-0805, sale \$33.50, USFAA) Demonstrates the life-saving potential of shoulder harnesses and seat belts. Documents FAA aeromedical research which simulates aircraft accidents using electronically outfitted 'dummies.'

Safety by the Numbers (31 min, 16mm, sd, color, 1969, Order No. FA-0802, sale \$125.25, USFAA) Illustrates a pilot's switch from familiar single-engine operations to twin-engine aircraft along with proper in-flight procedures to follow in the event of engine failure.

To Save a Life (13 min, 16mm, sd, color, 1961, Order No. FA-0129, sale \$54.50, USFAA) Depicts emergency life-saving techniques for VFR pilots who accidentally stray into IFR weather.

Transport Crash Safety Tests, Pt 1 (15 min, 16mm, sd, color, 1964, Order No. FA-0515, sale \$62.25, USFAA) Explains the purpose and procedures used in the Phoenix crash safety tests in 1964. Analyzes fuselage and wing break-up, fuel spray patterns, and seat and cargo restraint during a typical crash landing or take-off accident.

Transport Crash Safety Tests, Pt 2 (26 min, 16mm, sd, color, 1966, Order No. FA-0615, sale \$105.75, USFAA) Explains the purpose and procedures used in the Phoenix crash safety tests in 1964. Provides crash and impact load data and information related to a full scale crash of a large transport aircraft under conditions normally considered to be survivable.

Unknown Thirty-six Seconds, The - Aircraft Accident Investigation (35 min, 16mm, sd, color, 1968, Order No. TF5992, sale \$141.00, USAF) Describes organization and mission of aircraft accident investigation board. Depicts its painstaking inspection of plane wreckage to determine possible electrical, mechanical, structural or hydraulic failure. Probes likelihood of crew's showing symptoms of physical or mental disability prior to crash. Concludes with findings and recommendations. (Cleared for TV)

AIR

Aircraft Crash Fire Incident Simulation Tests of the Light Water Twinned Agent System (18 min, 16mm, sd, color, 1966, Order No. MN10333, sale \$74.25, USN) Shows introduction of twinned agent (light water and purple-k powder) fire extinguishers into the aircraft fire fighting and rescue service.

Aircraft Fire and Rescue Procedures (39 min, 16mm, sd, color, 1968, Order No. TF6176, sale \$154.50, USAF) Outlines procedures for controlling aircraft fires and rescuing crewmen. Points out different techniques applying to armed aircraft, tankers, and cargo aircraft. Shows various fire truck approaches and positions. Also depicts routine personnel activities including maintenance, inspection and training programs. (Cleared for TV)

Bird Aircraft Strike Hazards (11 min, 16mm, sd, color, 1967, Order No. FR851, sale \$44.75, USAF) Reviews bird strike hazards to aircraft and aircrews. Shows canopy and fuselage damage to several aircraft and cites loss of several lives. Discusses ratios of given bird weights, aircraft speeds, and pounds of impact pressure. Cites critical geographical areas during migrating seasons and at certain times of day. Offers helpful suggestions for avoiding strikes. (Cleared for TV)

Flight (28 min, 16mm, sd, color, 1962, Order No. FA-0117, sale \$113.50, USFAA) Shows how FAA employees guarantee safety in different facilities and play various critical roles to safeguard flight.

Path to Safety (20 min, 16mm, sd, color, 1967, Order No. FA-0612, sale \$82.00, USFAA) Points out that more accidents are caused by human error than by any other factor.

DRIVING

Operator and Safety, The (19 min, 16mm, sd, b & w, 1945, Order No. OE493, sale \$33.75, rental \$7.50, USOE) Explains the importance of safety in bus operation. Tells how to operate safely in passing cars, at intersections, at bus stop zones, and under special weather conditions.

From the *Automotive Series. Bus Operation, No. 3*

Passengers - Driving Hazards - Safety (14 min, 16mm, sd, b & w, 1945, Order No. OE495, sale \$25.50, rental \$7.50, USOE) Points out the driver's responsibility for the safety of child passengers and safe driving habits and safety in handling children getting on and off the bus.

From the *Automotive Series. School Bus Operation, No. 2*

FIRE

Field Burnout Tests of Apartment Dwelling Units (21 min, 16mm, sd, color, 1970, sale \$86.00, USNBS) Reports on three burnout tests in an experimental housing unit built for evaluating construction methods, sound transmission, and fire safety. Suitable for building code officials, fire inspectors, architects, and high school and college students.

Fire Prevention and the Home (25 min, 16mm, sd, color, 1968, Order No. TF6047, sale \$101.75, USAF) Discusses individual responsibilities in observing fire safety in daily living. Illustrates such hazards

as overloaded wiring and electric cords running under rugs. Outlines fire survival rules. Shows how carelessness and panic bring tragedy to a family. (Cleared for TV)

Fire Prevention - Know Your Fire Hazards (20 min, 16mm, sd, color, 1958, Order No. MN08330B, sale \$82.00, USN) Describes the fire characteristics of certain materials used at work and their potential danger.

Fire Prevention - The Nature of Fire (16 min, 16mm, sd, color, 1958, Order No. MN08330A, sale \$66.00, USN) Uses animation to show that a fire has three essential elements--oxygen, temperature and fuel--and that a fire can be controlled by the elimination of any one of these elements.

Firefighting Aboard Tankers (28 min, 16mm, sd, color, 1961, sale \$157.25, rental \$12.50, USCG) Depicts techniques and methods for fighting fires aboard ship, at sea, or alongside a pier. Contains firefighting demonstrations including proper use of various types of equipment. Gives methods of preventing fires and tells how to protect against reflash after a fire is extinguished. Describes use of chemicals, foam, and water.

Structural Fire Suppression Procedures (36 min, 16mm, sd, color, 1968, Order No. TF6058, sale \$145.00, USAF) Uses modern fire fighting equipment and advanced techniques to demonstrate real property fire suppression and rescue operations. Shows equipment layout such as laying fire hose, hooking to plugs, and providing connecting lines for backup. Elaborates on Air Force base pre-fireplan. Reviews fire alarm center operations and methods of alerting others. (Cleared for TV)

GENERAL

Dangerous War Trophies (12 min, 16mm, sd, b & w, 1969, Order No. MF20-5525, sale \$26.75, USA) Shows how dangerous war trophies can cause accidents and how they often get into the hands of criminals. (Cleared for TV)

Explosive Ordnance Disposal (27 min, 16mm, sd, color, 1965, Order No. MF09-5132, sale \$109.50, USA) Shows training at the Navy Ordnance Disposal School in Maryland, organization and work of an explosive ordnance disposal field detachment, and the challenge and importance of the EOD mission. (Cleared for TV)

Explosive Ordnance Disposal (29 min, 16mm, sd, color, 1965, Order No. TV666, sale \$115.50, USA) Adapted from Explosive Ordnance Disposal (MF20-5132). Tells story of military men who risk their lives to make safe or destroy undetonated explosives. From the *Big Picture* Series.

Military Rock Climbing - Movement of Combat Units (31 min, 16mm, sd, b & w, 1958, Order No. TF07-1480, sale \$64.25) Shows procedures for moving and operating with certain types of equipment in mountain areas, individual rock climbing, safety factors, use of field expedients, methods of handling organizational equipment in different terrain, and transporting sick and wounded.

Military Rock Climbing - Technique of Climbing (32 min, 16mm, sd, b & w, 1948, Order No. TF07-1475, sale \$66.50, USA) Describes organization of two and three-man "climbing teams," climbing equipment and its correct use, teams climbing and descending various types of formations, types of holds, knots to be tied, and emphasizes individual attention and judgment for each rock.

Safety in Mountain Surveying (27 min, 16mm, sd, color, 1969, sale \$109.50, USFHW) Introduces some basic techniques of safe mountain climbing to Federal Highway Administration personnel whose assignments require they work in mountainous terrain. Covers knot

assignments require they work in mountainous terrain. Covers knot tying, rope testing, proper equipment, and basic safe methods in moving on rock.

Speaking of Explosions (15 min, 16mm, sd, color, 1969, Order No. SFP1862, sale \$62.25, USAF) Cites hazards of unauthorized entry to test areas at Eglin AFB warns public against handling objects found on land and in waters surrounding reservations. Explains danger of dud and tells what action to take should certain pieces be found. Shows how ordnance drops are planned for practice and testing. Gives precise safety steps by detonation experts. Explains duties of explosive ordnance disposal unit. Shows function of certain pieces of ordnance such as bombs, flares, grenades, igniter, missiles, rockets, and blasting caps. (Cleared for TV)

Story of an Accident Report, The - The Paper Tiger (25 min, 16mm, sd, color, 1968, Order No. SFP1696, sale \$101.75, USAF) Portrays mission of the directorate of aerospace safety which investigates aircraft, missile, and ground accidents. Explains how the Directorate's board members initiate an investigation, collect and process data, and compile a report citing causes and recommendations for prevention of similar accidents. Points out how an effective report triggers corrective action through directives, films, and printed media.

HOSPITAL

Safety in Army Hospitals (27 min, 16mm, sd, b & w, 1967, Order No. TF08-3777, sale \$56.50, USA) Discusses major aspects of the safety program required in Army hospitals--including common causes of accidents, and precautions necessary to maintain hospital safety at a high level. (Cleared for TV)

INDUSTRIAL

Industrial Hygiene - Right Makes Safe (19 min, 16mm, sd, color, 1968, Order No. MN10295, sale \$78.00, USN) Describes dangers to ears, skin, eyes and the respiratory system and shows preventive measures and equipment for elimination risks. From the *Nursing* Series.

Railroad Safety (34 min, 16mm, sd, b & w, 1952, Order No. TF55-1731, sale \$70.50, USA) Stresses safety in all phases of railroad work. Gives pointers for train crew, right-of-way maintenance crews, and in maintenance and repair shops. (Cleared for TV)

Safety in the Shop (12 min, 16mm, sd, b & w, 1944, Order No. OE481, sale \$22.25, rental \$7.50, USOE) Dramatizes three typical shop accidents and shows how poor supervision or inadequate training may have been the real cause behind these 'accidents'. From the *Problems in Supervision* Series.

WATER

Capsizing, Sinkings and Falls Overboard (14 min, 16mm, sd, color, 1968, sale \$62.50, USCG) Shows causes and prevention of sinkings, capsizings, and falls overboard. Discusses buoyant effect and stability of pleasure boats. (Cleared for TV)

Invasion by Oil (22 min, 16mm, sd, color, 1969, sale \$89.75, USAE) Tells the story of the OCEAN EAGLE tanker breaking in half in the San Juan, Puerto Rico harbor, creating a hazard to navigation and spilling oil onto the beaches. Describes the salvage operation by the U S Army Corps of Engineers in removing the tanker.

SCIENCE

ATOMIC ENERGY, APPLICATIONS

Atom, The - Year of Purpose (29 min, 16mm, sd, color, 1969, sale \$150.00, USAEC) Describes 17 major developments in the peaceful uses of the atom, including--the first refueling of the nuclear ship Savannah in six years, the growth of nuclear power stations, experimental breeder reactor ii, the agro-industrial complex, toll enrichment of uranium owned by private industry, expanded mining of uranium, work on the 200-bev atom smasher at the National Accelerator Laboratory with its 12-foot bubble chamber and superconducting magnet, Project Buggy and Project Gasbuggy and the Phoebus-2A fullpower ground test of a nuclear powered space rocket engine.

Atomic Revolution in Wood (23 min, 16mm, sd, color, 1969, sale \$75.75, USAEC) Tells the story of an important peaceful application of atomic energy--the fusing of wood and plastic by irradiation into a combination-substance which has all the aesthetic appeal of wood, but is improved in hardness, abrasion resistance and durability. Traces the development of radiation processed wood-plastic materials from initial Atomic Energy Commission efforts through industry's commercialization activities.

Atomic Search, The (29 min, 16mm, sd, color, 1970, sale \$150.00, USAEC) Shows important contributions to the peaceful uses of nuclear energy such as--nuclear chemistry to investigate the composition of lunar rocks, plutonium to provide heat for the seismometer on the moon, an isotopic nuclear generator for weather satellites, and the first in a series of tests with dogs of a nuclear-fueled cardiac pacemaker.

Atoms for Peace, Pt 3, Agriculture, Industry and Power (20 min, 16mm, sd, b & w, 1955, sale \$42.50, rental \$7.50, USIA) Covers research in uses of radioactive materials in agriculture, industrial production and power development, showing tangible results and stressing the potential for improving world economic standards.

Atoms for Peace, Pt 4, Scientific Advancement (20 min, 16mm, sd, b & w, 1956, sale \$42.50, rental \$7.50, USIA) Deals with atomic electric power, atomic irradiation for food production and preservation, and the use of isotopes in manufacturing, road building, and treatment of cancer and heart disease.

Atoms for Peace, Pt 5, Working Together (20 min, 16mm, sd, b & w, 1957, sale \$42.50, rental \$7.50, USIA) Tells the story of regional and international cooperation among scientists and governments in the development of peaceful uses of atomic energy.

Harvest of an Atomic Age (14 min, 16mm, sd, color, 1963, sale \$58.25, rental \$10.00, USIA) Reports on research with atom-irradiated seeds to develop bigger and disease-and-weather-resistant crops. Shows progress by U S scientists in creating new types of plants and practical results on farms. (AEC gave technical assistance on this film.)

Man and Radiation (28 min, 16mm, sd, color, 1963, sale \$117.75, USAEC) Describes many aspects of radiation and presents a survey of the widespread application of radiation in medicine, industry, agriculture, power and research. Uses animation to explain the different types of radiation and the alpha, beta, and gamma rays. Discusses radiation studies in photosynthesis using radiochromatography, as well as the Atomic Energy Commission's research on food preservation through irradiation, the Army's projects, and the use of radiation to produce plastics in wood.

No Greater Challenge (14 min, 16mm, sd, color, 1969, sale \$58.25, USAEC) Shows man's historic and growing hunger for water and a dramatic solution to this great challenge--the agro-industrial complex. With the nuclear reactor as the energy source, and the desalting plant as the fresh water source, tomorrow's coastal deserts may be transformed into self-sustaining, mammoth nuclear powered agro-industrial centers consisting of farms and industrial plants. Nuclear power reactors will pump millions of gallons of water from the sea and provide the heat to desalt it. At the same time low-cost nuclear energy will produce electricity to help extract and process the ocean's mineral wealth.

Nuclear Power and the Environment (14 min, 16mm, sd, color, 1969, sale \$53.00, USAEC) Dramatizes the problems that stem from the growing demands for electricity in the U S, demands which are doubling every ten years. To meet these future needs, the most practical means of producing power in large amounts is to build steam-powered electrical power plants--both fossil-fuel and nuclear. The great care taken in studying and controlling effects of nuclear power plants on the environment is discussed. Environmental surveys are conducted to predict and control effects on fish life, ecology and hydrology.

Nuclear Ship Savannah (20 min, 16mm, sd, color, 1960, sale \$82.00, rental \$10.00, USIA) Uses live action, animation and models to explain the construction of the first U S nuclear-powered commercial ship, the Savannah. Stresses the safety and dependability of this ship that can sail around the world without refueling. Depicts the work of subcontractors in many states. Includes participation of Mrs Nixon at the laying of the keel and of Mrs Eisenhower at the christening ceremony.

ATOMIC ENERGY, BIOLOGY & MEDICINE

Atoms for Peace, Pt 2, Medicine (20 min, 16mm, sd, b & w, 1955, sale \$42.50, rental \$7.50, USIA) Concentrates on present and potential uses of atomic materials in diagnosis and treatment of such ills as cancer, hyperthyroidism and arterio-sclerosis. Includes a dramatic sequence of a brain tumor patient.

Isotopes in the Diagnosis of Anemia (33 min, 16mm, sd, b & w, Order No. T-1505, sale \$68.25, USNMAC) Presents the use of four basic radioactive isotopes--Iodine 131, Chromium 51, Iron 59, and Cobalt 60 in the diagnosis of anemia. The virtue of these substances is the extremely small amounts necessary for the detection of emissions. Dr Crosby also discusses pros and cons of splenic scanning and its relationship to splenic involvement, and broad-range surface scanning. (Kinescope)

Medical Effects of Nuclear Radiation, The (31 min, 16mm, sd, b & w, 1951, Order No. MF08-7897, sale \$64.25, USA) Uses the analogy of effects of sun bathing on the body to demonstrate the effects of nuclear radiation. Shows defense against atomic weapons, the nature and potency of gamma, alpha and beta particles, and medical destructiveness and limits of atomic bursts.

Radiation Protection in Nuclear Medicine (43 min, 16mm, sd, color, 1961, Order No. MN09419, sale \$172.25, USN) Demonstrates the procedures devised for naval hospitals to protect against the gamma radiation emitted from materials used in radiation therapy. However, its principles are applicable in all hospitals. The practices demonstrated are based on three principles established at the outset. The film explains the nature of gamma radiation relative to how time, distance, and shielding are used to provide protection from its harmful effects. (Limited sale and exhibition)

ATOMIC ENERGY, RESEARCH

Nuclear Effects Testing At White Sands (21 min, 16mm, sd, color, 1966, Order No. MF45-9547, sale \$86.00, USA) Shows missions, facilities and capabilities of nuclear effects branch at White Sands. Depicts studies conducted on weapons systems in the three major radiation environments.

Study of Grain Growth in Beryllium Oxide Using a New Transmitted Light Hot Stage (17 min, 16mm, sd, color, sale \$77.00, USAEC) Depicts the design and operation of a new hot stage used with a polarizing microscope and transmitted light. Time-lapse color cinematography makes possible the observation of time-dependent reactions and structural changes in transparent crystalline materials at temperatures as high as 2000 degrees centigrade. Sequences are shown of studies of thin sections of beryllium oxide ceramics at about 1700 degrees centigrade in a vacuum. Movement of pores and grain boundaries, grain growth, and surface evaporation effects were seen. This film report was based on ceramics technology research conducted for the Fuels and Technology Branch, Division of Reactor Development and Technology, Atomic Energy Commission.

ATOMIC ENERGY, ENGINEERING

ACCEL Revisited - Automated Circuit Card Etching Layout (20 min, 16mm, sd, color, sale \$86.75, USAEC) An updated version of the film ACCEL, issued in 1965, about the computer program which designs printed circuit boards and produces the drawings for their construction.

ATOMIC ENERGY, GENERAL

Atoms for Peace, Pt 1, Introducing the Atom (20 min, 16mm, sd, b & w, 1955, sale \$42.50, rental \$7.50, USIA) Provides a basic explanation of atomic energy. Includes animated sequences which show the make-up and functioning of the atom, and formation and control of chain reaction. Depicts the atomic pile at Los Alamos and radioisotope preparation and storage at Oak Ridge.

Fundamentals of Radiac Instruments (25 min, 16mm, sd, v & w, 1955, Order No. TF11-2234, sale \$52.50, USA) Describes basic atomic theory, characteristics and uses of accumulation and intensity devices, and emphasizes accurate calibration for efficient operation. (Cleared for TV)

Journal of Plutonium, A (47 min, 16mm, sd, color, 1969, sale \$210.00, USAEC) Pictures the men and events that led to the discovery, separation and large scale production of plutonium, through the personal reminiscences of Dr Glenn T Seaborg, Dr Emilio Segre, Burris Cunningham and others, this is the personal story of the men who discovered plutonium, purified and weighed it, and eventually produced it on a large industrial scale for the wartime Manhattan project.

Magnetic Bottle, The - Atoms for Peace (11 min, 16mm, sd, color, 1958, sale \$44.75, rental \$7.50, USIA) Explains how thermonuclear fusion results in formation of hydrogen and helium atoms which develop tremendous heat and power. Questions man's ability to control what he creates. Made from the longer Atomic Energy Commission film 'Research into Controlled Fusion.'

Safe Handling of Enriched Uranium, The (22 min, 16mm, sd, color, sale \$89.75, USAEC) Introduces the concept of nuclear fission and criticality, and explains the reason for various safety procedures observed in the handling of enriched uranium and other fissionable materials.

ATOMIC ENERGY, REACTORS

Atoms for Peace, Pt 7, Atomic Power and the US (30 min, 16mm, sd, b & w, 1957, sale \$62.50, rental \$10.00, USIA) Describes five types of nuclear reactors designed by U S Government laboratories and American industries--EPR-B-1, SRE, PWR, HRE and EBWR. Points out that benefits of U S research are available to other countries through international agreement.

GENERAL

Capital Story (20 min, 16mm, sd, b & w, 1945, sale \$42.50, rental \$7.50, USOWIO) Shows the relationship between industry and science. Pictures some functions of the U S Public Health Service. Follows the activities of a research chemist, explaining the processes used in chemical analysis.

Critical Phenomena in Carbon Dioxide (8 min, 16mm, sd, color, 1970, sale \$33.50, USNBS) Shows some of the striking phenomena observed in macroscopic matter when a fluid such as carbon dioxide passes through its gas-liquid critical point. It is intended as illustration material for lectures on phase transitions. Suitable for physical scientists and college level physics and chemistry students.

Crystal Structures at High Pressures (40 min, 16mm, sd, color, 1970, sale \$160.50, USNBS) Describes and illustrates basic principles of X-ray diffraction of single crystals and their application to structure determinations. Describes a new technique developed by National Bureau of Standards scientists for obtaining crystal structures of high pressure forms of materials. The concept of pressure-temperature phase equilibrium diagrams is developed and illustrated by striking sequences of high pressure transitions, in carbon tetrachloride, potassium nitrate, water, and benzene.

Diffractometer Control System - A System for Easy Man-machine Communications (15 min, 16mm, sd, color, 1970, sale \$62.25, USNBS) Technically explains the use of a diffractometer control system at the National Bureau of Standards' reactor. Explains the technique of using a digital computer to perform the tedious, repetitive operations required in collecting data for crystal structure analysis while the human experimenter performs the supervisory functions for which man is uniquely qualified. (Film assumes basic knowledge of structural crystallography.)

Exploration at Boulder (20 min, 16mm, sd, color, 1970, sale \$82.00, USNBS) Describes the work of the National Bureau of Standards at its Boulder, Colorado laboratories, an important center for new knowledge in the field of science and technology. Depicts the pioneering efforts of Bureau scientists in quantitative measurement of cryogenics, electronics, electromagnetics, time and frequency, and atomic physics.

Flue Gas Analysis - Orsat Apparatus (19 min, 16mm, sd, b & w, 1944, Order No. OE367, sale \$33.75, rental \$7.50, USOE) Shows how to set up the orsat gas analyzer, collect an air-free sample of flue gas, absorb and measure the amounts of carbon dioxide, oxygen and carbon monoxide in the sample and calculate the amount of nitrogen.

Paper Blizzard (Scientists' Version) (30 min, 16mm, sd, color, 1970, sale \$115.50, rental \$12.50, USOE) Introduces the array of information sources within the federal government and identifies the use of these resources with professionalism. Briefly scans the spectrum of services available from the typical information source as well as the range of subject matters to be expected. Indicates the principal switching centers and entry points for one who is unfamiliar with information resources. The second half surveys the range of services that may be expected from a representative information source, ranging from acquisition to abstracting and repackaging. Indicates the services of the Federal Clearinghouse, Scientific Information Exchange (SIE), and the National Referral Center (NRC).

U S Naval Observatory (18 min, 16mm, sd, color, 1970, Order No. MN10647, sale \$74.25, USN) Shows how astronomers and mathematicians determine time, predict and publish the positions of the Sun, moon, stars and planets for navigation and scientific purposes in addition to doing fundamental astronomical research.

NATURAL

American Island, The (29 min, 16mm, sd, color, 1970, sale \$117.50, rental \$12.50, USBOR) Shows one of America's last unspoiled resources, her islands. Indicates how intelligent planning for use provides a variety of recreational activities and protects this environment for future generations. Covers islands from Maine to California, such as, Mt Desert Island, Harkers Island, Isle Royal, and Santa Catalina.

Biology Plus (33 min, 16mm, sd, b & w, Order No. OE503, sale \$56.75, rental \$12.50, USOE) Presents the traditional subject matter of biology, with the additional series of student laboratory and field experiences.

So Little Time (28 min, 16mm, sd, color, sale \$113.50, USBSFW) Shows the need for preserving our wildlife by presenting intimate close-ups of birds and mammals in their natural environment. Describes environmental factors contributing to the decline in waterfowl and other birdlife. Shows animals in moments of peril. Territorial disputes, at rest, and in flight.

Tomorrow Will Not Wait - Air, Water and Land Conservation (13 min, 16mm, sd, color, 1970, Order No. SFP2003, sale \$54.50, USAF) Indicts us for befouling our air, water and soil, and shows attempts by the Air Force to do something to stop pollution where possible. (Cleared for TV)

Warm Coat, The (14 min, 16mm, sd, color, 1969, sale \$56.50, USAEC) Describes the transplanting of sea otters from Amchitka Island in the Bering Sea to Alaskan coves with the cooperation of the AEC.

OCEANOGRAPHY

Airborne Oceanography - Oceanographer of The Navy (23 min, 16mm, sd, color, 1969, Order No. MN10523, sale \$94.00, USN)

Shows major areas of airborne research conducted by the oceanographic office. Includes scenes of long-range ice forecasting, magnetic surveying of the Earth's surface and surveying the Gulf Stream.

Beach Intelligence - Shoreline Processes (26 min, 16mm, sd, b & w, 1957, Order No. FN08110B, sale \$54.75, USN) Explains how currents, winds and waves change beach profiles.

Beach Intelligence - Waves, Breakers, And Surf (20 min, 16mm, sd, b & w, 1957, Order No. FN08110A, sale \$42.50, USN) Explains wave forms, equations involved, period, velocity and wave lengths. Shows how waves are formed in the fetch area, how they travel through decay, how refractions take place in shoal waters, and breakers on the beach.

Deep Sea Drilling Project (28 min, 16mm, sd, color, 1970, sale \$111.75, USNSF) Presents the idea of continental drift and sea floor spreading. Shows activity aboard the drilling ship GLOMAR CHALLENGER as sedimentary cores from the ocean bottom are brought up through the longest drill string ever suspended from a floating platform. Shows how the studies of the cores have virtually confirmed the theories of drift and spreading.

Man in the Sea (30 min, 16mm, sd, b & w, 1967, sale \$62.50, rental \$10.00, USIA) Shows oceanographic work being done by the United States. Includes footage of Sea Laboratory 2. From the *Report From America* Series.

Underwater Sound - Basic Principles (21 min, 16mm, sd, color, 1969, Order No. MN10287, sale \$86.00, USN) Illustrates the basic principles of the behavior of sound under water. Shows the effects of absorption, scattering, bottom loss and sound refraction on sound transmissions in the sea.

Venomous Animals of the Sea (28 min, 16mm, sd, color, 1970, Order No. MN10697, sale \$113.50, USN) Discusses many venomous forms of marine life from cone shells to stone fish and explains how dangerous their venom is to man.

PHYSICS

Doppler Principles (30 min, 16mm, sd, b & w, Order No. TVK30-903, sale \$62.50, USAF) Explains the phenomenon of the doppler effect through the use of animation and illustration. Explains the effects on a transmitted wave when it encounters a moving object or when the transmitter itself is moving, by showing the operation of a separate transmitter and receiver, and of a transmitter and receiver in the same unit. Explains the doppler effect when the target is moving at various angles to the transmitter. (Kinescope)

Frequency Spectrum (30 min, 16mm, sd, b & w, sale \$62.50, USAF) Explains wavelengths, frequency, and period. Demonstrates how to calculate the period when either the frequency or the wavelength of a radio wave is known. (Kinescope)

Frequency Spectrum (16 min, 16mm, sd, b & w, Order No. TVK30-204A, sale \$34.25, USAF) Shows the light spectrum through a prism to explain 'frequency spectrum.' Discusses frequency, wavelength, and period as an introduction to representing the 'frequency spectrum.' Gives the band of frequencies from audio, through radio (including VHF and UHF), to microwave. (Kinescope)

Frequency Spectrum - Wavelengths and Frequency (26 min, 16mm, sd, b & w, Order No. TVK30-204B, sale \$54.75, USAF) Discusses velocity in terms of miles-per-hour as a basis for understanding the speed of light and radio waves. Explains the terms 'wavelength' and 'period,' and gives the formula for wavelength. Shows some examples of problems involving frequency and wavelength. (Kinescope)

Fundamentals of Ballistics (19 min, 16mm, sd, b & w, 1949, Order No. TF09-1512, sale \$40.50, USA) Describes interior ballistics, type and characteristics of various powder grains, exterior ballistics, effects of resistance and gravity, trajectory, methods of overcoming problems involved, terminal ballistics, types of fuzes and explosives, and types of projectiles including penetration, blast and fragmentation.

Magnetism, Pt A (34 min, 16mm, sd, b & w, Order No. TVK30-135A, sale \$70.50, USAF) Defines magnets and explains the difference between natural and artificial magnets. Discusses the characteristics of magnetic lines of force about a magnet and the laws of repulsion and attraction between magnets. Then gives the factors that affect the amount of repulsion and attraction. Finally, explains the theory of molecular arrangement in a magnet. (Kinescope)

Principle of Moments (23 min, 16mm, sd, b & w, 1945, Order No. OE362, sale \$40.50, rental \$10.00, USOE) Explains the concept of moment of a force and presents the formula for finding its numerical value. Discusses the principle of moments as applied to all coplanar force systems.

From the *Engineering Series*. Fundamentals Of Mechanics

Principles of Dry Friction (17 min, 16mm, sd, b & w, 1945, Order No. OE365, sale \$30.50, rental \$7.50, USOE) Explains advantages and disadvantages of friction, forces involved in friction and calculation of the forces of static and kinetic friction.

From the *Engineering Series*.

Principles of Gas-filled Tubes (15 min, 16mm, sd, b & w, 1945, Order No. OE353, sale \$27.00, rental \$7.50, USOE) Explains the theory of ionization applied to gas filled tubes and control of current in circuits employing gas-filled tubes.

Principles of Gearing - An Introduction (18 min, 16mm, sd, b & w, 1945, Order No. OE363, sale \$32.00, rental \$7.50, USOE) Discusses friction gears and toothed gears. Explains the law of gearing, positive driving, pressure angle, involute profiles, cycloid profiles, velocity rates and circular pitch.

From the *Engineering Series*. Fundamentals Of Mechanics

Principles of Lubrication (16 min, 16mm, sd, b & w, 1945, Order No. OE355, sale \$28.50, rental \$7.50, USOE) Discusses the need for lubrication and the properties, action and viscosity of lubricants. Describes conditions that determine proper viscosity.

From the *Engineering Series*.

Tension Testing (21 min, 16mm, sd, b & w, Order No. OE348, sale \$37.00, rental \$7.50, USOE) Shows how a hydraulic tension testing machine operates, how to prepare the machine and a specimen for a test. Describes how to conduct the test to determine the specimen's elastic limit, yield point, and ultimate strength.

From the *Engineering Series*.

Trapping of Free Radicals at Low Temperatures (14 min, 16mm, sd, color, 1960, sale \$56.50, USNBS) Gives basic explanation of free radicals and their behavior. Shows one unique experiment at the Bureau of Standards, giving step by step procedure of trapping and storing the elusive, highly reactive molecular fragments designated as free radicals. Research is performed at temperatures within a few degrees of absolute zero. Glows and flashes of brilliant color, emanating from free radicals trapped in a solid matrix of frozen gas, create spectacular passages in the film.

SPACE PROGRAMS, APPLICATIONS

And, of Course, You (13 min, 16mm, sd, color, 1968, sale \$54.50, rental \$10.00, USA) Depicts how the common man around the

world is affected by spin-off benefits of the U S space program. Uses motion picture, still photography and animation to show developments in food production, education, communications, navigation, meteorology, resource exploration, mapping and other activities.

SPACE PROGRAMS, ASTRONOMY

Satellite Astronomy - Progress and Promise (17 min, 16mm, sd, color, 1969, Order No. HQ193, sale \$81.50, USNASA) Reviews principal results of unmanned satellite exploration of the moon, near planets and the stars during the past decade, and briefly describes proposed studies in the 1970's of the sun and both near and distant planets.

Seeds of Discovery (28 min, 16mm, sd, color, 1970, Order No. HQ196, sale \$127.25, USNASA) Provides an overview of astronomy and space science projects for the 1970's, including Mariner flybys of Mars and Jupiter, Viking landings on Mars, a grand tour of the planets, and solar studies.

SPACE PROGRAMS, COMMUNICATIONS

Apollo Communications (7 min, 16mm, sd, color, 1969, Order No. AD024, sale \$45.50, USNASA) Shows how Apollo astronauts will communicate with mission control in Houston by telemetry, voice, and television. Reports on how these means of communication will be used in the Apollo Mission.

From the *Apollo Digest Series*.

Satellite Communications - The Tactical Satellite Communication Program, Pt 1 (24 min, 16mm, sd, color, 1968, Order No. FR1130, sale \$98.00, USAF) Describes the first steps toward satisfying the needs of the Department of Defense for global tactical satellite communications. Discusses the role of the space and missile systems organization, and the various other Air Force, Army, Navy and contractor organizations involved in the program. Details technical aspects of tactical satellite communications and culminates with the LES-5 satellite and the results of its experiments.

SPACE PROGRAMS, FACILITIES

Canaveral to Kennedy (8 min, 16mm, sd, color, 1969, Order No. AD016, sale \$39.00, USNASA) A pictorial history of the Kennedy Space Center, from the first firing in 1951 until the present. Contrasts primitive launch facilities from the first firing in 1951 to the complex areas used in the Apollo program.

From the *Apollo Digest Series*.

Launch Control Center (5 min, 16mm, sd, color, 1969, Order No. AD020, sale \$29.00, USNASA) A report on the nerve center of launch operations at Kennedy Space Center. Shows the evolution of space control facilities and includes close-up views of the complex array of equipment used to control a Saturn launch.

From the *Apollo Digest Series*.

Launch Site to the Moon (3 min, 16mm, sd, color, 1969, Order No. AD017, sale \$20.50, USNASA) Shows the Kennedy Space Center's facility from which Apollo-Saturn moon flight leaves. Includes scenes of vehicle assembly building, launch control center and launch pads.

From the *Apollo Digest Series*.

Minus Three Miles (7 min, 16mm, sd, color, 1969, Order No. AD018, sale \$37.00, USNASA) The mobility concept of assembling a 36-story rocket and moving it to the launch area is explained and illustrated. Features the facilities used to support the concept. From the *Apollo Digest Series*.

Mission Control (5 min, 16mm, sd, color, 1969, Order No. AD022, sale \$29.75, USNASA) Shows Mission Control in Houston where the Apollo flights are monitored and controlled once the Saturn is launched from its pad. Shows the methods by which a flight is monitored and controlled. From the *Apollo Digest Series*.

Spacecraft for Apollo (6 min, 16mm, sd, color, 1969, Order No. AD005, sale \$26.00, USNASA) An overview of the three modules which comprise the Apollo spacecraft. The modules, or units, are shown individually and collectively and their separate and joint roles explained. From the *Apollo Digest Series*.

SPACE PROGRAMS, GENERAL

Astronaut Training (8 min, 16mm, sd, color, 1969, Order No. AD004, sale \$39.75, USNASA) Apollo astronauts are shown preparing for flight during various training programs--in the classroom, in observatories and geological surveys, underwater and in various simulators. From the *Apollo Digest Series*.

Day in March, A (15 min, 16mm, sd, b & w, 1966, sale \$32.50, rental \$7.50, USIA) Emphasizes the open society handling of U S space activities by juxtaposing the Gemini III launch and recovery against activities of American youth picnicking on the nearby beach to observe the events.

First Short Step, The (7 min, 16mm, sd, color, 1969, Order No. AD014, sale \$37.00, USNASA) Shows the problems of moving the separate stages of the Saturn V to the Kennedy Space Center. Various stages are shown being barged, airlifted and trucked to Florida with each method posing unusual problems requiring unusual solutions. From the *Apollo Digest Series*.

Living in Space (8 min, 16mm, sd, color, 1969, Order No. AD025, sale \$42.00, USNASA) A report on the problems and solutions of astronauts taking oxygen, water and food in space. Includes astronaut adjustments to such phenomena as weightlessness. From the *Apollo Digest Series*.

Rehearsal for the Moon (7 min, 16mm, sd, color, 1969, Order No. AD003, sale \$39.00, USNASA) A report on the complex simulators used to train astronauts for the Apollo mission. Shows astronauts undergoing weightless simulation in an airplane and in water, and demonstrates simulators which approximate the conditions to be encountered during flight to the moon and the landing. From the *Apollo Digest Series*.

Research in the Atmosphere (25 min, 16mm, sd, color, 1969, Order No. HQA180, sale \$111.75, USNASA) Traces the methods of exploring the upper atmosphere and near-earth environment from ancient times until the present, with emphasis on research with balloons and sounding rockets. Shows the technique of scientific 'model building' through a study of ionized helium in the earth's atmosphere.

Service Module, The (5 min, 16mm, sd, color, 1969, Order No. AD008, sale \$24.00, USNASA) Reports on the unmanned portion of the Apollo spacecraft, the section providing essential services for the

command and lunar modules. Explains the functions of propulsion, fuel storage, and advanced instrumentation. From the *Apollo Digest Series*.

Space Suit (5 min, 16mm, sd, color, 1969, Order No. AD026, sale \$29.00, USNASA) Gives the story on the space suit worn on the Apollo missions. Includes footage of the extra-protection garment worn by the astronauts who actually walk on the surface of the moon. From the *Apollo Digest Series*.

SPACE PROGRAMS, HISTORY

USAF Aerospace 10th Anniversary (7 min, 16mm, sd, color, 1957, Order No. SFP1549, sale \$29.50, USAF) Traces history of man's efforts to explore outer space and discusses the over-all significance of the space challenge and its present and future effect on man. (Cleared for TV)

Why Space (7 min, 16mm, sd, color, 1957, Order No. SFP1864, sale \$29.50, USAF) Traces history of man's efforts to explore outer space and discusses the overall significance of the space challenge and its present and future effect on man. (Cleared for TV)

Within This Decade - America in Space (29 min, 16mm, sd, color, 1969, Order No. HQ191, sale \$137.25, USNASA) Reviews major accomplishments in NASA research from 1959 through preparations for the first manned lunar landing, with emphasis on manned space flight.

SPACE PROGRAMS, LUNAR EXPLORATION

Apollo 10 - Green Light for a Lunar Landing (29 min, 16mm, sd, color, 1969, Order No. HQ190, sale \$137.00, USNASA) Shows highlights of the second lunar-orbital mission by astronauts Stafford, Cernan and Young, May 1969, including descent of the lunar module within nine miles of the lunar surface. Features views of the lunar features and the earth from space.

Apollo 11--See Eagle Has Landed - The Flight Of Apollo 11 (16mm, sd, color, . USNASA)

Apollo 12 - Pinpoint for Science (28 min, 16mm, sd, color, 1969, Order No. HQ197, sale \$114.00, USNASA) Describes the second lunar landing with emphasis on scientific investigation and landing accuracy.

Apollo 13 - Houston, We've Got a Problem (29 min, 16mm, sd, color, 1970, Order No. HQ200, sale \$137.00, USNASA) Tells how the Apollo 13 Astronauts returned safely to earth after an explosion severely damaged their service module and caused a loss of power and oxygen in their command module Odyssey. Emphasizes the teamwork between astronauts Lovell, Haise and Swigert as they worked with ground personnel to solve a series of critical problems. Shows the response of people around the world to the successful return of the crew. Features on-board photography of the astronauts in the lunar module Aquarius, and the presentation of the Medals of Freedom by President Nixon in Hawaii.

Apollo Recovery (7 min, 16mm, sd, color, 1969, Order No. AD028, sale \$38.25, USNASA) A look at the various plans and techniques used for recovery of the Apollo Spacecraft. Shows the joint efforts of

NASA and Department of Defense forces in covering primary and secondary recovery zones.

From the *Apollo Digest Series*.

Assembling Apollo (6 min, 16mm, sd, color, 1969, Order No. AD019, sale \$32.00, USNASA) Shows the complex techniques developed for assembling the various stages and components of the Apollo-Saturn vehicle. Includes assembly scenes inside the vehicle assembly building.

From the *Apollo Digest Series*.

Command Module, The (6 min, 16mm, sd, color, 1969, Order No. AD006, sale \$33.50, USNASA) A detailed examination of the Apollo command module which astronauts use in their journey to the moon. Features detailed interior shots and includes explanations of the specific jobs of each of the three astronauts.

From the *Apollo Digest Series*.

Eagle Has Landed - The Flight of Apollo 11 (29 min, 16mm, sd, color, 1969, Order No. HQ194, sale \$137.00, USNASA) Shows man's first moon landing, July 1969, including highlights of the flight of astronauts Armstrong, Aldrin, and Collins from launching through post-recovery activities, with emphasis on initial exploration of the lunar surface.

Flight of Eagle and Columbia (7 min, 16mm, sd, color, 1969, sale \$36.50, USNASA) Shows man's first moon landing, July 1969, including highlights of the flight of astronauts Armstrong, Aldrin, and Collins from launching through post-recovery activities, with emphasis on initial exploration of the Lunar surface.

Lunar Module, The (5 min, 16mm, sd, color, 1969, Order No. AD007, sale \$28.25, USNASA) A close-up look at the vehicle which made the actual touchdown on the lunar surface. Includes a view from the inside, as well as an examination of the exterior features.

From the *Apollo Digest Series*.

Testing Apollo (5 min, 16mm, sd, color, 1969, Order No. AD021, sale \$29.75, USNASA) Illustrates the testing programs for the Saturn and Apollo spacecraft. Shows testing sequences in the vehicle assembly building and on the launch pad.

From the *Apollo Digest Series*.

SPACE PROGRAMS, NAVIGATION

Guidance and Navigation (7 min, 16mm, sd, color, 1969, Order No. AD023, sale \$35.25, USNASA) A report on the problems of guiding the astronauts on their lunar voyage and the ways in which these problems are solved. Shows the special techniques used to guide the launch vehicle and the spacecraft from earth to the moon and back.

From the *Apollo Digest Series*.

Instrument Unit, The (5 min, 16mm, sd, color, 1969, Order No. AD013, sale \$26.50, USNASA) Shows a Saturn V section containing electronics instrumentation for guidance and navigation, and shows assembly and testing of the major parts.

From the *Apollo Digest Series*.

Space Navigation (21 min, 16mm, sd, color, 1967, Order No. HQ116, sale \$101.00, USNASA) Explains principles of charting a course in space for manned and unmanned spacecraft and navigating between earth and other celestial bodies, with concentration on navigation methods in the Apollo program.

SPACE PROGRAMS, PROPULSION

Launch of the Saturn 5 (4 min, 16mm, sd, color, 1969, Order No. AD015, sale \$24.00, USNASA) Shows a typical launch of the Saturn 5. The Saturn is shown being assembled, rolled to the launch pad and launched. Closes after separation of the first stage and includes footage of the separation, taken from a camera mounted inside the second stage.

From the *Apollo Digest Series*.

Powering Apollo (5 min, 16mm, sd, color, 1969, Order No. AD009, sale \$29.00, USNASA) An overall view of the Saturn 5 rocket used in the flight to the moon. The entire launch vehicle is shown, and the role of each of its major parts is briefly explained.

From the *Apollo Digest Series*.

Saturn First Stage (5 min, 16mm, sd, color, 1969, Order No. AD010, sale \$30.50, USNASA) A detailed look at the first stage of the Saturn 5. Explains the role of the first stage and its various components.

From the *Apollo Digest Series*.

Saturn Second Stage (5 min, 16mm, sd, color, 1969, Order No. AD011, sale \$26.25, USNASA) A close-up view of the Saturn second stage. Includes scenes of manufacturing and testing.

From the *Apollo Digest Series*.

Saturn Third Stage (5 min, 16mm, sd, color, 1969, Order No. AD012, sale \$30.75, USNASA) A report on the final stage of the Saturn. Includes scenes of test firings and examines the precise role of the stage during flight.

From the *Apollo Digest Series*.

SPACE PROGRAMS, SATELLITES

Space Down to Earth (28 min, 16mm, sd, color, 1970, Order No. HQ204, sale \$111.75, USNASA) Shows applications of space satellites and how they will help man make more precise earth measurements, locate new mineral resources, trace pollution, track migrating animals, make long range weather forecasts, and improve navigation and communications.

SPACE PROGRAMS, SPACE PROBES

Martian Investigators, The (28 min, 16mm, sd, color, 1969, Order No. HQ195, sale \$133.50, USNASA) Shows reactions of scientists to man's first close-up pictures of the planet Mars. Summarizes the principal results of the Mariner 6 and 7 observations of Martian craters and polar ice cap as the twin spacecraft passed within 2,000 miles of the planet in 1969.

Mission for Mariner, A (15 min, 16mm, sd, color, 1969, Order No. HQ192, sale \$60.00, USNASA) Illustrates through animation the principal results of the unmanned Mariner spacecraft fly-by of the planet Venus in 1967, including new knowledge of the composition and density of the Venusian atmosphere, surface pressure and temperature, maps and radiation.

SOCIAL SCIENCE

AMERICAN HISTORY, GENERAL

AEF in Siberia (29 min, 16mm, sd, b & w, 1963, Order No. TV612, sale \$59.50, USA) Shows mission and activities of expeditionary force which journeyed into Russia following World War I. (Cleared for TV)

From the *Big Picture Series*.

Alaskan Heritage (20 min, 16mm, sd, b & w, 1967, Order No. AFMR0663, sale \$54.50, USDO) Gives the history and development of Alaska--focusing on the important role of the U S Armed Forces in Alaska, past and present. Shows her present day status and strategic importance as she celebrates her centennial.

American Soldier in Combat, The (29 min, 16mm, sd, b & w, 1960, Order No. AIF011, sale \$60.50, USA) An account of the combat history of the American fighting man from the early days to the struggle for independence in the present era.

Introducing the United States (21 min, 16mm, sd, b & w, 1956, sale \$44.50, rental \$7.50, USIA) Describes the United States and its people. Gives an overview of the geography and history, economic life, occupations of the people and social customs. Briefly explains the U S role in the North Atlantic Treaty Organization. From the *Atlantic Community Series*.

Letter to Linda (10 min, 16mm, sd, b & w, 1964, sale \$21.00, rental \$5.00, USCG) Shows aspects of America's greatness from earliest days of history to the present time. (Cleared for TV)

New Spirit for '76, A (10 min, 16mm, sd, color, 1970, sale \$48.00, rental \$7.50, USARBC) Presents the highlights of President Nixon's remarks to the American Revolution Bicentennial Commission on October 8, 1969, charging them with the responsibility for planning the commemoration of the 200th anniversary of the U S. Shows the ideas associated with the American revolution and their implications for future generations.

Pilgrimage of Liberty, A (30 min, 16mm, sd, color, 1958, sale \$121.25, rental \$12.50, USIA) Pictures, using minimum narration and evocative musical accompaniment, U S historical landmarks to signify the heritage of liberty in American life. Includes shrines to the nation's great, national parks, giant dams, super-highways and bridges, Mt Vernon, Monticello, and sites in Philadelphia, Boston and Illinois.

Preamble to Peace (29 min, 16mm, sd, b & w, 1957, Order No. TV373, sale \$59.50, USA) Examines the meaning of the U S Constitution and its preamble. (Cleared for TV) From the *Big Picture Series*.

Tom Schuler, Cobbler Statesman (28 min, 16mm, sd, color, 1954, sale \$113.50, rental \$12.50, USIA) Demonstrates with animation the weaknesses of the Articles of Confederation as a colonial shoemaker travels across several state lines to buy leather. Later he helps to get the Constitution ratified.

AMERICAN HISTORY, KOREAN WAR

Combat Bulletin No. 101 - Korea Battles For Time (29 min, 16mm, sd, b & w, 1950, Order No. CB101, sale \$60.50, USA) Shows logistics and combat operations of air, sea, and ground forces of United Nations in Korea from 10 July through 10 August, 1950.

Combat Bulletin No. 102 - Korea Turning the Tide (22 min, 16mm, sd, b & w, 1950, Order No. CB102, sale \$46.25, USA) Shows combat activities in Korea during period 10 August through 10 September, 1950. Includes combat footage of attack and counterattack on the ground, tactical and strategic U N air support, Marines spearheading amphibious landing on Wolmi Island, U N forces capturing Inchon and pushing to outskirts of Seoul, and U N forces holding Pusan beachhead and pushing Red aggressors back.

Combat Bulletin No. 103 - Korea U N Offensive (21 min, 16mm, sd, b & w, 1950, Order No. CB103, sale \$44.50, USA) Shows combat activities in Korea during period 20 September through 20 October, 1952. Includes recapture of Seoul and capture of Pyongyang.

Combat Bulletin No. 104 - Chinese Reds Enter War (21 min, 16mm, sd, b & w, 1951, Order No. CB104, sale \$44.50, USA) Shows combat activities in Korea during 20 October through 20 November, 1950--Chinese Communists enter war, speed of U N medical treatment through evacuation of wounded by air, field demonstrations at Aberdeen Proving Ground, rough winter weather impedes Navy, Air Force test on new Fairchild XC-120 pack airplane, and demonstration of U S winter uniforms.

Combat Bulletin No. 105 - U N Forces Escape Trap (16 min, 16mm, sd, b & w, 1951, Order No. CB105, sale \$34.25, USA) Shows combat activities in Korea during 20 November through 20 December, 1950--largest amphibious evacuation in military history. Shows U N forces escaping trap, 3rd Division fighting principal holding action, 10th Corps evacuated by sea from Hungnam, Evacuation of troops, supplies, equipment, and civilians in face of advancing Communist Chinese, air evacuation of casualties, destruction of abandoned supplies, and interrogation of Chinese prisoners.

Combat Bulletin No. 106 - U N Forces Consolidate Below 38th Parallel (20 min, 16mm, sd, b & w, 1951, Order No. CB106, sale \$42.50, USA) Shows combat activities in Korea during 20 December 1950 through 20 January 1951--U N forces evacuated from Hungnam, flight of civilian refugees, evacuation of Seoul, redeployment of 8th Army, withdrawal across Han River, and U N troops digging in near Suwon.

Combat Bulletin No. 107 - U N Forces Move North (17 min, 16mm, sd, b & w, 1951, Order No. CB107, sale \$36.75, USA) Shows combat activities in Korea during 20 January through 20 February 1951--Suwon captured, Red resistance stiffens on central front, Red positions blasted by massed firepower of tanks and artillery, and U N Forces push northward following failure of Red breakthrough attempt.

Combat Bulletin No. 108 (18 min, 16mm, sd, b & w, 1951, Order No. CB108, sale \$38.50, USA) Shows combat activities in Korea during 20 February through 20 March 1951--Operation Killer continues against weakening enemy resistance, C-119's supply frontline units by air, U N Air Force continues around the clock bombing and strafing of enemy, troops of 24th and 25th Divisions carry battle to enemy, and 7th Division reconnaissance patrol strikes northward.

Combat Bulletin No. 109 - U N Forces Cross 38th Parallel (19 min, 16mm, sd, b & w, 1951, Order No. CB109, sale \$40.50, USA) Shows combat activities in Korea, 20 March through 20 April 1951--U N forces cross 38th parallel, official activation of SHAPE headquarters, paratroopers of 187th Airborne regimental combat team land near Munsan during Operation Tomahawk, 24th Division advances in face of stiff resistance at 38th parallel. ROK division crosses Imjin River with U S fire support, tank-infantry team executes a reconnaissance in force across 38th parallel, and reconnaissance tank mission against Communist snipers.

Combat Bulletin No. 110 - Reds Launch Spring Offensive (15 min, 16mm, sd, b & w, 1951, Order No. CB110, sale \$32.50, USA) Shows combat activities in Korea, 20 April through 20 May 1951--Red spring offensive is stalled before it starts, U N forces withdraw across Imjin River and through Uijongbu to setup major defenses along Lincoln line above Seoul, tank-infantry team deflects Chinese columns as U N planes blast enemy concentration north of Seoul, and 'human sea' tactics of reds prove costly against superior U N firepower.

Combat Bulletin No. 111 - U N Counterattack (16 min, 16mm, sd, b & w, 1951, Order No. CB111, sale \$34.25, USA) Shows combat activities in Korea, 20 May through 20 June 1951--allied units push north, advancing U N forces necessitate airlift delivery of supplies to front when mud hampers supply operations, artillery battery pounds Reds with 155mm howitzer shells, Communist targets are pinpointed by air-ground team as U N advance continues, and Wonsan harbor is blasted at night by rocket-firing vessels of U S Navy.

Combat Bulletin No. 112 - Korean Cease-Fire Talks (18 min, 16mm, sd, b & w, 1951, Order No. CB112, sale \$38.50, USA) Shows activities in Korea during 20 June through 20 July 1951 with emphasis on the cease-fire talks at Kaesong.

Combat Bulletin No. 113 - Stalemate in Korea (18 min, 16mm, sd, b & w, 1951, Order No. CB113, sale \$38.50, USA) Shows combat activities in Korea during 20 July through 20 August, 1951--continuation of ground action, return of refugees to Seoul, and continuation of cease fire talks.

Korea Story, The (20 min, 16mm, sd, b & w, 1953, sale \$42.50, rental \$7.50, USIA) Describes the Korean War. Includes the attempts to unify Korea, the June 1950 invasion, the U N decision to halt aggression, the resulting war and truce talks.

AMERICAN HISTORY, VIETNAM WAR

Day in Vietnam, A (28 min, 16mm, sd, color, 1967, Order No. MH10382B, sale \$113.50, USMC) Shows Navy and Marine Corps action in Vietnam.

Operation Montagnard (29 min, 16mm, sd, b & w, 1963, Order No. TV607, sale \$59.50, USA) Adapted from Operation Montagnard (SB 15). Demonstrates methods used by U S Army Special Forces to help win over the Montagnard tribes to the cause of South Vietnam. (Cleared for TV)
From the *Big Picture Series*.

Ready to Strike (29 min, 16mm, sd, color, 1967, Order No. TV724, sale \$115.50, USA) Shows exploits of the 'Tropic Lightning' 25th Infantry Division in Vietnam. (Cleared for TV)
From the *Big Picture Series*.

Sky Soldiers, The (29 min, 16mm, sd, color, 1967, Order No. TV720, sale \$115.50, USA) Depicts the important role of the 173rd Airborne Brigade in Vietnam. Includes scenes of landing and securing airfield at Vung Tau, mounting a large scale attack against the enemy in the heavily fortified Bien Hoa area, and the mission of protecting the rice harvest. (Cleared for TV)
From the *Big Picture Series*.

Small Boat Navy, The (28 min, 16mm, sd, color, 1968, Order No. MN10387, sale \$113.50, USN) A report on the operations of the U S Navy's small boats in Vietnam. Includes scenes of swiftboats, PBR's, MSB's, LCP's, armored troop carriers and monitors along with Sea-wolf helicopters on coastal and river patrols under enemy fire or spearheading invasions in enemy-held river territory.

U S Army Advisor in Vietnam (29 min, 16mm, sd, b & w, 1963, Order No. TV605, sale \$59.50, USA) Tells how the army advisor works closely with a Vietnamese unit on defense, offense, training, and tactics. (Not cleared for TV)
From the *Big Picture Series*.

Vietnam Crucible (29 min, 16mm, sd, color, 1968, Order No. TV736, sale \$115.50, USA) Reports on the American soldier's activities in Vietnam. Presents both the military and civilian situation. (Cleared for TV)
From the *Big Picture Series*.

Yuletide Reflections - Vietnam (16 min, 16mm, sd, color, 1968, Order No. MN10696, sale \$66.00, USN) Describes impressions of the Chief of Navy Chaplains about Vietnam.

AMERICAN HISTORY, WORLD WAR II

Battle of Britain, The (55 min, 16mm, sd, b & w, 1943, Order No. OF04, sale \$115.00, rental \$15.00, USWD) Presents the story of the year during which Britain stood alone against the Axis. Tells how the Nazi air force smashed at her cities and how she fought back, finally stopping Hitler.
From the *Why We Fight Series*.

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Battle of China, The (67 min, 16mm, sd, b & w, 1944, sale \$139.50, rental \$15.00, USWD) Depicts Japanese aggression against China during World War II and describes Japanese plans for world conquest. Describes Chinese development of the compass, printing, astronomy, gunpowder, and porcelain.
From the *Why We Fight Series*.

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Battle of Russia, The (80 min, 16mm, sd, b & w, 1944, sale \$167.00, rental \$15.00, USWD) Shows the Russian defense against the Nazi invasion during World War II, climaxing with the Battle of Stalingrad.
From the *Why We Fight Series*.

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Battle of San Pietro, The (35 min, 16mm, sd, b & w, 1945, Order No. CR002, sale \$72.50, USA) Gives a close-up of modern warfare from the soldier's point of view. Stresses the number of men killed in taking one military objective. Shows the people and children of San Pietro, during World War II, too stunned to realize they have been liberated.

Beachhead - Anzio (29 min, 16mm, sd, b & w, 1962, Order No. TV579, sale \$59.50, USA) Shows establishment of Anzio beachhead during World War II. (Cleared for TV)
From the *Big Picture Series*.

Breakout and Pursuit (29 min, 16mm, sd, b & w, 1960, Order No. TV506, sale \$59.50, USA) Tells how American Forces break out from Normandy and begin their dash across France during World War II. (Cleared for TV)
From the *Big Picture Series*.

Climb to Glory, Pt 1 (29 min, 16mm, sd, b & w, 1963, Order No. TV599, sale \$59.50, USA) Tells how the 10th Mountain Division broke through the invincible Gothic line in Italy. (Cleared for TV)
From the *Big Picture Series*.

Climb to Glory, Pt 2 (29 min, 16mm, sd, b & w, 1963, Order No. TV600, sale \$59.50, USA) Shows the final break-through by 10th Mountain Division in Italy during World War II. (Cleared for TV)
From the *Big Picture Series*.

Command Decision - The Invasion of Southern France (29 min, 16mm, sd, b & w, 1962, Order No. TV572, sale \$59.50, USA) The invasion of Southern France, Operation Dragon, is described. Roosevelt, Churchill, Chiang Kai-shek, and Stalin are featured. (Cleared for TV)
From the *Big Picture Series*.

Divide and Conquer (60 min, 16mm, sd, b & w, 1943, Order No. OF03, sale \$124.50, rental \$15.00, USWD) Documents the German attack and conquest of Belgium, Holland, and France in 1940.
From the *Why We Fight Series*.

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Dragon's Teeth (29 min, 16mm, sd, b & w, 1962, Order No. TV566, sale \$59.50, USA) General J Lawton Collins tells of the fight to take the Siegfried Line in World War II, and of the campaign to cross onto the soil of Germany. (Cleared for TV)
From the *Big Picture Series*.

Eighty-third Infantry Division in Europe, The (20 min, 16mm, sd, b & w, 1951, Order No. MF45-7814, sale \$42.50, USA) Recounts the Omaha Beach landing, relieving 101st Airborne, fighting through hedgerows of Normandy, taking St Malo, surrender of 20,000 Germans in Loire Valley, Battle of the Bulge, hurling back enemy in the Ardennes, and the drive to the Elbe River.

Famous Fourth, The (29 min, 16mm, sd, b & w, 1961, Order No. TV546, sale \$59.50, USA) Traces history of Fourth Division in World War I, World War II, and concludes with airlift of unit across North Pole to assignment in West Germany. (Not cleared for TV)
From the *Big Picture Series*.

Fortress in the Sea (29 min, 16mm, sd, b & w, 1962, Order No. TV587, sale \$59.50, USA) Recreates the recapture of Corregidor in World War II by Gen MacArthur's forces. Includes recollections of an Army nurse, a commander of paratroopers and an Army sergeant who saw action on the island. (Cleared for TV)
From the *Big Picture Series*.

Nazis Strike, The (41 min, 16mm, sd, b & w, 1943, Order No. OF02, sale \$84.00, rental \$12.50, USWD) Documents Germany's preparations for war, the conquest of Austria and Czechoslovakia, and the attack upon Poland.
From the *Why We Fight Series*.

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Operation Cartwheel (29 min, 16mm, sd, b & w, 1960, Order No. TV477, sale \$59.50, USA) Reports on the World War II Pacific Theater Operation and demonstrates the Allies' success in bypassing and isolating enemy strong points. (Cleared for TV)
From the *Big Picture Series*.

Paris '44 (29 min, 16mm, sd, b & w, 1963, Order No. TV602, sale \$59.50, USA) Depicts the recapture of Paris in 1944, and how the Allies saved it from mass destruction by the Occupation Forces of the Nazi regime. (Cleared for TV)
From the *Big Picture Series*.

Payoff in the Pacific, Pt 1 (60 min, 16mm, sd, b & w, 1960, Order No. TV480, sale \$59.50, USA) Surveys World War II from Pearl Harbor and the loss of the Philippines to the early victories in the South Pacific and to the B-29 bases constructed on Saipan. (Cleared for TV)
From the *Big Picture Series*.

Payoff in the Pacific, Pt 2 (29 min, 16mm, sd, b & w, 1960, Order No. TV481, sale \$59.50, USA) Documents the war in the Pacific. Covers the islandhopping victories of the Allies to the Japanese surrender abroad the Battleship Missouri. (Cleared for TV)
From the *Big Picture Series*.

Prelude to War (54 min, 16mm, sd, b & w, 1942, Order No. OF01, sale \$113.00, rental \$15.00, USWD) Describes the events leading up to World War II. Shows the development of fascism in Germany, Italy and Japan, and the beginning of Japanese aggression in Manchuria. Dwells on the rise of Nazism in Germany.
From the *Why We Fight Series*.

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Sunset Division - 41st Infantry Division (13 min, 16mm, sd, b & w, 1950, Order No. CMF130-7:30, sale \$28.50, USA) Highlights the history of the 41st (Sunset) Infantry Division during World War II in the Pacific. (Cleared for TV)

War Comes to America (67 min, 16mm, sd, b & w, 1945, Order No. OF07, sale \$139.50, rental \$15.00, USWD) Briefly reviews the history of the United States. Describes the characteristics, habits, and beliefs of the American people and explains the events, from 1931 to 1941, that led to the United States' entry into World War II.
From the *Why We Fight Series*.

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Why We Fight--a Series (16mm, sd, b & w.)

NAZIS STRIKE, THE	41 min
DIVIDE AND CONQUER	60 min
BATTLE OF CHINA, THE	67 min
BATTLE OF BRITAIN, THE	55 min
BATTLE OF RUSSIA, THE	80 min
WAR COMES TO AMERICA	67 min

ARCTIC AND ANTARCTIC

Alaskan Patrol (28 min, 16mm, sd, color, 1957, sale \$126.00, rental \$12.50, USCG) Shows the Coast Guard on patrol in the Alaskan area--protecting seal herds, enforcing halibut fishing regulations, and providing medical aid for the Eskimos. Illustrates how the Eskimos work and live. Includes rare scenes of the Nalukatuk dance.

Alaskan Scout (29 min, 16mm, sd, b & w, 1962, Order No. TV584, sale \$59.50, USA) Features the activity of Eskimo scouts in the Alaska national guard as they operate from fishing village of Shishmaref, near Arctic Circle. (Cleared for TV)

From the *Big Picture Series*.

City Under Ice (30 min, 16mm, sd, b & w, 1960, Order No. TV514, sale \$59.50, USA) Shows Army in action on the polar frontier, and tells the story of Camp Century, a research and development project in Greenland. (Not cleared for TV)

From the *Big Picture Series*.

Exercise Ski Jump (25 min, 16mm, sd, b & w, 1954, Order No. MF31-8290, sale \$52.50, USA) Describes cold weather operations in north temperate subarctic regions of a tactical unit. Shows equipment and techniques for personal and tactical survival and depicts requirements for survival in mountain operations. (Cleared for TV)

Flight to the South Pole (29 min, 16mm, sd, color, 1968, Order No. MN10489, sale \$117.50, USN) shows the challenge of Antarctic flying, from rear Admiral Byrd's first polar flight to Operation Deepfreeze. Includes scenes of C-130 Hercules aircraft operations in the Antarctic.

International Ice Patrol (22 min, 16mm, sd, b & w, 1949, sale \$46.25, rental \$7.50, USCG) Shows how the U S Coast Guard, operating under international agreements, patrols the North Atlantic shipping lanes in search of icebergs, and issues warnings to ships. Illustrated through a portrayal of the Cutter Mendota's search for iceberg No. 39.

Summer Movements in the Arctic (15 min, 16mm, sd, b & w, 1950, Order No. FB55-0232, sale \$32.50, USA) Describes terrain features of arctic and subarctic regions--the difficulties of moving men and supplies, and problems of camping and survival. (Formerly FB20-0232)

Subarctic Cross-country Mobility, Pt 2, Summer Operations (11 min, 16mm, sd, b & w, 1956, Order No. TF31-2297, sale \$23.25, USA)
Shows nature and character of tundra, muskey, permafrost and frozen subsoil. Tells how various areas are traversed by military units. (Cleared for TV)

Top of the World (29 min, 16mm, sd, b & w, 1961, Order No. TV543, sale \$59.50, USA) Examines defense posture and strategic importance of Alaska, the Northwest Territory, Canada and Greenland. Features DEW line and electronic sentinels on guard there. (Cleared for TV)

From the *Big Picture Series*.

Tractor Sled Operations - Icecap II (10 min, 16mm, sd, color, 1954, Order No. MF55-8243, sale \$41.00, USA) Shows successful tests conducted in summer of 1953, to determine practicality of hauling heavy tonnages over Greenland icecap. (Cleared for TV)

COMMUNITY LIFE

Blue Ribbon (22 min, 16mm, sd, b & w, 1948, sale \$46.25, rental \$7.50, USDS) Shows family life and activities of rural youth in the United States, 4-H club activities and exhibits at county agricultural fairs, and 'blue ribbon' awards given to boys and girls for livestock, farm produce, and homemaking projects.

Burroughs Newsboy Foundation (10 min, 16mm, sd, b & w, 1949, sale \$21.00, rental \$5.00, USIA) Description of the school, clubhouse, and summer camp given to Boston's newsboys by a former newsboy, Harry E Burroughs.

Businessmen's Service Club (23 min, 16mm, sd, b & w, 1951, sale \$28.50, rental \$10.00, USDS) Shows how members of the Kiwanis Club in Waterbury, Conn., as a community service to high-school students, give evening talks about their businesses and professions, and how the students work after school in various businesses in order to gain experience.

Celebrations (19 min, 16mm, sd, color, 1966, sale \$78.00, rental \$10.00, USIA) Shows celebrations which are retained from the 'old country' by Americans of diverse ethnic and national origins. Includes the feast of San Gannaro, Blessing of the Animals, the Chinese New Year, Zuni Indian dances, the Mexican Pinata festival, and an Italian-American wedding.

City, The - Time of Decision (26 min, 16mm, sd, color, 1967, sale \$105.75, rental \$12.50, USIA) Discusses the growing problems of U S cities and measures to relieve them. Includes such items as slum clearance and urban renewal, traffic congestion, electric transport, pollution control and 'new towns.'

Community Advisory Service, A (27 min, 16mm, sd, b & w, 1949, sale \$56.50, rental \$10.00, USDS) Shows the organization and operation of a community advisory service in Bridgeport, Connecticut and the values of such a service to the individuals of the community.

Cumington Story, The (22 min, 16mm, sd, b & w, 1945, sale \$46.25, rental \$7.50, USOWIO) Portrays the experiences of a refugee family in a New England town, their diffidence as newcomers, and their later acceptance into the life of the community.

From the *American Scene Series, No. 14*

Fair Chance, A (27 min, 16mm, sd, b & w, 1954, sale \$56.50, rental \$10.00, USIA) Depicts community action in protecting the welfare of American children through a dramatized story of the illness, recovery, and rehabilitation of a young rheumatic fever victim.

Forgotten Families, The (29 min, 16mm, sd, color, 1969, sale \$180.00, USCHS) Describes some of the problems a migrant farm worker faces. Also shows some of the ways communities provide services for migrant families.

Garden of Children (15 min, 16mm, sd, color, 1970, Order No. SFP2000, sale \$62.25, USAF) Shows the lives of children in an orphanage and gives the reactions of the adults who support the orphanage. (Cleared for TV)

Goodbye Mrs Pilgrim (39 min, 16mm, sd, b & w, 1970, sale \$80.25, rental \$12.50, USIA) Documents the story of Lavelle, St Louis, where Union Local 688 undertook a community wide rehabilitation job. Shows warm cooperation between people in order to mend areas of social damage.

Grand Central Market (10 min, 16mm, sd, b & w, 1963, sale \$21.00, rental \$5.00, USIA) Portrays, without narration or dialogue, activity in a Los Angeles, California, food store, grand central market. Vendors, representing the melting pot that is America, are shown displaying and selling their wares to people of all ages and all walks of life.

Image Changers, The (28 min, 16mm, sd, b & w, 1968, sale \$68.00, USQJD) Discusses the relationships between the community, the police, and youth.

Independence Day, U S A (10 min, 16mm, sd, color, 1965, sale \$41.00, rental \$7.50, USIA) Depicts various ways Americans celebrate the '4th of July,' such as parades, speech-making, family get-togethers and resting. Reviews the original Independence Day.

Jenny Is a Good Thing (18 min, 16mm, sd, color, 1969, sale \$55.25, USHS) Documents one of Head Start's most important concepts—that the nutrition program plays a major role and is an integral part of the daily activities in a good Head Start program.

Junior Chamber of Commerce (19 min, 16mm, sd, b & w, 1951, sale \$40.50, rental \$7.50, USDS) Story of the organization of a Junior Chamber of Commerce in an American town and its work in planning and executing projects for the welfare and betterment of the community.

Look Further than Tomorrow (34 min, 16mm, sd, b & w, 1967, sale \$78.50, USOJD) Discusses the pros and cons of summer youth involvement programs in Washington, D.C.

Making Ends Meet (11 min, 16mm, sd, color, 1969, sale \$44.75, USSRS) Shows via film-a-graph techniques the successful operation of a day-care center in Perry, Georgia, where limited funds are available.

Mitzvah to Serve, A (26 min, 16mm, sd, color, 1969, Order No. MF16-5333, sale \$105.75, USA) Provides an orientation on the meaning, responsibilities, and value of Jewish lay leadership in the U.S. Armed Forces.

National Folk Festival, Pt 1 (10 min, 16mm, sd, b & w, 1950, sale \$21.00, rental \$5.00, USA/IA) Includes Western German and Philippine dances, a New England barn dance and the Scottish highland fling.

National Folk Festival, Pt 2 (10 min, 16mm, sd, b & w, 1950, sale \$21.00, rental \$5.00, USA/IA) Includes Polish, English, Croatian, American Indian, Lithuanian, Ukrainian, Texas and Tennessee dances and Negro and Yugoslav songs.

National Folk Festival, Pt 3 (10 min, 16mm, sd, b & w, 1950, sale \$21.00, rental \$5.00, USA/IA) Includes Israeli, Russian, Czechoslovakian and American square dances, Ozark ballads, songs of Pennsylvania coal miners, Spanish-American songs and 'Casey Jones.'

Operation Amigo (29 min, 16mm, sd, color, 1963, Order No. TV598, sale \$115.50, USA) Points out civic action at work in Latin and South America with assistance offered by members of the U.S. Army. Shows road-building, medical help, and education for the masses. (Cleared for TV)

From the *Big Picture* Series.

Our Town Is Our Classroom (22 min, 16mm, sd, b & w, 1952, sale \$46.25, rental \$7.50, USIA) Shows students learning about local government by sitting in on the town's council meetings, listening to court sessions and attending meetings of citizens and public officials.

Quiet Summer, The (28 min, 16mm, sd, b & w, 1965, sale \$67.25, USOJD) Describes how in 1965, a summer project operated by youth, ended annual youth rioting in Hampton Beach, New Hampshire.

Renaissance of a City (18 min, 16mm, sd, color, 1970, sale \$74.25, rental \$10.00, USIA) Describes the efforts of the mayor of a small rural city (Erie, Pennsylvania) to develop community cultural interests which would attract residents and visitors to the city. Shows various methods of leisure-time recreation and activities.

Steel Town (17 min, 16mm, sd, b & w, 1944, sale \$36.75, rental \$7.50, USOWIO) Shows the steel mills, blast furnaces, and lives of the steel workers in Youngstown, Ohio.

From the *American Scene* Series. No. 4

Swedes in America (16 min, 16mm, sd, b & w, 1943, sale \$34.25, rental \$7.50, USOWIO) Tells of the lives and contributions of Swedes in America, particularly the Swedish-American families in Minnesota. Contains a portrayal of Carl Sandburg. Narrated by Ingrid Bergman.

From the *American Scene* Series. No. 1

There Was a Need (30 min, 16mm, sd, b & w, 1966, sale \$62.50, rental \$10.00, USIA) Shows how industrial, labor union and community service personnel of Concord, Massachusetts, co-operate to achieve economic stability and prosperity.

From the *Report From America* Series.

Tower of Learning (20 min, 16mm, sd, color, 1961, sale \$82.00, rental \$10.00, USIA) Describes how 18 nationality groups in Pittsburgh, Pennsylvania, worked together to create, at University of Pittsburgh's Tower of Learning, 18 nationality rooms which serve as monuments to the 18 cultures represented and as a symbol of the University's broad program of international cultural and educational exchange. Shows each of the rooms.

Town, The (13 min, 16mm, sd, b & w, 1944, sale \$28.50, rental \$7.50, USOWIO) Shows life in an American town, Madison, Indiana, and explains the democratic characteristics of the social and civic life of the people.

Wednesday in April (20 min, 16mm, sd, color, 1968, sale \$82.00, rental \$10.00, USIA) Pictures an average day as it is lived across the varied scene of the American continent. Cowboy, farmer or urban worker, every citizen is free to weave his own unique pattern into the infinite and multi-colored threads of the American tapestry. His day, career and way of life are his to create, unravel and recreate in this mobile and richly diverse society.

Women Who Care (30 min, 16mm, sd, b & w, 1967, sale \$62.50, rental \$10.00, USIA) The story of two typical women volunteers in a small southern city, who take time out of their busy lives to help young people find their way back to productive lives and a brighter future.

Women's Service to the Nation (10 min, 16mm, sd, b & w, 1964, Order No. TF16-3416, sale \$21.00, USA) Deals with contributions of American women for the national welfare, from colonial times to present. (Cleared for TV)

Year in America, A (30 min, 16mm, sd, b & w, 1951, sale \$62.50, rental \$10.00, USIA) Portrays Japanese exchange students studying at an American university.

FAMILY LIFE

And Now Miguel (60 min, 16mm, sd, b & w, 1953, sale \$132.00, rental \$15.00, USIA) The story of an American family in the Southwest who has inherited from Spanish ancestors the traditions of sheep-raising. Portrays family relationships and the fulfillment of young Miguel's dream of being accepted on equal footing by his father and older brothers. Also called 'Shepherding in the Southwest.'

Family, The (20 min, 16mm, sd, b & w, 1952, sale \$42.50, rental \$7.50, USIA) Presents a true-to-life family situation that calls for understanding and a willingness to work and share.

For a Bright Home Life (26 min, 16mm, sd, b & w, 1950, sale \$54.75, rental \$10.00, USIA) Portrays projects undertaken by two Japanese schoolgirls enrolled in a domestic science class in Japan in order to modernize the kitchens in their rural homes.

Head of the House (40 min, 16mm, sd, b & w, 1954, sale \$82.25, rental \$12.50, USIA) A story of community action to solve a problem in mental health. Shows how a social worker, a policeman and a minister can join forces to help a young boy and his parents through serious troubles of adolescence.

FOREIGN COUNTRIES

Assignment - Iran (29 min, 16mm, sd, b & w, 1965, Order No. TV655, sale \$59.50, USA) Shows how a young Army officer is prepared for an assignment to Iran. Includes training in guerilla warfare, in the native language, and the history and culture of Iran. (Cleared for TV)

From the *Big Picture Series*.

Bent with the Years (20 min, 16mm, sd, b & w, 1949, sale \$42.50, rental \$7.50, USIA) Explains changes made in the Japanese woman's way of life through activities and benefits derived from postwar rural cooperative associations.

Berlin Duty (12 min, 16mm, sd, b & w, 1964, Order No. AFMR0631, sale \$42.50, USDOD) Pictures life, particularly the life of American occupation forces, in West Berlin.

Canada (18 min, 16mm, sd, b & w, 1953, Order No. AFIF0043, sale \$38.50, USA) Explains Canada's geography, history, way of life, industries, economy, government, and current role in world affairs.

Czechoslovakia - 1918-1968 (15 min, 16mm, sd, color, Order No. 01-11829, sale \$62.25, rental \$10.00, USIA) Portrays in newsreel fashion Czechoslovakia's history, including her freedom between the two world wars, the 1939 Nazi invasion, her subsequent 'liberation' and beginning of reconstruction. Culminates with the dramatic events of the Soviet invasion with planes, tanks and troops in August, 1968. Sequences are self-explanatory and there is no narration.

Feast, The (29 min, 16mm, sd, color, 1970, sale \$90.00, rental \$12.50, USAEC) Shows how an alliance is formed between hostile Yanomamo Indian villages through feasting, trading, dancing, and chanting. Recounts in detail the feast and its preparation by using only sights and sounds of the events and occasional superimposed translations of the authentic recorded dialogue. Made by Timothy Asch and Napoleon Chagnon with the support of the Atomic Energy Commission.

Himalayan Awakening (40 min, 16mm, sd, color, 1957, sale \$160.50, rental \$15.00, USIA) Explores Nepal's cultural, social and political background, and her 20th century economic progress and planned development with Indian and American Aid.

Hungarian Fight for Freedom (11 min, 16mm, sd, b & w, 1956, sale \$23.25, rental \$5.00, USIA) Shows scenes of the 1956 revolt of the Hungarian people in Budapest, its suppression by the Soviet Army, and demonstrations of sympathy in various cities throughout the world.

Impressions of Japan (15 min, 16mm, sd, b & w, 1955, sale \$32.50, rental \$7.50, USIA) Presents the impressions of William Faulkner during his visit to Japan to participate in a USIS-sponsored American literature seminar. Based on an essay the novelist wrote prior to his departure from Japan.

Introducing Belgium (22 min, 16mm, sd, b & w, 1955, sale \$46.25, rental \$7.50, USIA) Describes the geography, economy and history of Belgium. Discusses the occupations and social customs of the people. Explains the role of Belgium in the North Atlantic Treaty Organization.

From the *Atlantic Community Series*.

Introducing Canada (22 min, 16mm, sd, b & w, 1956, sale \$46.25, rental \$7.50, USIA) Describes the country and people of Canada. Historical development, geographical features, economic life, occupations and social customs are shown.

From the *Atlantic Community Series*.

Introducing Denmark (20 min, 16mm, sd, b & w, 1955, sale \$42.50, rental \$7.50, USIA) Shows the land and its use, the people, industries, schools and recreation. Emphasizes interdependence of NATO countries.

From the *Atlantic Community Series*.

Introducing France (20 min, 16mm, sd, b & w, 1955, sale \$42.50, rental \$7.50, USIA) Presents contemporary France--her colonies, great ports, cultural traditions and leadership as a center of learning.

From the *Atlantic Community Series*.

Introducing Germany (23 min, 16mm, sd, b & w, 1957, sale \$48.75, rental \$10.00, USIA) Shows the West German Republic as a nation rebuilding economically and hopeful for peace.

From the *Atlantic Community Series*.

Introducing Greece (16 min, 16mm, sd, b & w, 1955, sale \$34.25, rental \$7.50, USIA) Describes Greece and its people. Includes geography, history, achievements, economic life, occupations and social customs.

From the *Atlantic Community Series*.

Introducing Iceland (18 min, 16mm, sd, b & w, 1956, sale \$38.50, rental \$7.50, USIA) Shows character of the land, the people, schools, and social customs.

From the *Atlantic Community Series*.

Introducing Italy (21 min, 16mm, sd, b & w, 1956, sale \$44.50, rental \$7.50, USIA) Describes the country, the people of Italy, geography, history, achievements, economic life, occupations and social customs.

From the *Atlantic Community Series*.

Introducing Luxembourg (22 min, 16mm, sd, b & w, 1955, sale \$46.25, rental \$7.50, USIA) Shows Luxembourg--the major cities, terrain, people and industry.

From the *Atlantic Community Series*.

Introducing Norway (19 min, 16mm, sd, b & w, 1955, sale \$40.50, rental \$7.50, USIA) Shows life in Arctic towns--includes the importance of the sea, forests and power from the rivers.

From the *Atlantic Community Series*.

Introducing Portugal (18 min, 16mm, sd, b & w, 1956, sale \$38.50, rental \$7.50, USIA) Shows location, character of the land, man's use of the land, industries, cities and fishing villages of Portugal.

From the *Atlantic Community Series*.

Introducing the Netherlands (22 min, 16mm, sd, b & w, 1955, sale \$46.25, rental \$7.50, USIA) Shows the major cities, terrain, people and industries of the Netherlands, one of the North Atlantic Treaty members.

From the *Atlantic Community Series*.

Introducing Turkey (21 min, 16mm, sd, b & w, 1956, sale \$44.50, rental \$7.50, USIA) Shows modern Turkey and older areas of this country. Indicates that modern machinery is replacing old methods.

From the *Atlantic Community Series*.

Introducing the United Kingdom (22 min, 16mm, sd, b & w, 1955, sale \$46.25, rental \$7.50, USIA) Describes the countries and people of the United Kingdom. Includes the geography, history and achievements, economic life, occupations and social customs.

From the *Atlantic Community Series*.

GENERAL

Jacqueline Kennedy's Asian Journey (30 min, 16mm, sd, color, 1962, sale \$121.25, rental \$12.50, USIA) Depicts Mrs John F Kennedy's trip to India and Pakistan with her sister, Princess Radziwill, in March 1962. Sequences include tours of the Taj Mahal, Jaipur, Khyber Pass, and the Shalimar Gardens.

Leaders of Tomorrow (20 min, 16mm, sd, b & w, 1949, sale \$42.50, rental \$7.50, USA/IA) Portrays Japanese teen-age boys and girls learning the principles of democracy at the youth training centers sponsored in Japan by the American Red Cross and the Supreme Commander, Allied Powers.

Libraries Without Bars (25 min, 16mm, sd, b & w, 1951, sale \$52.50, rental \$10.00, USA/IA) Shows improvements being made in Japanese libraries to stimulate interest in reading and to encourage appreciation of art, music, and literature. Prepared for use in occupied areas, particularly in Japan.

Nation in Torment, A (11 min, 16mm, sd, b & w, 1956, sale \$23.25, rental \$5.00, USIA) Reviews briefly the history of Hungary with particular reference to the period 1946-56. Describes the October 1956 revolt of the people, its repression by Soviet troops, and the exodus of Hungarian refugees.

Near Horizon, The (18 min, 16mm, sd, b & w, 1955, sale \$38.50, rental \$7.50, USIA) Describes past progress and current economic developments in Latin America. Illustrates principles of modern economic development and interdependence. Shows progress in industry, agriculture, power, and transportation. Describes the extent of intrahemispheric trade.

North Africa (20 min, 16mm, sd, b & w, Order No. AFIF0095, sale \$42.50, USDOD) Covers the geography, history, and present day political and economic problems of Morocco, Algeria, Tunisia and Libya. Includes information concerning the U.S. role in this vital area.

Patterns of History (29 min, 16mm, sd, b & w, 1961, Order No. TV550, sale \$59.50, USA) Reveals the pattern of Communist aggression from early post-World War II days in Greece, through Korea, Southeast Asia and Cuba. (Kinescope)

From the *Big Picture* Series.

Revolt of a Generation (20 min, 16mm, sd, b & w, 1956, sale \$42.50, rental \$7.50, USIA) Recounts the story of the Hungarian people from the imposition of Communist Party rule in 1948 through the 1956 revolt and Soviet intervention and repression. Shows demonstrations throughout the world condemning Soviet repression, and the exodus of refugees over the Austrian border.

Rise of the Soviet Navy, The (28 min, 16mm, sd, color, 1969, Order No. MN10390, sale \$113.50, USN) Traces the rise of Soviet seapower from the Imperial Navy of the Czar to the Navy of today. Done in documentary style. Narrated by Richard Basehart.

Thailand (29 min, 16mm, sd, color, 1963, Order No. TV616, sale \$115.50, USA) Looks at Kingdom of Thailand and assistance offered by members of the U S Army. (Not cleared for TV)

From the *Big Picture* Series.

We, The Japanese People (25 min, 16mm, sd, b & w, 1952, sale \$52.50, rental \$10.00, USA) Shows some of the democratic changes the Japanese people have adopted since 1945.

Alaska, Newest of the United States of America (18 min, 16mm, sd, b & w, 1958, sale \$38.50, rental \$7.50, USIA) Gives general information and background material on Alaska and its potential. Includes President Eisenhower's signing of the bill granting statehood to the Territory of Alaska in 1958.

Alaskan Centennial (29 min, 16mm, sd, color, 1967, Order No. TV698, sale \$115.50, USA) Tells the history of Alaska, first as a possession, then as the 49th state. Describes the role of Alaska in assisting the United States in defense, resources, and manpower for peace. (Cleared for TV)

From the *Big Picture* Series.

Dateline Alaska (12 min, 16mm, sd, b & w, 1965, Order No. AFMR0639, sale \$26.75, USDOD) Reviews the damage resulting from the 1964 Alaskan earthquake and portrays fast restoration to near normal operation. Cites the courage of the Alaskan people and the quick response of Congress, the Armed forces, The Red Cross and other agencies in providing funds, emergency and rebuilding aid, as reasons for Alaska's fast recovery.

Day in America, A (29 min, 16mm, sd, color, 1969, Order No. AFIF0187, sale \$117.50, USDOD) Presents a day in the life of America from dawn through evening hours. Features all people of America--professional, tradesmen, sportsmen, children at school and many others going about their business, keeping America on the move under a democratic system. Stresses freedom to work, worship and play. Shows a cross section of the country with an emphasis on the people.

Family of Man, The (20 min, 16mm, sd, b & w, 1955, sale \$43.25, rental \$7.50, USIA) Shows Edward Steichen and his photographic exhibit 'The Family of Man.' Steichen explains that the purpose of the exhibit is to show the universal oneness and goodness of mankind.

Golden Gate, The (11 min, 16mm, sd, color, 1967, sale \$44.75, rental \$7.50, USIA) Presents a look at one of America's most charming cities by following the casual wanderings of a bemused tourist from Thailand. Portrays the winding streets, profusion of flowers, exotic shops, cable cars, easy-going inhabitants and, in general, the pervasive sense of well-being in San Francisco.

Hoover Dam (33 min, 16mm, sd, b & w, 1949, sale \$68.25, rental \$12.50, USIA) Explains the need for control of the Colorado River. Pictures the construction of the Hoover Dam and indicates its value for irrigation and electric power.

Impressioable Years, The (35 min, 16mm, sd, b & w, 1952, sale \$72.50, rental \$12.50, USIA) Presents the story of a Hungarian family which emigrated to the United States under the sponsorship of a Catholic refugee agency. Shows their experiences in the new country, their adjustments, and what this country means to them.

Let Us Live (Rev Ed) (20 min, 16mm, sd, b & w, 1959, sale \$42.50, rental \$7.50, USIA) Portrays refugees and displaced persons entering West Berlin. Explains steps being taken to rehabilitate them and gives their reasons for coming. This revised version contains new commentary which reflects the plight of the refugees from East Germany and the progress being made in West Germany.

Northwest U S A (22 min, 16mm, sd, b & w, 1945, sale \$46.25, rental \$7.50, USOWIO) Reviews the resources, industries, and people of Oregon and Washington.

From the *American Scene* Series, No. 10

Now We Are Free (26 min, 16mm, sd, b & w, 1957, sale \$54.75, rental \$10.00, USIA) Follows a Hungarian family from Budapest, first to Austria, then to Camp Kilmer in New Jersey, and finally to resettlement in a midwest city in the U S.

Out of Hungary to Freedom (19 min, 16mm, sd, b & w, 1957, sale \$40.50, rental \$7.50, USIA) Reviews exodus of Hungarian refugees during the winter of 1956-57, including their temporary stay in Austria, departure for their new homes, and welcoming ceremonies in many different countries. Includes scenes of the visit of Vice-President Nixon to refugee camps in Austria. Depicts Hungarians in the U S adjusting to their new lives.

Plow That Broke the Plains, The (25 min, 16mm, sd, b & w, 1936, sale \$54.75, USDA) Depicts social and economic history of Great Plains from the settlement of prairies by cattlemen and farmers through the World War I boom to drought and depression. Also, gave the initial impetus to the American documentary film. Directed by Pare Lorentz. Photographed by Paul Strand, Ralph Steiner, and Leo Hurwitz. Music is by Virgil Thompson.

River, The (32 min, 16mm, sd, b & w, 1939, sale \$66.50, rental \$10.00, USDA) Traces life in the Mississippi River Valley during the last 150 years. The consequences of sharecropping, soil exhaustion, unchecked erosion and floods are shown. Concludes with scenes of regional planning, T V A development and correlated federal efforts.

Tulsa, Oklahoma (20 min, 16mm, sd, b & w, 1950, sale \$42.50, rental \$7.50, USIA) Depicts the history of the City of Tulsa, Oklahoma.

U S Army in Berlin, Pt 2, Checkpoint Charlie (29 min, 16mm, sd, b & w, 1961, Order No. TV536, sale \$59.50, USA) Reports on the divided city of Berlin in the summer of 1961.

From the *Big Picture Series*.

GOVERNMENT

America's Critics Abroad (20 min, 16mm, sd, b & w, 1965, Order No. AFIF0137, sale \$42.50, USDOD) Explains how to counter adverse criticism of the United States when abroad and how to reply to questions about American habits, attitudes, and policies. Points out the serviceman's responsibility to be accurately informed when representing the position of the United States Government.

Ballots That Fly (10 min, 16mm, sd, b & w, Order No. AFIF0129, sale \$21.00, USDOD) Provides information on how service personnel can apply for an absentee ballot, process the application, and mark and mail the ballot.

Congress, The (31 min, 16mm, sd, b & w, 1967, Order No. AFIF0157, sale \$76.25, USDOD) Outlines the mission and organization of the congress of the United States. Describes the functions of its two houses, the Senate and House of Representatives. Discusses passage of a bill into law and work of Congressional committees. Points out how the President and Congress share responsibility for national defense. Also tours the Capitol.

For All the People - The Harry S Truman Library (29 min, 16mm, sd, color, 1969, sale \$109.25, rental \$12.50, USNLT) Shows the role of Truman during and immediately following World War II. Includes such historical episodes as the ending of the war in Europe, the use of the atomic bomb, the end of the war in the Pacific, American participation in the U N, the Korean War, the Truman Doctrine, and postwar domestic programs. Narrated by Martin Gabel.

Social Change in a Democracy (30 min, 16mm, sd, b & w, 1951, sale \$62.50, rental \$10.00, USIA) Portrays students in a high-school social-studies class discussing the difference between conditions in a democracy and in a totalitarian state, then learning first-hand how a problem in their own community, arising from a social change, is solved by law and assembly of the people.

Valley of the Tennessee (29 min, 16mm, sd, b & w, 1949, sale \$60.50, rental \$10.00, USIA) Emphasizes the change in agricultural methods made possible by flood control in the Tennessee Valley. Describes the origin of the TVA and dam building. visit for the 30th anniversary celebration.

Vote, The (11 min, 16mm, sd, b & w, 1963, Order No. AFIF0128, sale \$23.25, USDOD) Emphasizes the importance of servicemen exercising their right to vote at election time. Explains the special provisions built into voting statutes that enable men in service to have their say in state and national elections. Also traces history of the vote and shows how voting laws have been developed and refined over the years.

INTERNATIONAL RELATIONS

Better Tomorrow, A (24 min, 16mm, sd, b & w, sale \$41.50, rental \$10.00, USIA) Shows how a Brazilian non-profit organization and the Point 4 economic assistance program cooperate in offering courses in civic administration and in providing scholarships for study in the United States.

Caribbean Command (29 min, 16mm, sd, b & w, 1961, Order No. TV528, sale \$59.50, USA) Reports on Latin America's importance in the maintenance of our freedom. (Not cleared for TV)

From the *Big Picture Series*.

Evil Wind Out (11 min, 16mm, sd, b & w, 1963, sale \$23.25, rental \$5.00, USIA) Shows how a Colombian public health service doctor overcomes superstition in a backward village. One of a trio of films by James Blue on the 'Alliance for Progress' theme. See also 'Letter from Colombia' and 'School at Rincon Santo.'

Frontiers of Trade (7 min, 16mm, sd, color, 1962, Order No. MF11-9629, sale \$29.50, USA) Explains the importance of international trade, to the United States and other participating countries of the free world, for better living standards and national progress. (Cleared for TV)

House, A Wife and a Singing Bird, A (30 min, 16mm, sd, color, 1957, sale \$121.25, rental \$12.50, USIA) Tells the story, based on an old Javanese folk saying that a man's happiness depends upon a knife, house, horse, wife and singing bird, of the restoration of a young man to his rightful place in his society and nation. Indicates the benefits of ICA assistance to Indonesia in combatting malaria.

In Which We Live (23 min, 16mm, sd, b & w, 1958, sale \$48.75, rental \$10.00, USIA) Describes the cooperative effort of the 64 nations participating in the scientific projects of the International Geophysical Year. Explains the three major phases of the IGY activity--study of the earth's surface and core, of the earth's atmosphere, and of outer space.

Letter to a Friend (20 min, 16mm, sd, b & w, 1951, sale \$42.50, rental \$7.50, USIA) Explains how Japanese boys and girls correspond, as 'Pen pals,' with boys and girls of their own ages in the United States.

Road to Peace (9 min, 16mm, sd, b & w, 1951, sale \$19.00, USA) Explains that the people of the East stand at a crossroads with one of two paths to follow--peace or war--and that the road to peace lies in the program of the United Nations.

San Francisco, 1945 (17 min, 16mm, sd, b & w, sale \$36.75, rental \$7.50, USA) Explains the beginning of the organization of the United Nations, which took place in San Francisco.

Story of Goodwill, A (19 min, 16mm, sd, b & w, 1952, sale \$40.50, rental \$7.50, USIA) Portrays four students at international house, New York. Korean, Japanese, Chinese and Philippine--discussing the assistance given their countries by the United States.

Town Meeting of the World (30 min, 16mm, sd, b & w, 1952, sale \$62.50, rental \$12.50, USIA) Defines the General Assembly of the United Nations as a 'town meeting of the world,' and explains its functions, organization, and operations.

Unending Struggle, The (30 min, 16mm, sd, b & w, sale \$49.25, USDS) Brings to life the abstractions of U S foreign policy through sequences photographed on location in Ecuador.

Will for Peace (33 min, 16mm, sd, b & w, 1951, sale \$68.25, rental \$12.50, USA/IA) Contrasts the post-war activities of the United States with those of Russia. Shows how the United States has worked toward peace through such organizations as the U N, UNRRA and the Marshall Plan, while Russia has concentrated its activities upon preparations for war.

TECHNICAL

BENCH WORK

Centering Small Stock (12 min, 16mm, sd, b & w, 1942, Order No. OE039, sale \$22.25, rental \$7.50, USOE) Shows the tools and methods used when locating the center of round, square and rectangular pieces.

From the *Machine Shop Work Series*. Bench Work, No. 7

Cutting and Threading Pipe by Hand (12 min, 16mm, sd, b & w, 1944, Order No. OE106, sale \$26.75, rental \$7.50, USOE) Explains how to use pipe cutter and pipe reamer, select and insert proper dies in stock, thread pipe by hand, test threads for it, prepare fitted pipe for delivery and care for tools.

From the *Shipbuilding Skills Series*. Pipefitting, No. 2

Cutting and Threading Pipe on a Power Machine (17 min, 16mm, sd, b & w, 1944, Order No. OE107, sale \$35.75, rental \$7.50, USOE) Explains how to measure and cut pipe for fittings, how to ream pipe which has been cut and how to thread pipe by machine.

From the *Shipbuilding Skills Series*. Pipefitting, No. 3

Cutting Threads with Taps and Dies (20 min, 16mm, sd, b & w, 1942, Order No. OE034, sale \$33.75, rental \$7.50, USOE) Shows and explains the methods, operations, and procedures used when cutting small threads with the use of hand taps and dies.

Fitting and Scraping Small Bearings (24 min, 16mm, sd, b & w, 1942, Order No. OE036, sale \$42.25, rental \$10.00, USOE) Shows how to scrape split bearings for shaft fit and alignment, how to 'relieve' a split bearing to aid lubrication and how to cut oil grooves in the cap of a split bearing.

From the *Machine Shop Work Series*. Bench Work, No. 3

Fundamentals of End Cutting Tools (12 min, 16mm, sd, b & w, 1942, Order No. OE043, sale \$22.25, rental \$7.50, USOE) Discusses radius, threading, sheer-cut finishing, round-nosed finishing, side-facing tools, the correct setting of the tools and the type of cut each makes.

From the *Machine Shop Work Series*. Single Point Cutting Tools, No. 2

Fundamentals of Filing (12 min, 16mm, sd, b & w, 1942, Order No. OE041, sale \$22.25, rental \$7.50, USOE) Demonstrates how to select, handle and care for files.

Fundamentals of Side Cutting Tools (11 min, 16mm, sd, b & w, 1946, Order No. OE042, sale \$19.25, rental \$5.00, USOE) Shows how side cutting tools are shaped, how they cut, and how generated heat is dissipated.

From the *Machine Shop Work Series*. Single Point Cut Ting Tools, No. 1

Reaming with Straight Hand Reamers (20 min, 16mm, sd, b & w, 1942, Order No. OE037, sale \$35.25, rental \$7.50, USOE) Discusses types of reamers. Shows how to check the size of reamers and ream straight holes with straight-fluted, helical-fluted and adjustable-blade reamers.

From the *Machine Shop Work Series*. Bench Work, No. 4

Reaming with Taper Hand Reamers (15 min, 16mm, sd, b & w, 1942, Order No. OE038, sale \$27.00, rental \$7.50, USOE) Describes how to hand ream a tapered hole through a shaft and collar and how to fit a taper pin in the reamed hole. Explains how to ream bearing caps for fitting dowel pins.

From the *Machine Shop Work Series*. Bench Work, No. 5

Scraping Flat Surfaces (14 min, 16mm, sd, b & w, 1942, Order No. OE035, sale \$25.50, rental \$7.50, USOE) Shows how surface plates are used to check the flatness of surfaces. Discusses the types of scrapers and shows how to remove high spots and to determine when a surface is scraped flat.

From the *Machine Shop Work Series*. Bench Work, No. 2

BLUE PRINT READING

Principal Dimensions, Reference Surfaces and Tolerances (12 min, 16mm, sd, b & w, 1945, Order No. OE053, sale \$22.25, rental \$7.50, USOE) Shows the relationship between the blueprint and a rough and finished casting. Tells how to use a blueprint in selecting reference surfaces, interpret tolerances, and check the accuracy of finished work.

From the *Machine Work Shop Series*. Fundamentals Of Blueprint Reading, No. 3

Reading a Drawing of a Valve Bonnet (20 min, 16mm, sd, b & w, 1945, Order No. OE055, sale \$35.25, rental \$7.50, USOE) Explains how to interpret conventional symbols and tolerance specifications and how to use the blueprint in planning machine operations.

From the *Machine Shop Work Series*. Fundamentals Of Blueprint Reading, No. 5

Reading a Three-view Drawing (10 min, 16mm, sd, b & w, 1945, Order No. OE052, sale \$17.50, rental \$5.00, USOE) Describes how to interpret and use a blueprint. Shows how to make a tool block according to specifications written on a blueprint.

From the *Machine Shop Work Series*. Fundamentals Of Blueprint Reading

Sectional Views and Projections - Finish Marks (15 min, 16mm, sd, b & w, 1944, Order No. OE054, sale \$27.00, rental \$7.50, USOE) Shows dimension, center, cross-section and object lines. Discusses the uses of finish marks and the meanings of standard cross-section lines.

From the *Machine Work Series*. Fundamentals Of Blueprint Reading

Visualizing an Object (9 min, 16mm, sd, b & w, 1945, Order No. OE051, sale \$15.75, rental \$5.00, USOE) Tells how a blueprint is developed, how dimensions are shown by different views and how various kinds of information are indicated on a blueprint.

From the *Machine Shop Work Series*. Fundamentals Of Blueprint Reading, No. 1

CARBIDE CUTTING TOOLS

Brazing Carbide Tools (18 min, 16mm, sd, b & w, Order No. OE241, sale \$32.00, rental \$7.50, USOE) Presents characteristics of carbide tools. Explains how to braze carbide tools with silver solder, make a sandwich braze, braze by other methods and remove the carbide tip from the shank.

From the *Machine Shop Work Series*. Carbide Cutting Tools, No. 1

Cutting with Carbide Tools, Pt 1, Single Point (19 min, 16mm, sd, b & w, 1945, Order No. OE244, sale \$33.75, rental \$7.50, USOE) Shows how to select the proper tool and set up a job, to calculate speed, feed and depth of cut, to machine on a lathe and to correct unsatisfactory machining.

From the *Machine Shop Work Series*. Carbide Cutting Tools, No. 1

Cutting with Carbide Tools, Pt 2, Milling Cutters (15 min, 16mm, sd, b & w, 1945, Order No. OE245, sale \$27.00, rental \$7.50, USOE) Demonstrates how to face-mill a steel forging with a carbide milling cutter.

From the *Machine Shop Work Series*. Carbide Cutting Tools, No. 5

Grinding Multiple-point Carbide Tools (20 min, 16mm, sd, b & w, 1945, Order No. OE243, sale \$35.25, rental \$7.50, USOE) Shows how to resharpen by grinding a dull carbide milling cutter, how to grind individual teeth offhand, how to circle-grind and surface-grind, and how to finish surfaces and edges by honing.

From the *Machine Shop Work Series*. Carbide Cutting Tools, No. 3

Grinding Single-point Carbide Tools (26 min, 16mm, sd, b & w, 1945, Order No. OE242, sale \$45.50, rental \$10.00, USOE) How to rough-grind a chipped or broken tip and how to Shows how to semi-finish and finish-grind a dull tool, grind a newly brazed tool and a chip breaker.

From the *Machine Shop Work Series*. Carbide Cutting Tools, No. 2

CONSTRUCTION

Let Nature Work for You (12 min, 16mm, sd, color, 1969, sale \$52.50, USFHWA) Illustrates how natural plant regeneration can be used to assist highway maintenance engineers in beautifying the right-of-way after construction has been completed. Encourages maintenance crews to keep mowing operations to a minimum by not mowing the complete right-of-way, giving nature a chance to revegetate the areas with natural growth.

Military Roads, Pt 1, Road Expedients (21 min, 16mm, sd, b & w, 1958, Order No. TF05-1193, sale \$44.50, USA) Shows expedient methods for road construction in swampy and sandy ground-including use of corduroy mats, wire mesh, and steel landing mats. Stresses road maintenance.

Military Roads, Pt 6, Gravel and Rock Surfaces (8 min, 16mm, sd, b & w, 1943, Order No. TF05-1198, sale \$17.25, USAE) Demonstrates the complete process of gravel and rock surfacing. Shows the composition of good gravel and the principles of gradation. Places emphasis on the maintenance of gravel roads.

Tennessee Bridge Test (19 min, 16mm, sd, color, 1970, sale \$78.00, USFHWA) Shows loading tests on three bridges located near Winchester, Tennessee. The U S Army HET-70 main battle tank transporter, loaded with the M60-A1 track laying combat tank, is the primary test vehicle. A prestressed concrete eye-beam structure, a four-span continuous steel girder bridge and a reinforced concrete T-beam structure are tested.

FOUNDRY

Charging and Operating a Cupola (14 min, 16mm, sd, b & w, 1945, Order No. OE437, sale \$25.50, rental \$7.50, USOE) Describes essential parts of the cupola. Lists steps to follow in firing, charging and operating a cupola and explains the cycle of operations involved in the melting process.

From the *Foundry Work Series*. Melting Practice

Laying Out Small Castings (16 min, 16mm, sd, b & w, 1942, Order No. OE42, sale \$28.50, rental \$7.50, USOE) Shows how to lay out holes for drilling, locate a reference point, use hermaphrodite calipers, and use a combination square and surface gage.

From the *Machine Work Shop Series*. Bench Work, No. 6

Making a Core Box for a Tail Print (18 min, 16mm, sd, b & w, 1945, Order No. OE350, sale \$32.00, rental \$7.50, USOE) Tells how to use dry sand cores in molding holes in castings, use pattern layout to make a core box, distinguish between core and core print, lay out the core print, add the core, and determine parting line of a core box.

From the *Precision Wood Machining Series*. Problems in Patternmaking

Making a Simple Core (15 min, 16mm, sd, b & w, 1944, Order No. OE424, sale \$27.00, rental \$7.50, USOE) Demonstrates how to prepare sand for coremaking, make a small cylindrical core in either one or two pieces, assemble a two-piece core and locate a vertical core in a mold to provide necessary venting. Shows how core gases escape when a mold is poured.

From the *Foundry Practice Series*. Bench Molding, No. 2

Molding a Horizontal Cored Part (22 min, 16mm, sd, b & w, 1945, Order No. OE431, sale \$38.50, rental \$7.50, USOE) Shows how to use a horizontal core, a split pattern, chaplets and chaplet supports, how to gate a mold to pour a thin casting and how to clean a casting.

From the *Foundry Practice Series*. Floor Molding, No. 4

Molding a Valve Body (25 min, 16mm, sd, b & w, 1945, Order No. OE430, sale \$45.50, rental \$10.00, USOE) Demonstrates use of a split pattern and multipart dry sand core, how to gate a mold for rapid, uniform distribution of clean metals, and how to locate a core and seal the core prints.

Molding on a Jolt Roll-over Pattern Draw Machine (23 min, 16mm, sd, b & w, 1945, Order No. OE434, sale \$40.50, rental \$10.00, USOE) Explains the jolt roll-over pattern draw machine. Shows how to fill the drag and jolt it, draw the pattern, set the drag and cope pattern plates, fill the cope and jolt it, and finish and close the mold.

From the *Foundry Practice Series*. Machine Molding

Molding on a Jolt Squeeze Machine (10 min, 16mm, sd, b & w, 1945, Order No. OE433, sale \$17.50, rental \$7.50, USOE) Shows the principles of the jolt squeeze molding machine, how to roll the mold, fill the cope and apply pressboard, squeeze the mold, draw the pattern, and finish and close the mold.

Molding Part with Deep Green Sand Core (25 min, 16mm, sd, b & w, 1945, Order No. OE429, sale \$43.75, rental \$10.00, USOE) Tells why to use a follow board with a thin box-like pattern. Shows how to reinforce a green sand core with nails, late sprue and watch-up pins, use gagers, and ram and vent a green sand core.

From the *Foundry Practice Series*. Floor Molding, No. 2

Molding with a Gated Pattern (11 min, 16mm, sd, b & w, 1944, Order No. OE427, sale \$19.25, rental \$5.00, USOE) Explains what a gated pattern is and why it is used. Shows how to match or follow board may simplify making a parting, how facing sand is prepared, and how and why some patterns are rapped through the cope.

From the *Foundry Practice Series*. Bench Molding, No. 5

Molding with a Loose Pattern - Bench (21 min, 16mm, sd, b & w, 1944, Order No. OE423, sale \$37.00, rental \$7.50, USOE) Shows how to use bench molder's tools, prepare molding sand, face a pattern, ram and vent a mold, roll a drag and cut a sprue, runner, riser and gates. Depicts with animation the inside of a mold during pouring.

From the *Foundry Practice Series*. Bench Molding, No. 1

Molding with a Loose Pattern - Floor (24 min, 16mm, sd, b & w, 1945, Order No. OE428, sale \$42.25, rental \$10.00, USOE) Shows difference between bench and floor molding, how to face a deep pattern, ram a drag and walk it off, clamp a mold, locate sprues and risers, and tuck the crossbars of a large cope. No. 1

From the *Foundry Practice Series*. Floor Molding,

Molding with a Split Pattern (19 min, 16mm, sd, b & w, 1944, Order No. OE426, sale \$33.75, rental \$7.50, USOE) Explains how split patterns aid in the more efficient molding of some casting and demonstrates how ramming affects the permeability of sand in a mold. Tells how to reinforce a mold with nails, and how to patch a mold.

From the *Foundry Practice Series*. Bench Molding, No. 4

Molding with a Three Part Flask (35 min, 16mm, sd, b & w, 1945, Order No. OE432, sale \$60.25, rental \$12.50, USOE) Explains the use of a deep follow board and outlines techniques of facing, ramming and venting a deep green sand core. Shows how to use a cheek in a three-part flask. Gives the purpose and method of step-gating.

From the *Foundry Practice Series*. Floor Molding, No. 5

Molecular Biology - An Introduction (15 min, 16mm, sd, color, 1969, sale \$90.00, USAEC) Explains that the development of more refined and sophisticated research tools, used in conjunction with radioactive tracers, has opened up new possibilities in the study of molecular biology--studies which may contribute basic information needed to find the cause and cure of human cancer and many other diseases.

Preparing a Cupola for Charging (21 min, 16mm, sd, b & w, 1945, Order No. OE436, sale \$37.00, rental \$7.50, USOE) Describes how to recognize the end of a heat. Gives procedures for dropping bottom and for preparing a cupola for its next heat.

From the *Foundry Work Series*. Melting Practice

GENERAL

Forging with a Hand Forge (13 min, 16mm, sd, b & w, 1945, Order No. OE191, sale \$23.75, rental \$7.50, USOE) Shows how to clean the tuyere and build an open fire in a forge, lay out and mark the stock, heat mild steel for forging, and forge an eye.

From the *Farm Work Series*. Forging, No. 1

Installing Vitreous Fixtures (19 min, 16mm, sd, b & w, 1944, Order No. OE121, sale \$39.25, rental \$7.50, USOE) Tells how to lay out, drill, and tap the seating. Describes how to measure and cut brass studs, make watertight installations, and assemble and connect the flushometer.

From the *Shipbuilding Skills*. Pipefitting, No. 6

Repainting a Frame Building (18 min, 16mm, sd, b & w, 1945, Order No. OE460, sale \$37.50, rental \$7.50, USOE) Tells how to prepare a building for painting, set up staging, prepare paint, apply the prime and second coats, and care for brushes, paint, and equipment.

From the *Farm Workers Series*. Painting, No. 1

HAND TOOLS

Drilling with Portable Drill Motors (17 min, 16mm, sd, b & w, 1943, Order No. OE138, sale \$30.50, rental \$7.50, USOE) Tells how to use a portable electric drill motor, select a drill, insert the drill in a chuck, check the drill for true-running, and install and use a special attachment for drilling.

From the *Aircraft Work Series*. Assembling and Riveting, No. 3

MAPS

Mapping Adventure (29 min, 16mm, sd, color, 1963, Order No. TV604, sale \$115.50, USA) Shows how Army engineers work hand-in-hand with Latin American neighbors on the difficult project of mapping South American jungles, mountains and swamps. (Cleared for TV)

From the *Big Picture Series*.

Multiplex Mapping, Pt 1 (25 min, 16mm, sd, color, 1949, Order No. TF05-1549, sale \$101.75, USAE) Shows how the multiplex method is used to produce accurate topographical maps from aerial photographs. Adapted from materials supplied by the U S Army Map Service.

MEASUREMENTS

Assignment - Weights and Measures (18 min, 16mm, sd, color, 1957, sale \$74.25, USNBS) Describes the importance of weights and measures to the average American family. Shows the experiences of an elementary school boy as he completes an assignment concerning commerial weights and measures.

Bevel Protractor, The (15 min, 16mm, sd, b & w, 1945, Order No. OE050, sale \$27.00, rental \$7.50, USOE) Gives principles of the vernier bevel protractor. Tells how to set and read the protractor and how to lay cut angular work and check angles.

From the *Machine Shop Work Series*. Precision Measurement, No. 7

Calibration of the Platinum Resistance Thermometer (16 min, 16mm, sd, color, 1964, sale \$66.00, USNBS) Shows the National Bureau of Standards procedure for calibrating a platinum resistance thermometer at the specified defining points on the international practical temperature scale. Along with the procedure, the unique and intricate equipment used at NBS for calibrating at the defining points is seen. Film is intended primarily for scientists, engineers, and technicians in standards and calibration laboratories.

Fixed Gages (17 min, 16mm, sd, b & w, 1941, Order No. OE003, sale \$30.50, rental \$7.50, USOE) Types and uses of gages for precision measurement. Snap, ring, plug, taper plug, taper right, flush pin and screw plug gages are shown.

From the *Machine Shop Work Series*.

Gage Blocks and Accessories (23 min, 16mm, sd, b & w, 1945, Order No. OE246, sale \$40.50, rental \$10.00, USOE) Tells why accessories are used with gage blocks, how to inspect a plug gage, an adjustable snap gage, a profile gage, a ring gage and a screw-thread pitch and how to build a height gage and scriber.

From the *Machine Shop Work Series*. Precision Measurement, No. 8

Height Gauges and Test Indicators (10 min, 16mm, sd, b & w, 1941, Order No. OE005, sale \$22.25, rental \$7.50, USOE) Reading of the vernier scale as used on a height gauge. Shows several forms of test indicators and demonstrates their use.

Measurement with Light Waves (15 min, 16mm, sd, b & w, 1944, Order No. OE174, sale \$27.00, rental \$7.50, USOE) Shows principles of measurement with light waves, nature of light waves, cause of interference bands and use of these bands in ultra-precision measurement, and procedures used in gage block inspection.

From the *Engineering Series*.

Micrometer, The (15 min, 16mm, sd, b & w, 1941, Order No. OE002, sale \$27.00, rental \$7.50, USOE) Explains the care, use and maintenance of micrometers. Shows various forms used to measure outside lengths, inside lengths and depths.

From the *Machine Shop Work Series*.

Precision Gage Blocks (18 min, 16mm, sd, b & w, 1945, Order No. OE049, sale \$32.00, rental \$7.50, USOE) Discusses the various uses of gage blocks in setting inspection gages. Shows how to calculate, clean and assemble gage blocks.

From the *Machinshop Work Series*. Precision Measurement, No. 6

Steel Rule (14 min, 16mm, sd, b & w, 1941, Order No. OE001, sale \$25.50, rental \$7.50, USOE) Discusses the variations found in steel rules, the types of scales found on them and their proper usage, and the procedure for transferring measurements by means of calipers and dividers.

From the *Machine Shop Work Series*.

Testing Mass Standards By Substitution (22 min, 16mm, sd, color, 1956, sale \$89.00, USNBS) Demonstrates a simple method for quickly determining with a high degree of precision the mass of an 'unknown' standard by comparison with one of known value, known as 'error testing.' Designed primarily as a training aid for weights and measures officials, it can also be useful to science classes and laboratory personnel.

True Standard, A (12 min, 16mm, sd, color, 1954, sale \$50.50, USNBS) Shows the importance of accurate and uniform standards of weights, how the international, as well as the national, standards are translated, step by step, through the complex down to the simplest weighing and measuring activities that take place in trade and industry. Shows how absolute accuracy and uniformity of standards are matters of great economic importance to everyone.

Understanding the Physical World through Measurement (33 min, 16mm, sd, color, 1957, sale \$133.00, USNBS) Depicts man's struggle to harness and control the various forms of energy in the universe. Lecture begins with prehistoric man, whose only source of energy was his own muscle, then traces the historic development of means for utilizing other energy sources from the steam engine to uranium fission. Demonstrates the transformation of energy--mechanical, chemical, electrical, thermal, nuclear--from one form to another.

Verniers (19 min, 16mm, sd, b & w, 1941, Order No. OE004, sale \$33.75, rental \$7.50, USOE) Uses animation to tell the principles of the vernier scale and its application to precision measuring instruments. Tells how to use and read vernier micrometers and calipers.

From the *Machine Shop Work Series*. Precision Measurement, No. 4

METALLURGY

Elements of Hardening (15 min, 16mm, sd, b & w, 1945, Order No. OE170, sale \$27.00, rental \$7.50, USOE) Shows how steel is quench-hardened and how its structure and hardness changes at progressive stages. Tells how the lower and upper critical temperatures are determined and how an iron-carbon diagram is made.

From the *Engineering Series*. Heat Treatment Of Steel, No. 1

Elements of Surface Hardening (14 min, 16mm, sd, b & w, 1945, Order No. OE172, sale \$25.50, rental \$7.50, USOE) Indicates how steel is quench-hardened, how the structure and hardness of steels with different carbon content change at progressive quench-hardening stages, how the lower and upper critical temperatures of steel are determined, and how an iron-carbon diagram is constructed and what it shows.

From the *Engineering Series*. Heat Treatment Of Steel, No. 3

Elements of Tempering, Normalizing and Annealing (15 min, 16mm, sd, b & w, 1945, Order No. OE171, sale \$27.00, rental \$7.50, USOE) Tells how steel is tempered. Shows how the structure, toughness, and

hardness of plain carbon steel change at progressive tempering stages. Describes normalized and annealed, and the results of normalizing and annealing.

From the *Engineering Series*. Heat Treatment Of Steel, No. 2

Hardness Testing - Rockwell (18 min, 16mm, sd, b & w, 1944, Order No. OE149, sale \$32.00, rental \$7.50, USOE) Describes the need for hardness testing and tells how to set up the Rockwell hardness tester, select and seat the penetrator, select and mount the anvil, adjust the timing of the machine, and test flat and curved surfaces.

From the *Aircraft Work Series*. Inspection, No. 5

Heat Treatment of Aluminum, Pt 1 (19 min, 16mm, sd, b & w, 1945, Order No. OE344, sale \$33.75, rental \$7.50, USOE) Describes the purpose of heat treatment, microstructure changes during heat treatment, the procedure of heat treatment and the effects on physical properties of aluminum.

From the *Engineering Series*.

Heat Treatment of Aluminum, Pt 2 (24 min, 16mm, sd, b & w, 1945, Order No. OE345, sale \$42.25, rental \$10.00, USOE) Explains the nature of cold working operations, crystalline structure of aluminum alloys, ship planes and deformation and microstructure changes.

From the *Engineering Series*.

Powder Metallurgy, Pt 1, Principles and Uses (19 min, 16mm, sd, b & w, 195, Order No. OE346, sale \$33.75, rental \$7.50, USOE) Discusses the principles of powder metallurgy and its major industrial applications. Depicts the laboratory process of combining silver and nickel powders.

From the *Engineering Series*.

Powder Metallurgy, Pt 2, Manufacture of Porous Bronze Bearings (15 min, 16mm, sd, b & w, 1945, Order No. OE347, sale \$27.00, rental \$7.50, USOE) Shows how metal powders are fabricated into porous bronze bearings and impregnated with oil.

From the *Engineering Series*.

OPTICS

Centering, Edge Grinding and Beveling (27 min, 16mm, sd, b & w, 1944, Order No. OE185, sale \$47.00, rental \$10.00, USOE) Tells how to center lenses by collimator, set up lenses for edge and bevel-grinding in single spindle or two spindle machine, and edgegrind lenses.

From the *Optical Craftmanship Series*. Spherical Surfaces

Fine Grinding (15 min, 16mm, sd, b & w, 1944, Order No. OE183, sale \$27.00, rental \$7.50, USOE) Describes how to set up lenses in multiple spindle machine, adjust grinding machine for grinding concave or convex lenses, and wash and inspect lenses after the grinding

From the *Optical Craftmanship Series*. Spherical Surfaces

Pitch Buttoning and Blocking (30 min, 16mm, sd, b & w, 1944, Order No. OE182, sale \$52.00, rental \$10.00, USOE) Demonstrates blocking large convex lenses, blocking with pagoda tool, use of ring button, buttoning and blocking with pitch points, and pitch buttoning and blocking very small lenses.

From the *Optical Craftmanship Series*. Spherical Surfaces

Polishing (28 min, 16mm, sd, b & w, 1944, Order No. OE184, sale \$48.75, rental \$10.00, USOE) Shows how to make concave or convex polishing shell, trim polishing shell to size and cut breathers, set up and use polishing machine, make Newton's ring check with test glass, and correct for hollow condition and high condition.

From the *Optical Craftmanship Series*. Spherical Surfaces

Rough Grinding (26 min, 16mm, sd, b & w, 1944, Order No. OE130, sale \$45.50, rental \$10.00, USOE) Explains three methods of rough grinding lenses—by hand, pin-bar, and mechanical curvature generator. Shows in detail how to hand grind a concave lens.
From the *Optical Craftsmanship Series*. Spherical Surfaces

Rough Grinding By Pin-bar (19 min, 16mm, sd, b & w, Order No. OE181, sale \$33.75, rental \$7.50, USOE) Depicts how to use job card, select and adjust grinding tool, use abrasive, perform the grinding operation, clean the grinding tool, and correct worn grinding tools.
From the *Optical Craftsmanship Series*. Spherical Surfaces

PATTERNMAKING

Designing a Pattern for a Water-cooled Motor Block (17 min, 16mm, sd, b & w, 1945, Order No. OE337, sale \$27.00, rental \$7.50, USOE) Illustrates how a patternmaker studies a drawing for a single-cylinder water-cooled motor block, visualizes the shape of the casting, plans the general shape of the pattern, checks on core support, and plans the core boxes.
From the *Precision Wood Machining Series*. Problems in Patternmaking

Designing Core Boxes for a Water-cooled Motor Block (12 min, 16mm, sd, b & w, 1945, Order No. OE338, sale \$22.25, rental \$7.50, USOE) Tells how a patternmaker visualizes the water jacket, port cores, the core in the mold, and then designs the ram-up core and set-up core.
From the *Precision Wood Machining Series*. Problems In Patternmaking

Making a Core Box for a Flanged Pipe Elbow (21 min, 16mm, sd, b & w, 1945, Order No. OE330, sale \$37.00, rental \$7.50, USOE) Tells how to use a pattern layout in making a core box, design a core box, lay out a curved core box piece, turn the core cavity in a curved piece, assemble a core box having a curved core piece, and finish the core box.
From the *Precision Wood Machining Series*. Fundamentals Of Patternmaking, No. 10

Making a Core Box for a Machine Base (12 min, 16mm, sd, b & w, 1945, Order No. OE334, sale \$22.25, rental \$7.50, USOE) Describes how a patternmaker, working from a casting, goes about the job of designing a core box. Tells how he examines the casting, visualizes the problem, makes the layout, and constructs the pattern and core boxes.
From the *Precision Wood Machining Series*. Problems in Patternmaking

Making a Core Box for a Vertical Core (19 min, 16mm, sd, b & w, 1945, Order No. OE329, sale \$40.50, rental \$7.50, USOE) Explains function of the sand core, how to make a half box, and how to use parted boxes. Describes how to use layout pattern in making a core box, prepare core box pieces, and assemble a core box.
From the *Precision Wood Machining Series*. Fundamentals Of Patternmaking, No. 9

Making a Master Contour Template (18 min, 16mm, sd, b & w, 1944, Order No. OE125, sale \$37.50, rental \$7.50, USOE) Describes purpose of a master contour template. Tells how to transfer a line from a linesboard to a piece of sheet metal, measure and record bevel angles, and the importance of frequent checks for accuracy.
From the *Aircraft Work Series*. Templates, No. 1

Making a Master Developed Layout, Pt 1 (20 min, 16mm, sd, b & w, 1944, Order No. OE126, sale \$42.25, rental \$7.50, USOE) Tells how to make the complete pattern or master developed layout for a bulkhead in an airplane fin, using a master contour template.
From the *Aircraft Work Series*. Templates, No. 2

Making a Master Developed Layout, Pt 2, And Making the Form Block (16 min, 16mm, sd, b & w, 1944, Order No. OE127, sale \$33.75, rental \$7.50, USOE) Tells how to complete the master developed layout by calculating and scribing the form block lines. Describes how to make the form block.
From the *Aircraft Work Series*. Templates, No. 3

Making a Matchboard Pattern (21 min, 16mm, sd, b & w, 1945, Order No. OE328, sale \$37.00, rental \$7.50, USOE) Shows how to sketch a matchboard, make patterns, prepare gates to connect patterns, prepare the runner for the cope side, assemble the matchboard, turn a draft taper on a hole and attach flask fixtures.
From the *Precision Wood Machining Series*.

Making a One-piece Flat Pattern (22 min, 16mm, sd, b & w, 1945, Order No. OE321, sale \$38.50, rental \$7.50, USOE) Shows how to identify the parts of the molding flask, to use shrinkage rules, to prepare the pieces, to make identical castings and to finish the patterns.
From the *Precision Wood Machining Series*.

Making a Pattern for a Flanged Pipe Elbow (18 min, 16mm, sd, b & w, 1945, Order No. OE327, sale \$32.00, rental \$7.50, USOE) Tells how to make a right-angle layout, turn out separate core prints, make split flanges, set flanges into core prints, assemble half the pattern on the layout, dowel an elbow pattern, and apply leather fillets.
From the *Precision Wood Machining Series*. Fundamentals Of Patternmaking, No. 7

Making a Pattern for a Machine Molded Steel Globe and Angle Valve (14 min, 16mm, sd, b & w, 1945, Order No. OE340, sale \$25.50, rental \$7.50, USOE) Explains how machine molding affects pattern design and how a patternmaker designs and constructs a pattern for a valve body, including the gating system.
From the *Precision Wood Machining Series*. Problems in Patternmaking

Making a Pattern for a Three-part Mold (20 min, 16mm, sd, b & w, 1945, Order No. OE326, sale \$35.25, rental \$7.50, USOE) Gives reasons for the three-part pattern. Tells how to make the layout, segment the body or center section, eliminate end grain on large flanges, and turn large work on the end of the lathe.
From the *Precision Wood Machining Series*. Fundamentals Of Patternmaking, No. 6

Making a Pattern Requiring a Cover Core (14 min, 16mm, sd, b & w, 1945, Order No. OE332, sale \$25.50, rental \$7.50, USOE) Shows how molding and coring problems lead to the choice of a cover core. Describes how a patternmaker designs a pattern and core boxes requiring a cover core, designs a cover print, and constructs a pattern for a cover pulley.
From the *Precision Wood Machining Series*. Problems In Patternmaking

Making a Pattern Requiring Box Construction (17 min, 16mm, sd, b & w, 1945, Order No. OE333, sale \$30.50, rental \$7.50, USOE) Tells how a patternmaker approaches the task of making a pattern for a duplicate of a casting, examines and measures the casting, visualizes the problem, and constructs the pattern.
From the *Precision Wood Machining Series*. Problems In Patternmaking

Making a Pattern Requiring Segmental Construction (13 min, 16mm, sd, b & w, 1945, Order No. OE335, sale \$23.75, rental \$7.50, USOE) Explains why segmental construction is a preferred method for some patterns and shows how a patternmaker designs and constructs a pattern for a gear blank which requires segmental construction.

From the *Precision Wood Machining* Series. Problems in Patternmaking

Making a Pattern Using a Green and a Dry Sand Core (14 min, 16mm, sd, b & w, 1945, Order No. OE331, sale \$25.50, rental \$7.50, USOE) Describes how a green sand core is molded. Tells how a patternmaker determines when to allow for a green sand core, designs a pattern allowing for a green sand core, and visualizes and constructs a particular pattern.

From the *Precision Wood Machining* Series. Problems in Patternmaking

Making a Pattern with a Horizontal Core (14 min, 16mm, sd, b & w, 1945, Order No. OE323, sale \$25.50, rental \$7.50, USOE) Tells when to use a horizontal core, and how to allow for shrinkage in bronze, lay out fillets, make horizontal core prints, true up a parting plane, dowel a pattern with a horizontal core, and turn crusher strips.

From the *Precision Wood Machining* Series. Fundamentals Of Patternmaking, No. 3

Making a Pattern with a Tail Print (19 min, 16mm, sd, b & w, 1945, Order No. OE324, sale \$33.75, rental \$7.50, USOE) Depicts how to mold castings with holes, make a rough sketch for visualizing the actual casting, use dry sand cores, form core cavities by using tail prints, and make a layout including tail prints.

From the *Precision Wood Machining* Series. Fundamentals Of Patternmaking, No. 4

Making a Pattern with a Vertical Core (14 min, 16mm, sd, b & w, 1945, Order No. OE322, sale \$25.50, rental \$7.50, USOE) Shows the importance of making a preliminary sketch. Tells how to make the layout, allow for shrinkage, allow for finish, lay out the core prints, use the layout, assemble the pattern, allow for draft, and shellac the pattern.

From the *Precision Wood Machining* Series. Fundamentals Of Patternmaking, No. 2

Making a Segmented Pattern (22 min, 16mm, sd, b & w, 1945, Order No. OE325, sale \$38.50, rental \$7.50, USOE) Tells how to plan segmentation of pattern, lay out segments and web, assemble the pattern, prepare a recessed hub, and finish the pattern.

From the *Precision Wood Machining* Series. Fundamentals Of Patternmaking, No. 5

Making Pattern, Core Boxes, And Assembling Cores For a Water-cooled Motor Block (18 min, 16mm, sd, b & w, 1945, Order No. OE339, sale \$27.00, rental \$7.50, USOE) Tells how a patternmaker constructs the pattern and master core boxes, checks the working core boxes, and pastes up and assembles test cores.

From the *Precision Wood Machining* Series. Problems in Patternmaking

Redesigning a Pattern for Production Purposes (11 min, 16mm, sd, b & w, 1945, Order No. OE336, sale \$19.25, rental \$5.00, USOE) Describes how a pattern originally designed for casting a single piece is redesigned for quantity production.

From the *Precision Wood Machining* Series. Problems In Patternmaking

PHOTOGRAPHY

Army Research and Development - Film Report No. 34 - Seeing the Unseeable (30 min, 16mm, sd, color, 1969, Order No. R & D34, sale \$121.25, USA) Describes the role of photo-instrumentation in research and development projects, focusing on the more outstanding devices and systems used in studies related to munitions, ballistics, rocketry, space vehicles, nuclear effects, oceanography, medicine, agriculture and industry.

Moment in Time, A (25 min, 16mm, sd, color, 1968, Order No. MN10367, sale \$101.75, USN) Depicts the scope of Navy photography and the mission of major photographic field activities.

Pathfinders to Progress (25 min, 16mm, sd, color, 1963, Order No. SFP1223, sale \$101.75, USAF) Tells the story of the 1370th Photo-mapping Wing and its world-wide photographic and charting responsibilities. Shows the Wing's contributions to the global geodetic puzzle and the tools and techniques used to carry out this mission. Scenes of field operations around the world depict the latest methods in HIRAN tri-leration and precision visual and electronically controlled photography. (Cleared for TV)

USAF Combat Photography - Southeast Asia (27 min, 16mm, sd, color, 1968, Order No. FR885, sale \$109.50, USAF) Highlights advancement of photography since Civil War. Shows how it serves as link between policy makers, major command heads, and men in field. Explains functions of combat photo groups such as 600th Photographic Squadron in Saigon. Stresses importance of historical documentation. Shows airstrikes filmed under direct enemy attack and films rushed to laboratory nerve centers for automatic processing and evaluation. Shows Aerospace Audio Visual Service (AAVS), pod installation, and development program. (Cleared for TV)

PLASTICS

Compression Molding, Pt 1, Preparing the Charge and Loading the Mold (11 min, 16mm, sd, b & w, 1945, Order No. OE468, sale \$19.25, rental \$5.00, USOE) Shows how to set up the press, how to weigh and preheat the charge, and how to clean, lubricate, and load the mold.

From the *Plastics* Series. No. 3

Compression Molding, Pt 2, Molding a Simple Part (10 min, 16mm, sd, b & w, 1945, Order No. OE469, sale \$17.50, rental \$5.00, USOE) Shows how to close and breathe the mold, how and when to open the mold, how to prevent pieces from warping, and how to coordinate steps of the molding cycle.

From the *Plastics* Series. No. 4

Finishing Molded Parts (14 min, 16mm, sd, b & w, 1945, Order No. OE474, sale \$25.50, rental \$7.50, USOE) Demonstrates how to trim the gate, drum-sand the cable hole and gate, retap metal inserts, remove flash from contours and sand, buff and polish the finished part.

From the *Plastics* Series. No. 9

Injection Molding, Pt 1, Setting Up the Press and Molding a Part (14 min, 16mm, sd, b & w, 1945, Order No. OE472, sale \$28.50, rental \$7.50, USOE) Explains what happens in the plunger cylinder, heating cylinder and mold during injection molding. Shows how to set up an injection molding press for a specified job, maintain the operating cycle and prevent damage.

From the *Plastics* Series. No. 7

Injection Molding, Pt 2, Cleaning and Servicing the Press (12 min, 16mm, sd, b & w, 1945, Order No. OE473, sale \$22.25, rental \$7.50, USOE) Demonstrates how to disassemble the heating cylinder and clean the cylinder, hopper and feeder mechanism. Shows how to prepare scrap material for re-use.
From the *Plastics Series*. No. 8

Machining Laminated Plastics (19 min, 16mm, sd, b & w, 1945, Order No. OE475, sale \$33.75, rental \$7.50, USOE) Shows how to machine a typical laminated part, cut the tube stock to length on a circular saw, turn the outside diameters on a lathe, machine inside diameters by boring with a lathe and finish on a milling machine.
From the *Plastics Series*. No. 10

Methods of Processing Plastic Materials (25 min, 16mm, sd, b & w, 1945, Order No. OE467, sale \$43.75, rental \$10.00, USOE) Discusses fundamentals of lamination and of the compression, transfer, extrusion and injection molding methods. Shows how to finish molded parts.
From the *Plastics Series*. No. 2

Origin and Synthesis of Plastic Materials (16 min, 16mm, sd, b & w, 1945, Order No. OE466, sale \$28.50, rental \$7.50, USOE) Explores the organic origin of plastics and the resemblance of synthetic compounds to natural substances. Shows how plastics are made and typical uses for them.
From the *Plastics Series*. No. 1

Semi-automatic and Hand Molding of Intricate Parts (16 min, 16mm, sd, b & w, Order No. OE471, sale \$28.50, rental \$7.50, USOE) Shows how to mold a part with undercuts, mold a part with complicated shape, and assemble and disassemble a hand mold.
From the *Plastics Series*, No. 6

Transfer Molding - Molding a Part with Inserts (10 min, 16mm, sd, b & w, 1945, Order No. OE470, sale \$17.50, rental \$5.00, USOE) Explains how transfer molding differs from compression molding. Shows how to mold a part by the transfer method and coordinate steps of the molding cycle.
From the *Plastics Series*. No. 5

REFRIGERATION

Adding or Removing Refrigerant (17 min, 16mm, sd, b & w, 1945, Order No. OE441, sale \$30.50, rental \$7.50, USOE) Demonstrates how to check a domestic refrigeration system for lack of refrigerant, how to add refrigerant by weight and in unmeasured amounts and how to remove refrigerant from the refrigeration system.
From the *Refrigeration Service Series*. Domestic Units, No. 4

Adjusting and Checking the Expansion Valve (21 min, 16mm, sd, b & w, 1945, Order No. OE444, sale \$37.00, rental \$7.50, USOE) Describes the design and operation of the bellows type and the diaphragm type automatic expansion valves. Explains how to adjust, check and service the bellows type valve.
From the *Refrigeration Service Series*. Domestic Units, No. 7

Adjusting and Repairing the Thermo Expansion Valve (12 min, 16mm, sd, b & w, 1945, Order No. OE448, sale \$22.25, rental \$7.50, USOE) Explains the theory of multiple refrigeration systems. Tells how to test and adjust the thermo expansion valve, how to recognize symptoms of trouble in the valve and how to service the valve.
From the *Refrigeration Service Series*. Commercial Systems, No. 1

Adjusting Commercial Thermostatic Controls (12 min, 16mm, sd, b & w, 1945, Order No. OE450, sale \$22.25, rental \$7.50, USOE) Demonstrates how to adjust the thermostatic motor control, the thermo two-temperature valve and the thermo water valve.

From the *Refrigeration Service Series*. Commercial Systems, No. 3

Adjusting Pressure Actuated Temperature Control Devices (15 min, 16mm, sd, b & w, 1945, Order No. OE449, sale \$27.00, rental \$7.50, USOE) Describes the purpose of pressure actuated temperature control devices. Explains how to adjust the pressure actuated motor control and how to adjust the metering type and snap-action two-temperature valves.
From the *Refrigeration Service Series*. Commercial Systems, No. 2

Centrifugal Air Conditioning Equipment - Principles and Operation (20 min, 16mm, sd, color, 1969, Order No. MN10344A, sale \$80.25, USN) Describes operating principles of centrifugal air conditioning equipment.

Checking and Replacing a Float Valve (19 min, 16mm, sd, b & w, 1945, Order No. OE445, sale \$33.75, rental \$7.50, USOE) Describes the functions of two basic types of float valves--high side float and low-side float. Explains how to correct troubles in both types and how to replace high-side float.
From the *Refrigeration Services Series*. Domestic Units, No. 8

Checking the Electrical System (17 min, 16mm, sd, b & w, 1945, Order No. OE446, sale \$30.50, rental \$7.50, USOE) Explains how to check and service an overheated motor in a domestic refrigerator, how to repair a stalled capacitor motor and an R I motor and how to repair thermostatic motor controls
From the *Refrigeration Services Series*. Domestic Units, No. 9

Checking the System, Pt 1, General Procedure (17 min, 16mm, sd, b & w, 1945, Order No. OE438, sale \$30.50, rental \$7.50, USOE) Explains how to install gages in a domestic refrigerator, clean the condenser and oil the motor of an open-type refrigeration unit and check operation pressures, compressor performance, and temperature range of the cooling unit.
From the *Refrigeration Service Series*. Domestic Units, No. 1

Checking the System, Pt 2, Trouble Shooting (17 min, 16mm, sd, b & w, 1945, Order No. OE439, sale \$30.50, rental \$7.50, USOE) Explains how to determine causes of several common refrigeration troubles, such as 'unit will not run,' 'unit runs continuously,' 'improper refrigeration of food, but unit freezes ice cubes.'
From the *Refrigeration Service Series*. Domestic Units, No. 2

Locating and Repairing Leaks (17 min, 16mm, sd, b & w, 1945, Order No. OE440, sale \$30.50, rental \$7.50, USOE) Shows how to test for sulphur dioxide and methyl chloride leaks, use the halide torch to locate freon leaks and repair several types of leaks.
From the *Refrigeration Service Series*. Domestic Units, No. 3

Making and Repairing Tubing Connections (18 min, 16mm, sd, b & w, 1944, Order No. OE452, sale \$32.00, rental \$7.50, USOE) Shows how to straighten copper tubing, how to work, cut and dress copper tubing, how to make a flare for various sizes of tubing and how to sweat in a connector to cover a break.
From the *Refrigeration Service Series*. Commercial Systems, No. 5

Principles of Refrigeration (20 min, 16mm, sd, b & w, 1944, Order No. OE360, sale \$35.25, rental \$7.50, USOE) Explains the basic physics of heat transfer. Uses animation to show the compression and the absorption systems of refrigeration.

Quieting a Noisy Refrigerator (16 min, 16mm, sd, b & w, 1945, Order No. OE447, sale \$28.50, rental \$7.50, USOE) Shows how to check and correct compressor and motor noises, noises caused by wear or looseness of parts and noises caused by high head pressure or an oil-logged evaporator.
From the *Refrigeration Service Series*. Domestic Units, No. 1C

Refrigeration - Compressor Controls (6 min, 16mm, sd, b & w, 1957, Order Na. FN08158C, sale \$13.25, USN) Depicts how the low pressure switch turns on and off the compressor motor via motor controller and how safety controls protect compressor and motor.

Refrigeration - Condenser Controls (5 min, 16mm, sd, b & w, 1957, Order Na. FN08158D, sale \$11.25, USN) Shows controls for the condenser of a refrigeration system. Demonstrates how the refrigeration pressure in the high pressure line is used by the water-regulating valve to control the flow of water through the condenser. Tells how use of the water failure switch serves as protection for the compressor.

Refrigeration - Evaporator Controls (8 min, 16mm, sd, b & w, 1957, Order Na. FN08158B, sale \$17.25, USN) Examines how the thermostat switch and solenoid valve work to deliver full flow refrigerant to the thermal expansion valve. Explains the differential. Shows how the super head is used by the thermal expansion valve to control the flow of refrigerant into the evaporator coil, and how the evaporator pressure regulator works to release refrigerant from the evaporator to the compressor.

Refrigeration - Introduction to Control Mechanisms (10 min, 16mm, sd, b & w, 1970, Order Na. FN08158A, sale \$21.00, USN) Explains the function of the automatic controls in the refrigeration cycle and use of the manual control in emergencies.

Removing and Installing a Compressor or Condenser (17 min, 16mm, sd, b & w, 1945, Order Na. OE442, sale \$30.50, rental \$7.50, USOE) Shows how to evacuate and remove a compressor in a domestic refrigerator, evacuate a stuck compressor, install a compressor and remove and install a condenser.
From the *Refrigeration Service Series*. Domestic Units, No. 5

Removing and Installing a Cooling Unit (19 min, 16mm, sd, b & w, 1945, Order Na. OE443, sale \$33.75, rental \$7.50, USOE) Discusses cooling unit disorders in a domestic refrigerator. Shows how to evacuate valved evaporators, remove an oil-logged evaporator, install the evaporator and install a direct expansion cooling unit.
From the *Refrigeration Service Series*. Domestic Units, No. 6

Servicing Water-cooled Condensers (12 min, 16mm, sd, b & w, 1945, Order Na. OE451, sale \$22.25, rental \$7.50, USOE) Explains the theory of a counter-flow condenser, the essential elements of a water-cooled system and the operation and regulation of the electric water valve.
From the *Refrigeration Service Series*. Commercial Systems, No. 4

SOLDERING

Brazing Flanges with Silver Solder (13 min, 16mm, sd, b & w, 1944, Order Na. OE104, sale \$28.50, rental \$7.50, USOE) Describes how tubing and silver brazing flanges are fitted, flux applied, heat applied to draw silver solder in and out, and flanges cleaned after soldering.
From the *Shipbuilding Skills Series*. Copper Smithing, No. 3

Brazing Flanges with Spelter (19 min, 16mm, sd, b & w, 1944, Order Na. OE103, sale \$40.50, rental \$7.50, USOE) Illustrates how copper tubing is prepared for flanges, flanges fitted for brazing, borax applied before brazing flanges, tube and flange brazed over a forge, and brazed flanges prepared for installation on the hull.
From the *Shipbuilding Skills Series*. Copper Smithing, No. 2

Hand Soldering (20 min, 16mm, sd, b & w, 1944, Order Na. OE479, sale \$35.25, rental \$7.50, USOE) Explains the theory of soldering. Shows how to prepare soldering irons and torches, clean and prepare the work, fasten the joints, solder wire and lug joints and seal seams.
From the *Accessory Assembly Series*. Tools and Procedures, No. 1

High Frequency Soldering (17 min, 16mm, sd, b & w, 1944, Order Na. OE480, sale \$30.50, rental \$7.50, USOE) Discusses the theory of high frequency heating. Explains how to select a work coil and leads, tune a converter, determine correct soldering time and temperature, and use an automatic timer.

From the *Accessory Assembly Series*. Tools and Procedures, No. 2

Making a Wrapped and Soldered Splice (15 min, 16mm, sd, b & w, 1944, Order Na. OE144, sale \$27.00, rental \$7.50, USOE) Demonstrates how to make a ball soldered terminal, prevent the wires from unlaying when cut, fit a cable to a thimble and make the wire wrap.
From the *Aircraft Work Series*. Control Cables, No. 1

Tinning and Solder Wiping (26 min, 16mm, sd, b & w, 1944, Order Na. OE343, sale \$53.50, rental \$10.00, USOE) Shows how to clean copper tubing for tinning, apply flux to copper, tin copper tubing by hand and by dipping, and how copper reacts to heat when being dipped. And solder wiped.

From the *Shipbuilding Skills Series*. Coppersmithing No. 4

WATER TREATMENT

Ancient Quest, The (30 min, 16mm, sd, b & w, 1966, sale \$62.50, rental \$12.00, USIA) Explores U S progress in desalination.
From the *Report From America Series*.

New Water for a Thirsty World (22 min, 16mm, sd, color, sale \$89.75, USOSW) Tells of saline water conversion--its need, its workings, and its future potential.

Water, Friend or Enemy (10 min, 16mm, sd, color, 1943, Order Na. 08-10077, sale \$44.75, rental \$7.50, USCIAA) Uses animation to illustrate correct measures for keeping spring and well water from becoming contaminated.
From the *Health For the Americas Series*.

WELDING

Forge Welding (12 min, 16mm, sd, b & w, 1945, Order Na. OE192, sale \$22.25, rental \$7.50, USOE) Describes how to maintain a proper fire, upset and scarf round stock, make a lap weld, and shape and hammer refine the weld.
From the *Farm Work Series*. Forging, No. 2

Guided Bend Test, The (17 min, 16mm, sd, b & w, 1944, Order Na. OE189, sale \$30.50, rental \$7.50, USOE) Shows how to prepare groove weld and fillet weld test specimens for the guided bend test. Shows how to make the test and describes causes of failure in bending.
From the *Welding Procedures Series*. Testing, No. 1

Manual Cutting a Bevel - Freehand (13 min, 16mm, sd, b & w, 1944, Order Na. OE187, sale \$23.75, rental \$7.50, USOE) Shows how to select a tip for bevel cutting, clean a tip, adjust oxygen and acetylene pressure for bevel cutting and cut a bevel with minimum drag.
From the *Welding Procedures Series*. Oxygen Cutting, No. 2

Manual Cutting a Shape - Freehand Guided (16 min, 16mm, sd, b & w, 1944, Order Na. OE188, sale \$28.50, rental \$7.50, USOE) Shows how to make plywood template for cutting, make a tip guide device, position a template for cutting, use the guide device and use a circle cutting device.
From the *Welding Procedures Series*. Oxygen Cutting, No. 3

Manual Cutting to a Line - Freehand (21 min, 16mm, sd, b & w, 1944, Order No. OE186, sale \$37.00, rental \$7.50, USOE) Shows how to assemble an oxyacetylene cutting outfit, select proper cutting tip, adjust oxygen and acetylene delivery pressures, adjust the preheating cutting flames, make a 90 degree free-hand cut and disassemble the cutting outfit.

From the *Welding Procedures Series. Oxygen Cutting, No. 1*

Oxy-acetylene Welding - Light Metal (21 min, 16mm, sd, b & w, 1944, Order No. OE190, sale \$37.00, rental \$7.50, USOE) Shows how to assemble a gas welding outfit, adjust gas pressures, adjust the flame, and make a butt weld and a 'T' weld in light tubing.

From the *Welding Procedures Series. Oxyacetylene Welding, No. 1*

Spot Welding (20 min, 16mm, sd, b & w, 1945, Order No. OE295, sale \$35.25, rental \$7.50, USOE) Shows how to spot weld parts of an access cover, set up the machine, remove and install electrodes, set pressure, current and time controls, test the setup and clean the electrode tips.

From the *Aircraft Work Series. Assembling and Riveting, No. 9*

WOODWORKING

BAND SAW

Sawing a Reverse Curve and a Bevel Reverse Curve (18 min, 16mm, sd, b & w, 1945, Order No. OE310, sale \$32.00, rental \$7.50, USOE) Shows how to select and lay out stock to avoid waste, reverse curves to contour lines, use the table tilting gage, saw a beveled reverse curve, prepare a template for a newel post and saw a newel post. From the *Precision Wood Machining Series. Operations On the Band Saw, No. 2*

Sawing with Jig and Changing Band (20 min, 16mm, sd, b & w, 1945, Order No. OE309, sale \$17.50, rental \$7.50, USOE) Shows how to select proper band saw blades for the job, adjust saw guides, mark stock and cut to the mark, prepare a jig, and cut discs using a jig. From the *Precision Wood Machining Series.*

JOINTER

Beveling, Mitering, Rabbeting and Dadoing (19 min, 16mm, sd, b & w, 1945, Order No. OE307, sale \$33.75, rental \$7.50, USOE) Shows how to cut a bevel with tilted fence, set a miter gage, use a stop-block, set the fence and blade for cutting rabbets, and install and use a dado head. From the *Precision Wood Machining Series. Operations On the Variety Saw, No. 2*

Beveling, Stop Chamfering and Tapering Square Stock (20 min, 16mm, sd, b & w, 1945, Order No. OE303, sale \$35.25, rental \$7.50, USOE) Shows how to set fence for bevel cutting, adjust the proper amount of cut, cut chamfer, set the infeed and outfeed tables and stop blocks, and how to cut tapers. From the *Precision Wood Machining Series. Operations On the Joiner, No. 2*

Face Planing Uneven Surfaces (13 min, 16mm, sd, b & w, 1945, Order No. OE304, sale \$23.75, rental \$7.50, USOE) Shows how to surface wide stock on one side, to use a pusher, to make and use a feather board and to use a backing block for facing thin stock. From the *Precision Wood Machining Series. Operations On the Joiner, No. 3*

Joining an Edge for Gluing - Installing Knives (21 min, 16mm, sd, b & w, 1945, Order No. OE305, sale \$37.00, rental \$7.50, USOE) Shows how to determine when knives are dull, to remove them, to install sharp knives, to straighten crooked stock and to join edges for gluing. From the *Precision Wood Machining Series. Operations On the Joiner, No. 4*

Joining Edges and Ends 90 Degrees to Face (17 min, 16mm, sd, b & w, 1945, Order No. OE302, sale \$30.50, rental \$7.50, USOE) Shows the functions and operation of the jointer, explains how to identify surfaces of a piece of stock. Describes how to joint a square edge to size and joint a piece of glued stock to size. From the *Precision Wood Machining Series.*

SANDER

Sanding Flat and Irregular Surfaces (19 min, 16mm, sd, b & w, 1945, Order No. OE312, sale \$33.75, rental \$7.50, USOE) Shows how

to operate a sander belt and prepare it, to sand flat stock on a belt sander, to sand curved molding and to use and replace sandpaper. From the *Precision Wood Machining Series. Operations On the Sander, No. 1*

SPINDLE SHAPER

Cutting Grooves with Circular Saw Blades (22 min, 16mm, sd, b & w, 1952, Order No. OE320, sale \$38.50, rental \$7.50, USOE) Describes how to set up a machine to cut grooves and the operation for cutting grooves in stiles, spines and rails.

Cutting Tenons and Segments (15 min, 16mm, sd, b & w, 1945, Order No. OE308, sale \$27.00, rental \$7.50, USOE) Shows how to lay out and cut a tenon, to set up equipment, to prepare a jig, to guide the jig and to use a slide miter gage. From the *Precision Wood Machining Series. Operations On the Variety Saw, No. 3*

Rabbeting and Shaping an Edge on Straight Stock (18 min, 16mm, sd, b & w, 1945, Order No. OE318, sale \$32.00, rental \$7.50, USOE) Explains the principles of the shaper operation. Shows how to set up a machine for cutting rabbets and for shape molding, and describes the process. From the *Precision Wood Machining Series. Operations On a Spindle Shaper*

Shaping After Template and Shaping Curved Edge (17 min, 16mm, sd, b & w, 1945, Order No. OE319, sale \$30.50, rental \$7.50, USOE) Shows how to make a template, install knives, use the template for smoothing squared edges and set up equipment for shaping a curved edge. From the *Precision Wood Machining Series. Operations On the Spindle Shaper, No. 2*

VARIETY SAW

Cutting Cove Molding and a Corebox (19 min, 16mm, sd, b & w, 1945, Order No. OE311, sale \$33.75, rental \$7.50, USOE) Explains how to select stock for cove molding, cut and rip cove molding, select the proper blade for oblique cutting, and cut a deep hollow. From the *Precision Wood Machining Series. Operations On the Variety Saw, No. 4*

Ripping and Crosscutting (19 min, 16mm, sd, b & w, 1945, Order No. OE306, sale \$33.75, rental \$7.50, USOE) Shows how each working part of the variety saw functions. Demonstrates how to check saw blades, set the fence, change saw blades, use a cutoff gage and use a hinged block in crosscutting. From the *Precision Wood Machining Series.*

WOOD LATHE

Face Turning a Collar (16 min, 16mm, sd, b & w, 1944, Order No. OE317, sale \$28.50, rental \$7.50, USOE) Describes how to prepare a face plate chuck, how to attach work to face plate chuck, how to turn a fillet and how to taper turn a recess. From the *Precision Wood Machines Series. Operations On the Wood Lathe*

Turning a Cylinder between Centers (17 min, 16mm, sd, b & w, 1944, Order No. OE313, sale \$30.50, rental \$7.50, USOE) Points out how to choose stock and mount it on a wood lathe for turning between centers. Demonstrates the use of a parting tool and skew chisel. Explains sand turning work.

From the *Precision Wood Machining Series. Operations On the Wood Lathe*

Turning Taper Work (12 min, 16mm, sd, b & w, 1945, Order No. OE314, sale \$22.25, rental \$7.50, USOE) Explains centering cylindrical wood stock for spindle turning. Tells how and when to make clearance cuts. Shows how to establish the diameters of a taper, how to turn a single taper, how to establish diameters for turning two tapers from a single piece of material and how to turn them.

Turning Work in a Chuck (15 min, 16mm, sd, b & w, Order No. OE316, sale \$27.00, rental \$7.50, USOE) Explains how to mount work on a face plate, turn one face of the work, make a chuck for the opposite face and remove rechucked work from the chuck.

Turning Work On a Face Plate (15 min, 16mm, sd, b & w, 1944, Order No. OE315, sale \$27.00, rental \$7.50, USOE) Shows the various types of face plates. Explains how to attach the stock to the face plate, how to true up the wood, how to scribe the work for inside turning, how to use the round nose chisel and diamond point chisel and how to smooth the recess bottom.

From the *Precision Wood Machining Series. Operations On the Wood Lathe.*

OTHER MEDIA

AGRICULTURE

LIVESTOCK

Sheep Shearing (52 frs. 35mm filmstrip, silent, b & w, 1944, Order No. OE199-FS, sale \$1.50, USOE) illustrates how to handle sheep for shearing, shear the sheep step by step, and roll and tie the fleeces.
From the *Farm Work Series*. Livestock, No. 1

AUTOMOTIVE

DRIVER TRAINING

Operator and His Passengers, The (43 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE492-FS, sale \$1.50, USOE) Stresses the importance of good customer relations and presents ways of handling problems such as expired transfers, people who miss their stops, and getting passengers to move to the rear of a bus.
From the *Automotive Series: Bus Operation*, No. 2

MAINTENANCE

Inspecting and Adjusting Hydraulic Brakes (45 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE255-FS, sale \$1.50, USOE) Tells how to inspect the hydraulic brake system, bleed the hydraulic brakes, add fluid to the hydraulic system reservoir, and check the brakes.

AVIATION

INSPECTION AND MAINTENANCE

Adjustments After Check Flight (47 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE261-FS, sale \$1.50, USOE) Explains the causes of nose-heaviness, tail-heaviness, yawing, torque tendency, rough propeller and ground looping. Shows how to determine the particular causes of these troubles and make necessary adjustments.

From the *Aircraft Work Series*. Aircraft Maintenance

Airplane Mechanic, The (44 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE278-FS, sale \$1.50, USOE) Gives duties, skills, and responsibilities of an airplane mechanic.

From the *Aircraft Work Series*. Preventive Maintenance

Connecting and Adjusting Controls (43 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE260-FS, sale \$1.50, USOE) Describes how to inspect and adjust the elevator and rudder control cables, line up and safety a turn buckle, remove and replace a damaged aileron control cable, and adjust it for proper aileron travel.

From the *Aircraft Work Series*. Aircraft Maintenance

Inspecting and Reconditioning Piston Assembly (44 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE263-FS, sale \$1.50, USOE) Explains how to clean, inspect and recondition the piston assembly, how to measure clearances and how to install new piston rings.

From the *Aircraft Work Series*. Power Plant Maintenance

Inspecting and Reconditioning Valve Assembly (54 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE264-FS, sale \$1.50, USOE) Demonstrates how to disassemble the valve mechanism, clean and recondition the parts, measure clearances, reassemble the valve mechanism and reinstall pistons and cylinders.

From the *Aircraft Work Series*. Power Plant Maintenance

Inspection of Threads (49 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE148-FS, sale \$1.50, USOE) Tells how to identify different parts of an American National standard thread, inspect external threads with a roll snap gage, adjust the roll snap gage, and inspect internal threads with a plug gage.

From the *Aircraft Work Series*. Inspection, No. 4

Periodic Inspection - Airplane (51 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE282-FS, sale \$1.50, USOE) Explains the importance and meaning of thoroughness in performing a periodic inspection, showing a complete detailed inspection of an aileron as an example.

From the *Aircraft Work Series*. Preventive Maintenance

Periodic Inspection - Engine (40 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE283-FS, sale \$1.50, USOE) Shows how to inspect the general condition of an engine, examine internal parts, check ignition and fuel system, examine the propeller, and prepare an engine for run-up.

From the *Aircraft Work Series*. Preventive Maintenance

Preflight Inspection - Airplane (46 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE280-FS, sale \$1.50, USOE) Shows the necessity for careful and thorough inspection. Tells how to use the 'circle method' to inspect landing gear, wings, fuselage, tail surfaces, cabins, controls, and instruments.

From the *Aircraft Work Series*. Preventive Maintenance

Preflight Inspection - Engine (47 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE281-FS, sale \$1.50, USOE) Tells how to check the general condition of an aircraft engine--inspect the fuel system, ignition system, and engine fittings and attachments. Describes how to conduct an engine run-up and complete the inspection procedure.

From the *Aircraft Work Series*. Preventive Maintenance

Servicing a Propeller (52 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE277-FS, sale \$1.50, USOE) Tells how to inspect and remove a propeller, repair damage to the metal edges, check and correct for out-of-track and for out-of-balance, and reinstall the propeller.

From the *Aircraft Work Series*. Power Plant Maintenance

Servicing an Airplane (43 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE279-FS, sale \$1.50, USOE) Shows how to perform the various routine servicing operations on a plane on the ground--cleaning the airplane, refueling, changing the oil, inflating tires and starting the engine. Shows hand signals for guiding the pilot.

Servicing and Timing Magnetos (40 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE266-FS, sale \$1.50, USOE) Tells how to remove magnetos from the engine, install and adjust new points, and reinstall and time the magnetos.

From the *Aircraft Work Series*. Power Plant Maintenance

Servicing Spark Plugs and Ignition Wiring (50 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE265-FS, sale \$1.50, USOE) Shows how to remove spark plugs and ignition wires, how to clean, inspect, adjust and reinstall the spark plugs, and how to prepare and install ignition wires.

From the *Aircraft Work Series*. Power Plant Maintenance

Troubleshooting Problems - Fuel Induction (48 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE276-FS, sale \$1.50, USOE) Shows how to trouble shoot the fuel system for failure to develop full power, for rough running at idling speed, and for overheating.

From the *Aircraft Work Series*. Power Plant Maintenance

Troubleshooting Problems - Ignition (52 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE275-FS, sale \$1.50, USOE) Describes how to locate trouble within the ignition system when an engine fails to start, when it runs rough, and when it fails to develop full power.

From the *Aircraft Work Series*. Power Plant Maintenance

Troubleshooting Problems - Mechanical And Lubrication (46 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE274-FS, sale \$1.50, USOE) Shows how to check symptoms and locate causes of an airplane engine's running 'rough,' of low oil pressure, and of high oil temperature.

From the *Aircraft Work Series*. Power Plant Maintenance

REPAIR

Attaching and Aligning Wings (45 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE258-FS, sale \$1.50, USOE) Describes how to inspect a damaged wing, remove the damaged wing, attach a new wing, level the airplane and align the wing, and inspect the finished job.

From the *Aircraft Work Series*. Aircraft Maintenance

Building a Box Beam Spar (47 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE297-FS, sale \$1.50, USOE) Tells how to assemble parts of the spar in a jig, apply aircraft glue, clamp parts together for a good glue bond, varnish surfaces, and use jigs for accurate drilling.

From the *Aircraft Work Series*. Wood Fabrication, No. 2

Building a Wooden Rib (38 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE296-FS, sale \$1.50, USOE) Describes how to assemble, fit, and glue wooden parts in a jig, fit and position the gussets to the framework, and apply aircraft glue and varnish.
From the *Aircraft Work Series*. Wood Fabrication, No. 1

Disassembling the Engine (38 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE268-FS, sale \$1.50, USOE) Shows how to remove the oil sump, valve tappet, and gear case cover assemblies. Tells how to separate crankcase, remove crankshaft assembly and camshaft, and disassemble crankshaft and gear case cover assemblies.
From the *Aircraft Work Series*. Power Plant Maintenance

Engine Change - Installation (47 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE273-FS, sale \$1.50, USOE) Describes safety precautions to be observed when installing an engine, how to inspect engine mount, controls, and firewall, connect controls and attachments, ground-test the engine, and prepare for check flight
From the *Aircraft Work Series*. Power Plant Maintenance

Engine Change - Removal (50 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE272-FS, sale \$1.50, USOE) Shows safety precautions to be observed when removing an engine, how to disconnect controls and attachments, remove the engine, and inspect the mount, firewall, and controls.
From the *Aircraft Work Series*. Power Plant Maintenance

Fabricating Metal Aircraft (41 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE288-FS, sale \$1.50, USOE) Describes how sheet metal is used in aircraft fabrication, how to cut sheet metal, form and assemble sheet metal parts, and fit major assemblies together.
From the *Aircraft Work Series*. Metal Fabrication

Forming On the Stretching Machine (36 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE251-FS, sale \$1.50, USOE) Shows how to form a skin panel on the stretch press, set up the machine, make necessary adjustments for a production run, and handle the run.
From the *Aircraft Work Series*. Forming Sheet Metal, No. 6

Installing and Aligning Tail Surfaces (43 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE259-FS, sale \$1.50, USOE) Shows how to inspect and remove damaged tail surfaces, and prepare new parts for installation. Describes how to install new stabilizers, elevators, and rudder.
From the *Aircraft Work Series*. Aircraft Maintenance

Installing Landing Gear (44 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE257-FS, sale \$1.50, USOE) Tells how to remove damaged landing gear. Shows how to replace old bolts, nuts, and cotters. Describes how to install an aircraft bolt properly, assemble and install a new landing gear, and check alignment and track of wheels.
From the *Aircraft Work Series*. Aircraft Maintenance

Laying Out and Forming Plywood (39 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE285-FS, sale \$1.50, USOE) Tells how to lay out plywood using blueprints and templates, form plywood in a press, reinforce plywood, and apply glue and varnish.
From the *Aircraft Work Series*. Wood Fabrication, No. 3

Making a Master Contour Template (34 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE125-FS, sale \$1.50, USOE) Describes purpose of a master contour template. Tells how to transfer a line from a linesboard to a piece of sheet metal, measure and record bevel angles, and the importance of frequent checks for accuracy.
From the *Aircraft Work Series*. Templates, No. 1

Making a Master Developed Layout, Pt 2, And Making the Form Block (50 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE127-FS, sale \$1.50, USOE) Tells how to complete the master developed layout by calculating and scribing the form block lines. Describes how to make the form block.

From the *Aircraft Work Series*. Templates, No. 3

Making Sheet Metal Repairs (34 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE252-FS, sale \$1.50, USOE) Describes how to remove damaged area around hole and lay out trim lines. Tells how to prepare hole to receive patch, 'bump' out plug and doubler. Mark and drill plug and doubler, and rivet completed patch to part.
From the *Aircraft Work Series*. Aircraft Maintenance

Overhauling Camshaft Assembly and Crankcase Section (42 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE270-FS, sale \$1.50, USOE) Explains how to inspect the camshaft and gear case cover assembly, inspect and recondition the crankcase section, measure crankcase bearings and inspect and recondition the remaining parts.
From the *Aircraft Work Series*. Power Plant Maintenance

Overhauling Crankshaft Assembly (41 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE269-FS, sale \$1.50, USOE) Explains how to clean the parts of a disassembled engine, inspect and recondition crankshaft assembly parts, determine clearances and check for out-of-round and inspect clearances against specifications.
From the *Aircraft Work Series*. Power Plant Maintenance

Overhauling the Carburetor (48 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE267-FS, sale \$1.50, USOE) Shows how to remove the carburetor assembly from the engine, disassemble, clean, inspect and reassemble the carburetor, check the fuel level and reinstall the carburetor assembly.
From the *Aircraft Work Series*. Power Plant Maintenance

Patching Fabric (46 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE250-FS, sale \$1.50, USOE) Tells how to cut out and prepare the damaged area. Describes how to prepare, dope, rib-stitch, and finish a patch.
From the *Aircraft Work Series*. Aircraft Maintenance

Patching Plywood (48 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE249-FS, sale \$1.50, USOE) Shows how to splay the edge of a hole, prepare and apply a splayed patch, make a flush or plug-type patch, make a frame of doubler and apply a flush patch.
From the *Aircraft Work Series*. Power Plant Maintenance

Reassembling the Engine (50 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE271-FS, sale \$1.50, USOE) Describes how to reassemble the crankshaft and camshaft assemblies, crankcase section, and gear case cover assembly. Tells how to reinstall the oil sump and completely reassemble the engine.
From the *Aircraft Work Series*. Power Plant Maintenance

Removing and Inspecting Cylinders (44 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE262-FS, sale \$1.50, USOE) Tells how to remove the cylinder assemblies from the engine, disassemble the cylinder assemblies, and clean, inspect, and recondition the cylinders.
From the *Aircraft Work Series*. Power Plant Maintenance

Repairing a Wooden Rib (42 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE247-FS, sale \$1.50, USOE) Tells how to remove gussets and broken rib parts, splice a section of cap strip, cut and finish a scarf joint, make a new truss member, and make and assemble gussets and reinforcement plates.
From the *Aircraft Work Series*. Aircraft Maintenance

Repairing Aircraft Tires (50 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE254-FS, sale \$1.50, USOE) Tells how to inspect an airplane tire, remove the tire, remove the tube from the tire, vulcanize the tube, repair a cut in the tire, and reinstall the wheel.
From the *Aircraft Work Series*. Aircraft Maintenance

Repairing and Relining Mechanical Brakes (54 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE256-FS, sale \$1.50, USOE) Describes how to check brake action, remove wheel and inspect brakes, disassemble wheel and remove brake lining, install new brake lining, replace brake cables, and adjust brakes.

From the *Aircraft Work Series*. Aircraft Maintenance

Repairing Structural Tubing (47 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE253-FS, sale \$1.50, USOE) Shows how to straighten a bent tube, round out a tube, remove a damaged section of tube, prepare a replacement section, prepare internal reinforcing sleeves and assemble and weld the replacement section and sleeves.

From the *Aircraft Work Series*. Aircraft Maintenance

Splicing a Wooden Spar (45 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE248-FS, sale \$1.50, USOE) Tells how to cut a scarf joint on a spar, finish a scarf face by hand, and glue and assemble a scarf joint. Tells how to make, glue, and assemble reinforcement plates and trim a spar to shape and size.

From the *Aircraft Work Series*. Aircraft Maintenance

Wing Assembly - The Bow Tip (36 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE284-FS, sale \$1.50, USOE) Shows how to fit the bow tip strip to the leading edge strip, make the spar tip joint, install the ribs, shape the bow tip, apply and glue the bow tip skins, and varnish the surface.

From the *Aircraft Work Series*. Wood Fabrication, No. 6

Wing Assembly - The Inboard Panel (35 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE300-FS, sale \$1.50, USOE) Describes how to install subassemblies in a jig, apply and glue the skins, apply and remove pressure strips, finish the outside surface, and inspect the completed assembly.

From the *Aircraft Work Series*. Wood Fabrication, No. 5

Wing Assembly - The Nose Section (44 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE299-FS, sale \$1.50, USOE) Tells how to position the main spar in the jig. Describes installation of the webbed ribs, junction rib, regular ribs, and leading edge strip. Shows how to apply and glue the skins, and finish the surface of the nose section.

From the *Aircraft Work Series*. Wood Fabrication, No. 4

EDUCATION & CULTURE

GENERAL

ERIC-A Series (25 frs, 35mm filmstrip, record, color, 1970, sale \$5.00, USFDA) Shows the organization and use of the educational resources information center, a national information network for acquiring, abstracting, indexing, storing, and disseminating significant and timely educational research and program descriptions.

INTRODUCTION TO ERIC13 frs
HOW TO USE ERIC6 frs
ERIC ADVANCED TRAINING PROGRAM6 frs

ERIC Advanced Training Program (6 frs, 35mm filmstrip, record, color, 1970, , USFDA) Sold only as part of the ERIC series.
From the *ERIC Series*.

How to Use ERIC (6 frs, 35mm filmstrip, record, color, 1970, , USFDA) Sold only as part of the ERIC series.
From the *ERIC Series*.

Introduction to ERIC (13 frs, 35mm filmstrip, record, color, 1970, , USFDA) Sold only as part of the ERIC series.
From the *ERIC Series*

LANGUAGES

Foreign Service Institute Language Tapes (114 in audiotape, full-track, monaural,) The materials prepared by the Foreign Service Institute, U S Department of State are not available for loan, rental or preview prior to purchase. However, the first tape of any set and its accompanying text (where available) may be purchased separately at a minimum charge of \$10.00. All tapes are on 5-inch reels at 3-3/4 ips.

Amharic, Basic Course, Units 1-50 (51 reels, audiotape, full-track, monaural, sale \$137.75) Tape set and accompanying text are both available for \$140.00.

Amharic, Basic Course, Units 51-60 Reader Glossary (10 reels, audiotape, full-track, monaural, sale \$27.00) Tape set and accompanying text are both available for \$29.50.

Beginning Japanese, Pt 1 (30 reels, audiotape, full-track, monaural, sale \$81.00, USFSI) Textbook to accompany this tape set is available from Yale University Press.

Beginning Japanese, Pt 2 (30 reels, audiotape, full-track, monaural, sale \$81.00, USFSI) Textbook to accompany this tape set is available from Yale University Press.

Bulgarian, Basic Course, Vol 1, Units 1-15 (37 reels, audiotape, full-track, monaural, sale \$100.00, USFSI) Textbook to accompany this tape set is out of print.

Bulgarian, Basic Course, Vol 2, Units 16-30 (20 reels, audiotape, full-track, monaural, sale \$54.00, USFSI) Textbook to accompany this tape set is out of print.

Cambodian, Basic Course, Vol 1, Units 1-45 (45 reels, audiotape, full-track, monaural, sale \$121.50, USFSI) Tape set and accompanying text are both available for \$123.50.

Chinyanja, Basic Course (30 reels, audiotape, full-track, monaural, sale \$81.00, USFSI) Tape set and accompanying text are both available for \$82.75.

Finnish, Graded Reader (28 reels, audiotape, full-track, monaural, sale \$75.50, USFSI) Tape set and accompanying text are both available for \$80.00.

Finnish, Basic Course (69 reels, audiotape, full-track, monaural, sale \$186.25, USFSI) Textbook to accompany this tape set is available from Indiana University.

Finnish, Pronunciation and Readings (4 reels, audiotape, full-track, monaural, sale \$10.75, USFSI) Textbook to accompany this tape set is available from Indiana University.

French, Basic Course, Units 1-12 (39 reels, audiotape, full-track, monaural, sale \$105.25, USFSI) Tape set and accompanying text are both available for \$109.25. Text is for units 1-12 and 13-34.

French, Basic Course, Units 13-34 (46 reels, audiotape, full-track, monaural, sale \$124.25, USFSI) Textbook accompanying first set covers units 1-12 and 13-34.

French, Supplementary Exercises 1-15 for Basic Course (104 reels, audiotape, full-track, monaural, sale \$280.00, USFSI) Tape set and accompanying text are both available for \$283.25.

German, Basic Course, Units 1-12 (43 reels, audiotape, full-track, monaural, sale \$116.00, USFSI) Tape set and accompanying text are both available for \$118.00.

German, Basic Course, Units 13-24 (42 reels, audiotape, full-track, monaural, sale \$113.50, USFSI) Tape set and accompanying text are both available for \$115.25.

Greek, Basic Course, Vol 1 (32 reels, audiotape, full-track, monaural, sale \$86.50, USFSI) Tape set and accompanying text are both available for \$88.25.

Greek, Basic Course, Vol 2 (33 reels, audiotape, full-track, monaural, sale \$89.00, USFSI) Tape set and accompanying text are both available for \$90.00.

Greek, Basic Course, Vol 3 (11 reels, audiotape, full-track, monaural, sale \$29.75, USFSI) Tape set and accompanying text are both available for \$31.75.

Hausa, Basic Course (30 reels, audiotape, full-track, monaural, sale \$81.00, USFSI) Textbook to accompany this tape set is out of print.

Hebrew, Basic Course (61 reels, audiotape, full-track, monaural, sale \$164.75, USFSI) Tape set and accompanying text are both available for \$167.25.

Hungarian, Basic Course, Units 1-12 (40 reels, audiotape, full-track, monaural, sale \$108.00, USFSI) Tape set and accompanying text are both available for \$109.25.

Hungarian, Basic Course, Units 13-24 (43 reels, audiotape, full-track, monaural, sale \$116.00, USFSI) Tape set and accompanying text are both available for \$117.75.

Hungarian, Graded Reader (32 reels, audiotape, full-track, monaural, sale \$86.50, USFSI) Tape set and accompanying text are both available for \$92.50.

Igbo, Basic Course (37 reels, audiotape, full-track, monaural, sale \$100.00, USFSI) Textbook to accompany this tape set is out of print.

Kirundi, Basic Course (35 reels, audiotape, full-track, monaural, sale \$94.50, USFSI) Tape set and accompanying text are both available for \$97.25.

Kituba, Basic Course (27 reels, audiotape, full-track, monaural, sale \$73.00, USFSI) Tape set and accompanying text are both available for \$75.25.

Korean, Basic Course, Vol 1 (35 reels, audiotape, full-track, monaural, sale \$94.50, USFSI) Tape set and accompanying text are both available for \$97.50.

Korean, Basic Course, Vol 2 (31 reels, audiotape, full-track, monaural, sale \$83.50, USFSI) Tape set and accompanying text are both available for \$88.25.

Lingala, Basic Course (24 reels, audiotape, full-track, monaural, sale \$64.75, USFSI) Tape set and accompanying text are both available for \$66.25.

Luganda, Basic Course (19 reels, audiotape, full-track, monaural, sale \$51.25, USFSI) Tape set and accompanying text are both available for \$53.50.

More, Basic Course (56 reels, audiotape, full-track, monaural, sale \$151.25, USFSI) Tape set and accompanying text are both available for \$153.00.

Serbo-croatian, Basic Course, Units 1-25 (39 reels, audiotape, full-track, monaural, sale \$105.30, USFSI) Tape set and accompanying text are both available for \$108.75.

Serbo-croatian, Basic Course, Units 26-50 (44 reels, audiotape, full-track, monaural, sale \$118.75, USFSI) Tape set and accompanying text are both available for \$122.75.

Spanish, Basic Course, Units 1-15 (30 reels, audiotape, full-track, monaural, sale \$81.00, USFSI) Tape set and accompanying text are both available for \$88.50. Text is for units 1-15 and 16-30.

Spanish, Basic Course, Units 16-30 (36 reels, audiotape, full-track, monaural, sale \$97.25, USFSI) Textbook accompanying first set covers units 1-15 and 16-30.

Spanish, Basic Course, Units 31-45 (31 reels, audiotape, full-track, monaural, sale \$83.75, USFSI) Tape set and accompanying text are both available for \$87.00.

Spanish, Basic Course, Units 46-55 (30 reels, audiotape, full-track, monaural, sale \$81.00, USFSI) Tape set and accompanying text are both available for \$83.50.

Spanish, Programmatic, Vol 1 (44 reels, audiotape, full-track, monaural, sale \$118.75, USFSI) Tape set and accompanying text are both available for \$121.00.

Swahili, Basic Course (38 reels, audiotape, full-track, monaural, sale \$102.50, USFSI) Tape set and accompanying text are both available for \$105.50.

Swahili, Active Introduction - General Conversation (4 reels, audiotape, full-track, monaural, sale \$10.75, USFSI) Tape set and accompanying text are both available for \$11.50.

Swahili, Active Introduction - Geography (5 reels, audiotape, full-track, monaural, sale \$13.50, USFSI) Tape set and accompanying text are both available for \$14.25.

Turkish, Basic Course, Units 1-30 (52 reels, audiotape, full-track, monaural, sale \$140.50, USFSI) Tape set and accompanying text are both available for \$142.50.

Twi, Basic Course (23 reels, audiotape, full-track, monaural, sale \$62.00, USFSI) Tape set and accompanying text are both available for \$63.25.

Vietnamese, Basic Course, Vol 1, Guide to Pronunciation, Lessons 1-10 (37 reels, audiotape, full-track, monaural, sale \$100.00, USFSI) Tape set and accompanying text are both available for \$101.75.

Vietnamese, Basic Course, Vol 2, Lessons 11-15 (18 reels, audiotape, full-track, monaural, sale \$48.50, USFSI) Tape set and accompanying text are both available for \$50.00.

Yoruba, Basic Course (69 reels, audiotape, full-track, monaural, sale \$186.25, USFSI) Tape set and accompanying text are both available for \$188.00.

TECHNIQUES

I Am a Teacher Aide (13 min, 35mm filmstrip, record, color, sale \$8.00, USOE) Shows the contributions of the aide to education, the role of the aide in working with the teacher, and the aide's analysis of her contribution and growing awareness of her own development. From the *Teams For Learning* Series.

ELECTRICITY

INSTALLATION

Identifying and Precutting Cables (26 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE112-FS, sale \$1.50, USOE) Describes characteristics of vca cable used in merchant ships. Tells how to compute cable size for identification and how to identify and precut cable.

From the *Shipbuilding Skills* Series. Marine Electricity, No. 3

Installing and Connecting Telltale Panel (34 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE116-FS, sale \$1.50, USOE) Tells how to lay out telltale unit, remove insulation from cable, reinsulate conductors and cable, and connect conductors to the multiconnection box.

From the *Shipbuilding Skills* Series. Marine Electricity, No. 7

Laying Out and Installing Compartment Fixtures (34 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE114-FS, sale \$1.50, USOE) Tells how to locate installations on a planview blueprint, lay out

ceiling fixtures and studs, lay out and burn a hole for the passage of cable, and install ceiling fixtures.

From the *Shipbuilding Skills* Series. Marine Electricity, No. 5

Laying Out and Installing Main Wireway (26 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE111-FS, sale \$1.50, USOE) Tells how to determine from the blueprint the route the cables are to follow and the size of the hangers to be used. Describes how to lay out the raceways, install flat bars and hangers, and lay out penetration holes to be cut.

From the *Shipbuilding Skills* Series. Marine Electricity, No. 2

Pulling and Installing Cable and Packing Terminal Tubes (34 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE113-FS, sale \$1.50, USOE) Tells how to pull, strap, and straighten cable. Describes how to prepare cable for pushing and for pulling with a rope, and pack terminal tubes.

From the *Shipbuilding Skills* Series. Marine Electricity, No. 4

Wiring Telltale Panel (49 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE115-FS, sale \$1.50, USOE) Describes the purpose of telltale units. Tells how to strip cable, form and lace conductors on a jig, strip the ends of conductors and put on lugs, and hook up conductors and test the connections.

HEALTH AND MEDICAL

ADDICTION

Drug Abuse Education and Information Slide Resource Kit (165 2x2 slides, silent, color, sale \$55.00, USBNDD) Supplements presentations by drug abuse education and information personnel. Some sections are designed for specific locales or audiences while other sections can be used generally--depending upon the presentation.

Drug Abuse Education Material (20 2x2 slides, silent, color, sale \$6.00, USBNDD) Part G of the Drug Abuse Education and Information Slide Resource Kit.

Drug Abuse Education Programs and Councils (15 2x2 slides, silent, color, sale \$5.50, USBNDD) Part H of the Drug Abuse Education and Information Slide Resource Kit.

Drug Abusers' Propaganda (15 2x2 slides, silent, color, sale \$5.50, USBNDD) Part B of the Drug Abuse Education and Information Slide Resource Kit.

Drugs and Your Body (12 2x2 slides, silent, color, sale \$5.50, USBNDD) Part D of the Drug Abuse Education and Information Slide Resource Kit.

Drugs of Abuse (33 2x2 slides, silent, color, sale \$10.00, USBNDD) Part C of the Drug Abuse Education and Information Slide Resource Kit.

History of Drug Abuse (18 2x2 slides, silent, color, sale \$6.00, USBNDD) Part A of the Drug Abuse Education and Information Slide Resource Kit.

Rehabilitation and Treatment Centers (22 2x2 slides, silent, color, sale \$7.00, USBNDD) Part F of the Drug Abuse Education and Information Slide Resource Kit.

U S Bureau of Narcotics and Dangerous Drugs (30 2x2 slides, silent, color, sale \$10.00, USBNDD) Part E of the Drug Abuse Education and Information Slide Resource Kit.

DENTAL, DIAGNOSIS

Oral Cancer - Detection and Diagnosis (94 2x2 slides, silent, color, 1967, Order No. S-1414, sale \$16.00, USCDC) Explains techniques used to detect oral cancer. Illustrates normal and abnormal oral and perioral soft tissue and shows biopsy techniques. Presents the steps which comprise a thorough examination of the oral soft tissue and points out how to determine when tissue is normal or abnormal. Shows how to determine when a biopsy is indicated. Accompanied by programmed text.

DENTAL, GENERAL

Oral Hygiene - Techniques for Maintenance of Dental Health Of the Physically Handicapped... (64 frs, 35mm filmstrip, tape reel, color, Order No. F-2003-X, sale \$10.00, USNMAC) Full title - Oral Hygiene - Techniques for Maintenance of Dental Health of the Physically Handicapped, Mentally Retarded Resident--explains the reasons why mentally retarded, physically handicapped residents

develop poor mouth conditions. Shows what roles the ward personnel and the dentists play in promoting and maintaining health in the resident's mouth. Shows the quadrants and surfaces of the mouth, and step-by-step procedure for brushing these areas.

DENTAL, PATIENT EDUCATION

Michael Gets a Letter (39 frs, 35mm filmstrip, record, color, 1970, sale \$7.50, USDDH) Encourages preschool and early elementary school children to make regular dental appointments a habit and helps prepare children for the experiences they may have in the recall appointment. Some of the dental procedures, instruments and equipment which may be encountered are identified and explained. Accompanied by a 45 RPM record and text. Also sold as a set with Michael Likes Good Food for \$12.50.

Michael Likes Good Food (36 frs, 35mm filmstrip, record, color, 1970, sale \$7.50, USDDH) Presents to preschool and early elementary school children good eating habits that are desirable for dental health. Particular emphasis is placed on eating sweets only with meals and selecting and eating non-sweets for between-meal snacks. Accompanied by a 45 rpm record and text. Also sold as a set along with Michael Gets a Letter For \$12.50.

Pedro and the Dentist (Spanish and English) (25 frs, 35mm filmstrip, record, color, sale \$15.00, USDDH) Prepares the preschool and primary school child for his first visit to the dentist by introducing him to the sights and sounds of the dental office. Accompanied by a 33-1/3 RPM record with Spanish and English soundtrack and text. Filmstrip is not sold alone. Price includes Pedro Learns to Brush His Teeth. It can also be purchased as a set including Pedro Learns to Brush His Teeth, Pedro Likes Good Food, and Pedro Gets A letter for \$25.00.

Pedro Gets a Letter (Spanish and English) (40 frs, 35mm filmstrip, record, color, 1970, sale \$15.00, USDDH) Encourages preschool and early elementary school children to make regular dental appointments a habit and helps prepare children for the experiences they may have in the recall appointment. Some of the dental procedures, instruments and equipment which may be encountered are identified and explained. Accompanied by a 33-1/3 RPM record with Spanish and English soundtrack and text.

Filmstrip is not sold alone. Price includes Pedro Likes Good Food. It can also be purchased as a set including, Pedro Likes Good Food, Pedro Learns to Brush His Teeth, and Pedro and the Dentist for \$25.00.

Pedro Learns to Brush His Teeth (Spanish And English) (29 frs, 35mm filmstrip, record, color, 1970, sale \$15.00, USDDH) Teaches young children a method of toothbrushing. Accompanied by a 33-1/3 RPM record with Spanish and English soundtrack and text.

Filmstrip is not sold alone. Price includes Pedro and the Dentist. It can be purchased as a set including Pedro and the Dentist, Pedro Gets A letter, and Pedro Likes Good Food, for \$25.00.

Pedro Likes Good Food (Spanish and English) (36 frs, 35mm filmstrip, record, color, 1970, sale \$15.00, USDDH) Presents to preschool and early elementary school children good eating habits that are desirable for dental health. Particular emphasis is placed on eating sweets only with meals and selecting and eating non-sweets for between-meal snacks. Accompanied by a 33-1/3 RPM record with Spanish and English soundtrack and text.

Filmstrip is not sold alone. Price includes Pedro Gets a Letter. It can also be purchased as a set including, Pedro Gets a Letter, Pedro and the Dentist, and Pedro Learns to Brush His Teeth, for \$25.00.

DIGESTIVE SYSTEM

Assessment of Fat Digestion (33 min, 2x2 slides, tape reel, color, Order No. S-1732-X, sale \$9.00, USNMAC) Shows chemical and physical events in fat digestion, use of test meal to assess fat digestion, necessity of reference marker to indicate dilution, necessity of lipolysis for micellar solubilization, and principles of titrimetric measurement of lipase. Demonstrates the influence of acid jejunal pH on lipase activity and protective role of bicarbonate, fat digestion in lipase deficiency, reasons for lipase deficiency, unreliability of percent lipolysis as an indicator of lipase activity, and the measurement of bile acids by steroid dihydrogenase. Also discussed is the importance of the physical state of bile acids, precipitation of glycine dihydroxy bile acids when jejunal pH is acid, thin layer chromatography of free and conjugated bile acids, fat digestion in bile acid deficiency, reasons for bile acid deficiency, and fat digestion when pancreatic secretion is delayed as well as the influence of fat digestion on fat absorption.

From the *Fat Absorption in Health and Disease Series*.

Differential Diagnosis of Streatorrhea (30 min, 2x2 slides, tape reel, color, Order No. S-1734-X, sale \$9.00, USNMAC) Explains classification of malabsorption syndromes characterized by streatorrhea with brief consideration of pathogenic factors for each major type. Gives diagnostic tests for streatorrhea and for the diseases which produce it, including screening and confirmatory laboratory procedures, roentgenologic examination of the small intestine and jejunal mucosal biopsies. Discusses frequently encountered problems in differential diagnosis.

From the *Fat Absorption in Health and Disease Series*.

Enterohepatic Circulation of Bile Acids, The (28 min, 2x2 slides, tape reel, color, Order No. S-1730-X, sale \$8.00, USNMAC) Gives information on definition and localization, determination of bile acid kinetics by isotope dilution, bile acid homeostasis, conjugation of free bile acids by liver enzymes and deconjugation by bacterial enzymes, hydroxylation of cholesterol to form bile acids and bacterial 7-dehydroxylation, fate of secondary bile acids, influence of bile acid conjugation on polarity and fraction present in nonionized form at physiological PH in intestinal content. Also deals with the site and mechanism of bile acid absorption in ileum, active, and all bile acids, including, jejunum, passive, glycine dihydroxy bile acids and free bile acids when present in disease.

From the *Fat Absorption in Health and Disease Series*.

Fat Absorption in Health and Disease--a Series (2x2 slides, tape reel, color, sale \$55.00, USNMAC)

INTRODUCTION - THE ABSORBING SURFACE10 frs
FAT DIGESTION - LIPOLYSIS AND MICELLE FORMATION, DISORDERS27 frs
FAT ABSORPTION - INTRACELLULAR EVENTS, DISORDERS20 frs
ENTEROHEPATIC CIRCULATION OF BILE ACIDS, THE28 frs
PROPERTIES OF PANCREATIC LIPASE25 frs
ASSESSMENT OF FAT DIGESTION33 frs
DIFFERENTIAL DIAGNOSIS OF STREATORRHEA	30 frs
STREATORRHEA IN THE BLIND LOOP SYNDROME21 frs
USEFULNESS OF MEDIUM CHAIN TRIGLYCERIDES18 frs

Fat Absorption - Intracellular Events, Disorders (20 min, 2x2 slides, tape reel, color, Order No. S-1729-X, sale \$7.00, USNMAC) Discusses the main intracellular steps in fat absorption, penetration of lipolysis products, synthesis of glycerides and phospholipids, and release of chylomicrons. The problems of understanding penetration into the cell membrane are emphasized, with some speculations on mechanisms. Activation of fatty acids, the monoglyceride and glycerophosphate pathways of glyceride synthesis, and the assembly of chylomicrons are included under the second step. Disorders in each of the three steps are shown to be related to production of fat malabsorption in various disease states.

From the *Fat Absorption in Health and Disease Series*.

Fat Digestion - Lipolysis and Micelle Formation, Disorders (27 min, 2x2 slides, tape reel, color, Order No. S-1728-X, sale \$9.00, USNMAC) Outlines theoretical principles of chemical events in lipolysis, physical properties of cholesterol to bile acids, amphipathic nature of the bile acid molecule, micelle formation, micellar solubilization used to measure the critical micellar concentration, micellar solubility of lipolytic products--oil and micellar phases of intestinal content and distribution of lipolytic products between the two phases in vivo, physical state of lipids when lipolysis or micellar dispersion is impaired, and reasons for fat maldigestion.

From the *Fat Absorption in Health and Disease Series*.

Introduction - The Absorbing Surface (10 min, 2x2 slides, tape reel, color, Order No. S-1727-X, sale \$6.00, USNMAC) Gives an introduction to the first four units in the fat absorption in health and disease series--the absorbing surface, fat digestion, fat absorption and the enterohepatic circulation of bile acids and the subsidiary basic and clinical lectures for those familiar with the core material. Following this introduction, certain concepts of the absorbing surface are briefly discussed, including the idea of a membrane separating the inside of the body from the outside, molecular passage across the membrane by diffusion or variants of that process, the movement of water insoluble materials through an aqueous medium, and the development of large surface areas both of the absorbing membrane and oil-water interface for materials to be absorbed.

From the *Fat Absorption in Health and Disease Series*.

Properties of Pancreatic Lipase (25 min, 2x2 slides, tape reel, color, Order No. S-1731-X, sale \$7.00, USNMAC) A discussion of the fundamental steps in the enzyme reaction sequence by which pancreatic lipase catalyzes the hydrolytic breakdown of ester bonds of triglycerides at the oil-water interface of oil droplets in water. The specificity of the enzyme for esters of primary alcohol groups is emphasized, and the kinetics of reaction of the sequential products described. Finally, the effects of this specificity on the composition of lymph triglycerides and the usefulness of the enzyme for determining structure of glycerides are mentioned.

From the *Fat Absorption in Health and Disease Series*.

Streatorrhea in the Blind Loop Syndrome (21 min, 2x2 slides, tape reel, color, Order No. S-1733-X, sale \$7.00, USNMAC) The general features of the blind loop syndrome are mentioned briefly, with emphasis on intestinal stasis as a condition for bacterial overgrowth in the proximal gut. The various possible mechanisms by which these bacteria could produce streatorrhea are considered, and the evidence reviewed. Fat malabsorption is concluded to occur because of deficiency of conjugated bile salts rather than toxicity of free bile acids, and reasons given. A basis for rational management and definitive therapy is given, developed from conclusions regarding the pathogenesis of the problem.

From the *Fat Absorption in Health and Disease Series*.

Usefulness of Medium Chain Triglycerides, The (18 min, 2x2 slides, tape reel, color, Order No. S-1735-X, sale \$6.00, USNMAC) Medium chain triglycerides, a recently developed, semi-synthetic type of food, have been enthusiastically recommended as well as deprecated as a faddish novelty. Some facts are given about how they compare with

differ with respect to ordinary fats and oils, in physical properties, physiologic handling, and metabolic properties. The place of reasonable use of this food supplement in clinical practice is discussed, and some points mentioned concerning the practical utilization of this material.

From the *Fat Absorption in Health and Disease Series*.

ENVIRONMENTAL HEALTH

Clean Hands (35 2x2 slides, tape reel, color, 1970, sale \$9.25, USFDA) Stresses the importance of one's hands in food production and the need for keeping them clean and sanitary. A farm worker, the food plant worker, demonstrates hand washing techniques. Designed for in-plant training of food plant employees and food handlers.

GENERAL

Bi-valve Casts, Their Construction And Application (14 min, 35mm filmstrip, tape reel, color, Order No. F-1472-X, sale \$10.00, USNMAC) Describes the purpose and value of bi-valve casts helping to keep the child's legs in good alignment, prevention of the formation of contractures, and aiding the child in maintaining an upright or standing position. Shows procedure from preparation of the extremity through construction of the cast and a demonstration.

NEUROLOGY

Basis of Diagnosis of Peripheral Nerve Injuries to the Upper Limb (73 frs, 35mm filmstrip, tape reel, color, 1969, Order No. F-1717, sale \$12.00, USNMAC) Depicts development of the peripheral nervous system. Shows development of the etaxial and hypaxial musculature and illustrates the formation and innervation of the upper limb. Considers methods of examination of the muscles of the upper extremity.

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NURSING AND PATIENT CARE

Care of the Patient with Hydrocephaly (35mm filmstrip, tape reel, color, Order No. F-1470-X, sale \$8.50, USNMAC) Describes how the patient with hydrocephaly is cared for at the Plymouth State Home and Training School, Northville, Michigan. It presents some of the physical descriptions of the head and spinal cord, and also a brief discussion of some of the causes and diagnostic procedures.

Fundamentals of Massage (47 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE414-FS, sale \$1.50, USOE) Describes techniques of fundamental massage movements--deep stroking, kneading, and friction. Gives principal physiological effects of these massage movements upon the human organism.

From the *Nursing Series*.

NUTRITION

Community Canning (20 frs, 35mm filmstrip, silent, b & w, 1943, Order No. OE198-FS, sale \$1.50, USOE) Explains how to wash, snap, grade, blanch, and season beans. Describes how to prepare the cans, pack and exhaust them, label and seal the cans, use a pressure cooker or retort, and cool, dry, and store the cans.

From the *Farm Work Series. Food Preservation, No. 1*

REHABILITATION

Diapers Away (20 min, 12 in audiodisc, 33 1/3 rpm, monaural, sale \$9.50, USNMAC) Phonograph record to accompany the filmstrips--*Diapers Away - Toilet Training the Mentally Retarded Child at Home* and *Diapers Away - Toilet Training Mentally Retarded Children in Groups*.

Diapers Away - Toilet Training the Mentally Retarded Child at Home (55 frs, 35mm filmstrip, silent, color, 1968, Order No. F-1586-X, sale \$5.50, USSRS) Most mentally retarded children can be trained, with time, by persons having patience and a knowledge of training techniques. Filmstrip demonstrates technique for teaching toilet use to a child in a home. This filmstrip may be purchased as a set with F-1587-x And an accompanying audiodisc for \$15.00.

Diapers Away - Toilet Training Mentally Retarded Children in Groups (49 frs, 35mm filmstrip, silent, color, 1968, Order No. F-1587-X, sale \$5.50, USSRS) Most mentally retarded children can be trained, with time, by persons having patience and a knowledge of training techniques. Filmstrip demonstrates technique for teaching toilet use to groups of children in institutions and day-care centers. This filmstrip may be purchased as a set with F-1586-x And an accompanying audiodisc for \$15.00.

Growing Up at the Table (23 min, 12 in audiodisc, 33 1/3 rpm, monaural, sale \$9.50, USNMAC) Phonograph record to accompany the filmstrips--*Growing Up at the Table - Teaching Feeding Skills to the Mentally Retarded Child at Home* and *Growing Up at the Table - Teaching Feeding Skills to Mentally Retarded Children in Groups*.

Growing Up at the Table - Teaching Feeding Skills To Mentally Retarded Children in Groups (52 frs, 35mm filmstrip, silent, color, 1968, Order No. F-1585-X, sale \$5.50, USSRS) Most mentally retarded children can be trained, with time, by persons having patience and a knowledge of training techniques. Filmstrip demonstrates technique for teaching feeding skills to groups of children in institutions and day-care centers. This filmstrip may be purchased as a set with F-1584-X and an accompanying audiodisc for \$15.00.

Growing Up at the Table - Teaching Feeding Skills To the Mentally Retarded Child at Home (50 frs, 35mm filmstrip, silent, color, 1968, Order No. F-1584-X, sale \$5.50, USSRS) Most mentally retarded children can be trained, with time, by persons having patience and a knowledge of training techniques. Filmstrip demonstrates technique for teaching feeding skills to a child in the home. This filmstrip may also be purchased as a set with F-1 and an accompanying audiodisc for \$15.00.

Recreational and Occupational Therapy (35 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE415-FS, sale \$1.50, USOE) Depicts recreational and occupational activities fitted to the patient's condition--passive diversion during an immobile state, limited physical activities carried on in bed, individualized occupational therapy, and social recreation projects.

From the *Nursing Series*.

MACHINING

METAL CUTTING BAND SAW

Sawing Template Metal (50 fts, 35mm filmstrip, silent, b & w, 1943, Order No. OE128-FS, sale \$1.50, USOE) Tells how to mount a saw blade on a band saw, select and adjust blade guides, saw to a layout line, 'Chew Out' metal from a notch, and remove burrs. From the *Aircraft Work Series. Templates, No. 4*

MARINE

SHIPBUILDING

Aligning and Installing Auxiliary Machinery (42 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE096-FS, sale \$1.50, USOE) Shows how to lay out foundations for machinery installation, drill bolt holes, establish centers for holes for drilling, and align machines accurately on foundations.

From the *Shipbuilding Skills* Series. Marine Machinery Installation, No. 2

Bending Copper Tubing to a Wire Template (37 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE102-FS, sale \$1.50, USOE) Describes how tubing is annealed, cooled and filled with rosin, how a wire template is made, and how bends are marked on copper tubing, made, and checked.

From the *Shipbuilding Skills* Series. Copper Smithing, No. 1

Bulkhead, The - Laying Off and Fitting a Centerline Stiffener (46 frs, 35mm filmstrip, silent, b & w, 1943, Order No. OE031-FS, sale \$1.50, USOE) Shows design of a centerline bulkhead stiffener. Tells how to lay out the main stiffener bar with the water-lines and work lines. Describes how to lay out, cut, and fit a main stiffener bracket and tripping brackets.

From the *Shipbuilding Skills* Series. Work Of Shipfitter and Shipwright, No. 8

Bulkhead, The - Laying Off the Boundary, Stiffeners, Waterlines, and Buttock Lines (43 frs, 35mm filmstrip, silent, b & w, 1943, Order No. OE030-FS, sale \$1.50, USOE) Illustrates how to align templates to a bulkhead plate, mark off stiffener work lines on the bulkhead plate, and prepare the plate for welding the stiffeners.

From the *Shipbuilding Skills* Series. Work Of Shipfitter and Shipwright, No. 7

Bulkhead, The - Setting a Transverse Watertight Bulkhead into the Hull (57 frs, 35mm filmstrip, silent, b & w, 1943, Order No. OE032-FS, sale \$1.50, USOE) Describes how to square a transverse bulkhead to a frame line and the centerline of the ship, set the bulkhead to proper height and declivity, cut the bulkhead to fit the innerbottom, and fit the bulkhead to the hull and tack-weld it.

From the *Shipbuilding Skills* Series, Work Of Shipfitter and Shipwright, No. 9

Covering Hot and Cold Pipes (54 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE109-FS, sale \$1.50, USOE) Describes materials used to insulate hot and cold pipes. Explains how to insulate straight pipe and how to cover coupling, bend, elbow, valve and flange.

From the *Shipbuilding Skills* Series. Pipe Insulation, No. 1

Deck Girders - Subassembly (44 frs, 35mm filmstrip, silent, b & w, 1943, Order No. OE028-FS, sale \$1.50, USOE) Explains use of transverse and longitudinal girders in hull structures. Tells how to fit, weld, and rivet stiffening brackets to a transverse girder and to a longitudinal girder.

From the *Shipbuilding Skills* Series. Work Of Shipfitter and Shipwright, No. 5

Deck Plates - Regulating and Setting (38 frs, 35mm filmstrip, silent, b & w, 1943, Order No. OE033-FS, sale \$1.50, USOE) Describes how to mark off the centerline, frame lines, and buttock lines on deck girders. Tells how to line up deck plates to the reference lines, fit square, scarfed, and V-type butt joints, and hold plates flush for welding.

From the *Shipbuilding Skills* Series. Work Of Shipfitter and Shipwright, No. 10

Deck, The - Setting a Web Frame and a Transverse Beam (47 frs, 35mm filmstrip, silent, b & w, 1943, Order No. OE029-FS, sale \$1.50, USOE) Describes how to square a web frame with the frame and buttock lines, shore up a transverse deck beam, and fair the transverse beam to the centerline and frame line of the deck.

From the *Shipbuilding Skills* Series. Work Of Shipfitter and Shipwright, No. 6

Filing and Installing Chocks (34 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE097-FS, sale \$1.50, USOE) Tells how chocks are used in machinery installation, measurements are made for preparing chocks, prussian blue and chalk are used for adjusting chocks, and how foundations and chocks are drilled for bolting machine.

From the *Shipbuilding Skills* Series. Marine Machinery Installation, No. 3

Fitting Tube, Shaft, and Propeller (58 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE342-FS, sale \$1.50, USOE) Describes how the stern tube and tail shaft are installed, how the propeller is swung into position and lined up, how the fairwater cap and rope guard are installed, and how the tail-shaft assembly is secured for launching.

From the *Shipbuilding Skills* Series. Marine Machinery Installation, No. 9

How to Check and Surface Foundations (35 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE095-FS, sale \$1.50, USOE) Tells how to check the location of machinery foundations to blueprint specifications, align and level foundations, and surface or smooth foundations.

From the *Shipbuilding Skills* Series. Marine Machinery Installation, No. 1

Innerbottom, The - Setting Up Floors and Longitudinals (44 frs, 35mm filmstrip, silent, b & w, 1943, Order No. OE026-FS, sale \$1.50, USOE) Tells how to fair the keel, set and fit transverse floors, and set, fit, and weld longitudinal girders.

From the *Shipbuilding Skills* Series. Shipfitter and Shipwright, No. 3

Innerbottom Sections - Subassembly of a Closed Floor, Subassembly Of an Open Floor (42 frs, 35mm filmstrip, silent, b & w, 1943, Order No. OE025-FS, sale \$1.50, USOE) Shows how the keel, longitudinal girders, transverse side stiffeners, and tank stops form the innerbottom of a ship, Shows how to lay out and install closed floor and open floor sections, and to weld stiffeners to the floors.

Installing Valves and Strainer on Sea Chest (29 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE099-FS, sale \$1.50, USOE) Tells how studs are driven and checked for accuracy, valves are installed on sea chests, and how strainer is prepared for and installed on sea chest.

From the *Shipbuilding Skills* Series, Marine Machinery Installation, No. 5

Installing Valves in Engine Room Systems, Pt 1 (37 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE123-FS, sale \$1.50, USOE) Describes identification of principal units in engine-room system and function of valves in controlling cycle of steam. Includes design and functions of gate valve, globe valve, and check valve.

From the *Shipbuilding Skills* Series. Pipefitting, No. 8

Installing Valves in Engine Room Systems, Pt 2 (46 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE124-FS, sale \$1.50, USOE) Describes installation of the globe valve in main steam line, gate, angle, and swing-check valves. Shows flanged valves, and valves with threaded fittings, and valves with threaded fittings where clearance is limited.

From the *Shipbuilding Skills* Series. Pipefitting, No. 9

Installing Vitreous Fixtures (54 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE121-FS, sale \$1.50, USOE) Tells how to lay out, drill, and tap the seating. Describes how to measure and cut brass

studs, make watertight installations, and assemble and connect the flushometer.

From the *Shipbuilding Skills Pipefitting, No. 6*

Laying Off Bulkheads (25 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE101-FS, sale \$1.50, USOE) Tells how to measure on bulkheads from the temporary line and establish the center of bulkhead openings. Describes the purpose for laying off the bulkheads and tells when to run the permanent line.

From the *Shipbuilding Skills Series. Marine Machinery Installation*

Laying Out and Installing Hangers (48 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE120-FS, sale \$1.50, USOE) Shows how to measure and cut hanger legs to length. Illustrates how to install stool, angle iron bracket, strap, rod, and saddle hangers.

From the *Shipbuilding Skills Series. Pipefitting, No. 5*

Laying Out and Installing Kickpipes and Stuffing Tubes (57 frs, 35mm filmstrip, silent, b & w, 1945, Order No. OE110-FS, sale \$1.50, USOE) Tells how to locate the kickpipe or stuffing tube area, lay out the penetration area, cut or burn the penetration area, and install the kickpipe or stuffing tube.

Laying Out, Drilling, and Tapping Flanges On Sea Chest (32 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE098-FS, sale \$1.50, USOE) Describes component parts of a sea chest. Tells how locations of flanges are checked, flanges leveled, stud hole centers are laid out, and stud holes drilled and tapped.

From the *Shipbuilding Skills Series. Marine Machinery Installation, No. 4*

Making a Cold Bend On a Hand Powered Machine (49 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE108-FS, sale \$1.50, USOE) Discusses the importance of bends in marine pipe installation. Shows how to measure pipe for bends and how to operate a hand-bending machine.

From the *Shipbuilding Skills Series. Pipefitting, No. 4*

Measuring Pipe, Tubing, and Fittings (48 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE105-FS, sale \$1.50, USOE) Explains how to identify types of pipe, tubing and fittings, use basic measuring

tools, measure pipe for offsets and make allowances for fittings and offsets in measuring pipe.

From the *Shipbuilding Skills Series. Pipefitting, No. 1*

Pipe Fabrication with Jigs (48 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE122-FS, sale \$1.50, USOE) Explains the purpose of the jig. Shows how to lay out and assemble targets for a jig, set hangers and targets using a pipe section as a template and fabricate pipe on the jig.

From the *Shipbuilding Skills Series. Pipefitting, No. 7*

Preparing and Setting a Keelblock and Bottom Cradle (45 frs, 35mm filmstrip, silent, b & w, 1943, Order No. OE024-FS, sale \$1.50, USOE) Describes use of base line, vertical centerline, buttock lines, waterlines, and frame lines in checking dimensions during ship construction. Tells how to lay a keelblock, use templates to make spauls, and erect a ship cradle.

From the *Shipbuilding Skills Series. Work Of Ship Fitter and Shipwright, No. 1*

Running a Permanent Line and Boring (58 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE341-FS, sale \$1.50, USOE) Tells how to run the permanent line, establish reference marks, install and adjust the boring bar, and rough-and finish-bore propeller post and various bulkheads to specifications.

From the *Shipbuilding Skills Series. Marine Machinery Installation, No. 8*

Running a Temporary Line (32 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE100-FS, sale \$1.50, USOE) Describes how the propeller post is prepared for running a temporary line, how to adjust a line to the center of bulkhead openings, how to eliminate the sag when a line has been run, and how a temporary line is checked for proper position.

From the *Shipbuilding Skills Series. Marine Machinery Installation, No. 6*

Side Frames - Subassembly of a Web Frame (45 frs, 35mm filmstrip, silent, b & w, 1943, Order No. OE027-FS, sale \$1.50, USOE) Shows how to lay out the main web plate from a template, fit stiffeners to the web plate, and dog the stiffeners to the plate for welding.

From the *Shipbuilding Skills Series. Work Of Shipfitter and Shipwright, No. 4*

SCIENCE

SPACE PROGRAMS, LUNAR EXPLORATION

Eagle Has Landed - The Flight of Apollo 11 (28 min, 8mm film, silent, color, 1969, sale \$59.75, USNASA) Shows man's first moon landing, July 1969, including highlights of the flight of astronauts Armstrong, Aldrin, and Collins from launching through post-recovery activities, with emphasis on initial exploration of the lunar surface.

Please specify exactly the format you desire and the exact model number of the projector you will be using when you order 8-mm cartridges.

Eagle Has Landed, - The Flight of Apollo 11 (28 min, 8mm film, magnetic sound, color, 1969, sale \$98.00, USNASA) Shows man's first moon landing, July 1969, including highlights of the flight of astronauts Armstrong, Aldrin, and Collins from launching through post-recovery activities, with emphasis on initial exploration of the lunar surface.

Please specify exactly the format you desire and the exact model number of the projector you will be using when you order 8-mm cartridges.

Eagle Has Landed, - The Flight of Apollo 11 (28 min, super-8mm film, silent, color, 1969, sale \$64.25, USNASA) Shows man's first moon landing, July 1969, including highlights of the flight of astronauts Armstrong, Aldrin, and Collins from launching through post-recovery activities, with emphasis on initial exploration of the lunar surface.

Please specify exactly the format you desire and the exact model number of the projector you will be using when you order super 8-mm cartridges.

Eagle Has Landed, - The Flight of Apollo 11 (28 min, super-8mm film, sd, color, 1969, sale \$75.50, USNASA) Shows man's first moon landing, July 1969, including highlights of the flight of astronauts Armstrong, Aldrin, and Collins from launching through post-recovery activities, with emphasis on initial exploration of the lunar surface.

For use with Technicolor Model 1000A 8-mm cartridge projector only.

Eagle Has Landed, - The Flight of Apollo 11 (28 min, super-8mm, magnetic sound, color, 1969, sale \$105.00, USNASA) Shows man's first moon landing, July 1969, including highlights of the flight of

astronauts Armstrong, Aldrin, and Collins from launching through post-recovery activities, with emphasis on initial exploration of the lunar surface.

Please specify exactly the format you desire and the exact model number of the projector you will be using when you order super 8-mm cartridges.

Flight of Eagle and Columbia (7 min, 8mm film, silent, color, 1969, sale \$15.50, USNASA) Shows man's first moon landing, July 1969, including highlights of the flight of astronauts Armstrong, Aldrin, and Collins from launching through post-recovery activities, with emphasis on initial exploration of the lunar surface.

Please specify exactly the format you desire and the exact model number of the projector you will be using when you order 8-mm cartridges.

Flight of Eagle and Columbia (7 min, 8mm film, magnetic sound, color, 1969, sale \$33.50, USNASA) Shows man's first moon landing, July 1969, including highlights of the flight of astronauts Armstrong, Aldrin, and Collins from launching through post-recovery activities, with emphasis on initial exploration of the lunar surface.

Please specify exactly the format you desire and the exact model number of the projector you will be using when you order 8-mm cartridges.

Flight of Eagle and Columbia (7 min, super-8mm film, silent, color, 1969, sale \$17.00, USNASA) Shows man's first moon landing, July 1969, including highlights of the flight of astronauts Armstrong, Aldrin, and Collins from launching through post-recovery activities, with emphasis on initial exploration of the lunar surface.

Please specify exactly the format you desire and the exact model number of the projector you will be using when you order super 8-mm cartridges.

Flight of Eagle and Columbia (7 min, super-8mm film, sd, color, 1969, sale \$25.50, USNASA) Shows man's first moon landing, July 1969, including highlights of the flight of astronauts Armstrong, Aldrin, and Collins from launching through post-recovery activities, with emphasis on initial exploration of the lunar surface.

For use with Technicolor Model 1000A 8-mm cartridge projector only.

Flight of Eagle and Columbia (7 min, super-8mm, magnetic sound, color, 1969, sale \$34.50, USNASA) Shows man's first moon landing, July 1969, including highlights of the flight of astronauts Armstrong, Aldrin, and Collins from launching through post-recovery activities, with emphasis on initial exploration of the lunar surface.

Please specify exactly the format you desire and the exact model number of the projector you will be using when you order super 8-mm cartridges.

TECHNICAL

GENERAL

Cutting and Threading Pipe on a Power Machine (48 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE107-FS, sale \$1.50, USOE) Explains how to measure and cut pipe for fittings, how to ream pipe which has been cut and how to thread pipe by machine.
From the *Shipbuilding Skills* Series. Pipefitting, No. 3

Repainting a Frame Building (44 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE460-FS, sale \$1.50, USOE) Tells how to prepare a building for painting, set up staging, prepare paint, apply the prime and second coats, and care for brushes, paint, and equipment.
From the *Farm Workers* Series. Painting, No. 1

HAND TOOLS

Cutting and Threading Pipe by Hand (47 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE106-FS, sale \$1.50, USOE) Explains how to use pipe cutter and pipe reamer, select and insert proper dies in stock, thread pipe by hand, test threads for it, prepare fitted pipe for delivery and care for tools.
From the *Shipbuilding Skills* Series. Pipefitting, No. 2

PATTERNMAKING

Making a Master Developed Layout, Pt 1 (36 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE126-FS, sale \$1.50, USOE) Tells how to make the complete pattern or master developed layout for a bulkhead in an airplane fin, using a master contour template.
From the *Aircraft Work* Series. Templates, No. 2

SOLDERING

Brazing Flanges with Silver Solder (27 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE104-FS, sale \$1.50, USOE) Describes how tubing and silver brazing flanges are fitted, flux applied, heat applied to draw silver solder in and out, and flanges cleaned after soldering.
From the *Shipbuilding Skills* Series. Copper Smithing, No. 3

Brazing Flanges with Spelter (37 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE103-FS, sale \$1.50, USOE) Illustrates how copper tubing is prepared for flanges, flanges fitted for brazing, borax applied before brazing flanges, tube and flange brazed over a forge, and brazed flanges prepared for installation on the hull.
From the *Shipbuilding Skills* Series. Copper Smithing, No. 2

Tinning and Solder Wiping (59 frs, 35mm filmstrip, silent, b & w, 1944, Order No. OE343-FS, sale \$1.50, USOE) Shows how to clean copper tubing for tinning, apply flux to copper, tin copper tubing by hand and by dipping, and how copper reacts to heat when being dipped and solder wiped.

WITHDRAWN TITLES

TITLE	MEDIA	PROD AGENCY	ORDER NUMBER
ABC Warfare Defense Ashore—Biological Warfare Decontamination—Personnel	16mm MP	USN	MN 7984 E
ABC Warfare Defense Ashore—Protective Clothing for Decontamination—Personnel	16mm MP	USN	MN 7984 D
Aircraft Familiarization—T2J-1 BUCKEYE—Carrier Procedures	16mm MP	USN	MN 8817 E
Aircraft Magneto, The	16mm MP	USAF	TF 1-3638
Aircraft Observer's Place in the Air Force	16mm MP	USAF	SFP 311
Aircraft Structure—Control Surfaces	16mm MP	USAF	TF 1-700
Air Force Story, The	16mm MP	USAF	SFP 263-22
Alaskan Earthquake, The	16mm MP	USGS	
American Heritage Contest	16mm MP	USOD	AFIF 148
Anatomy of Aggression, The	16mm MP	USDOD	AFIF 108
Army Aircraft Gas Turbine Engine Operation, Pt 2, Controls and Instrumentation	16mm MP	USA	TF 46-2986
Asia—The Crucial Area	16mm MP	USDOD	AFIF 161
Australia	16mm MP	USDOD	AFIF 4
Background—Southeast Asia	16mm MP	USDOD	AFIF 121
Basic Physics of an Atomic Bomb, The	16mm MP	USDOD	MF 20-7896
Before the Day	16 mm MP	USSSA	
Bennies and Goofballs	16mm MP	USFDA	
Biologic Aspects of Operative Dentistry	16mm MP	USVA	D-114
Brazil	16mm MP	USDOD	AFIF 33
Canada	16mm MP	USDOD	AFIF 43
Care of Feet	16mm MP	USN	MN 6143
Cartoid Triangle	16mm MP	USVA	D-49A
Chaplain and Commander, The	16mm MP	USA	TF 16-3202
Chaplain Story, The	16mm MP	USA	TF 16-1943
Class IV Gold Foil	16mm MP	USVA	D-5-0
Coast Guard Auxiliary	16mm MP	USCG	
Code, The—The U.S. Fighting Man's Code of Conduct	16mm MP	USDOD	AFIF 90
Communism	16mm MP	USDOD	AFIF 5
Communist Blueprint for Conquest	16mm MP	USDOD	AFIF 76
Communist Europe	16mm MP	USDOD	AFIF 107
Communist Target—Youth	16mm MP	USDOD	AFIF 116
Communist Weapon of Allure, The	16mm MP	USDOD	AFIF 75
Complicated Exodontia—Introduction	16mm MP	USN	MN 6722
Combined Resection of Tongue and Floor of Mouth Radical Neck Dissection	16mm MP	USVA	
Crown and Bridge, A Series	16mm MP	USVA	
Tooth Preparation			D-34-FP
Fabrication of the Temporary Bridge			D-35-FP
Impression Procedure—Compound in Copper Band			D-36-FP
Crown Insertion and Bridge Adjustment			D-37-FP
Cummings City—Military Assistance in Civil Disaster	16mm MP	USDOD	AFIF 89
Day that Made the Difference, The	16mm MP	USDOD	CD-38-226
Day Without End—Duties of a Civil Defense Director	16mm MP	USOCD	CD-20-225
Development of a Postage Stamp, The	35mm FS	USPO	
Doppler Navigation System AN/ASN-64 Operation	16mm MP	USA	TF 11-3805
Drilling Metal, Wood, and Plastics	16mm MP	USN	MN 142

TITLE	MEDIA	PROD AGENCY	ORDER NUMBER
Endodontics—Diagnosis and Case Selection	16mm MP	USVA	D-14-E
Endodontics—Filling the Root Canal			
Endodontics—Filling the Root Canal	16mm MP	USVA	D-16-E
Endodontics—Mechanical Preparation of the Root Canal	16mm MP	USVA	D-15-E
Face-to-Face with Communism	16mm MP	USDOD	AFIF 21
Fact of Life, A	16mm MP	USDOD	CD-20-228
Fallout	16mm MP	USDOD	CD-20-229
First Aid—Pt III—Burns	16mm MP	USA	TF 8-2588
Flight Training—The Barrel Roll	16mm MP	USN	MN 7398 H
Flight Training—Fundamentals of Formation Flying	16mm MP	USN	MN 7398 I
Flight Training—The Wingover Roll	16mm MP	USN	MN 7398 G
Food Preparation and Service	16mm MP	USN	MN 9228
Gingivectomy	16mm MP	USA	PMF 5328
Head Injury—Report of Battle Casualty	16mm MP	USN	MN 3726
Headquarters, USA	16mm MP	USDOD	AFIF 70
High Altitude, High Speed, Flight Problems—Physiological Effects	16mm MP	USN	MN 6915-A
Highway Soil Engineering	16mm MP	USFHW A	
Hookworm Disease and Hookworm Infection	35mm FS	USPHS	F 073
How an Airplane Flies, Pt 1 and 2	16mm MP	USAF	TF-1-4804
How an Airplane Flies, Pt 3, 4, 5, and 6	16mm MP	USAF	TF-1-4805
How Non-Profit Groups Can Sponsor Housing for Low-income Tenants	35mm FS	USHUD	
How to Get Along in Europe	16mm MP	USDOD	AFIF 115
How to Prevent Private Vehicle Accidents	16mm MP	USA	TF 20-3317
Iceland	16mm MP	USDOD	AFIF 65
Integrated Landing Aids, Pt 1	16mm MP	USN	MN 6613-A
Integrated Landing Aids, Pt 2	16mm MP	USN	MN 6613-B
Junk Navy	16mm MP	USDOD	AFMR 652
Latin America	16mm MP	USDOD	AFIF 113
Latin American Missions	16mm MP	USDOD	AFIF 644
Leading Edge, The	16mm MP	USMC	MH-8599
Manage Your Career—The U S Army Civilian Career Management Program	16mm MP	USA	MF 11-9263
Management Concepts of Depot Maintenance	16mm MP	USAF	SFP 480
Management of Mass Casualties—Pt 6—Sorting	16mm MP	USA	TF 8-2675
Masseter, Temporal Muscles and Temporal Fascia	16mm MP	USVA	D-108
McNamara and the Pentagon	16mm MP	USDOD	AFIF 130
Medicare	16mm MP	USSSA	
Mosquito Larval Habitats	35mm FS	USPHS	F-190
Nation Builds Under Fire, A	16mm MP	DOD	AFIF-160
Navigation—Dead Reckoning— Air	16mm MP	USN	MN 831
Navigation (Air) Relative Movement, Pt 1	16mm MP	USN	MN 83 Y
Navy Uniform	16mm MP	USDOD	AFIF 86
Night of the Dragon	16mm MP	USDOD	AFIF 156
North Africa	16mm MP	USDOD	AFIF 95
Old Glory	16mm MP	DOD	AFIF 99
Operation in Sea Ice	16mm MP	USN	MN 7419B
Optical Inspection Methods, Pt 2	16mm MP	USN	MN 2449W

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Oral Cancer—Extra Oral Examination	16mm MP	USVA	D-11-D
Over Your Signature—Position Classification	16mm MP	USAF	TF 1-5346
Panama	16mm MP	USDOD	AFIF 60
Partners in Freedom	16mm MP	USDOD	AFIF 135
Pentagon Forum — Military Compensation	16mm MP	USDOD	AFIF 183
Philippines, The	16mm MP	USDOD	AFIF 48
Physiology of High Altitude Flying	16mm MP	USN	MN 5311
Post Attack World	16mm MP	USDOD	CD 20-231
Preface to a Life	16mm MP	USNMAC	MIS-266
Private Pilot	16mm MP	USFAA	FA 211
Public Works and Public Utilities—Painting Structures Ashore	16mm MP	USN	MN 8131-F
Quality Control — A Management Tool	16mm MP	USAF	SFP 616
Radar Refraction and Weather — Why the Weather?	16mm MP	USAF	TF 1-5079A
Radar Refraction and Weather — Why the Weather Problem?	16mm MP	USAF	TF 1-5079B
Radio Compass Equipment	16mm MP	USAF	TF 1-4989
Radiological Defense	16mm MP	USDOD	CD 3-130
Radiological Defense	16mm MP	USMC	MH 9570
Red China	16mm MP	USDOD	AFIF 97
Re-inforced Pin Technique	16mm MP	USVA	D-1-0
Regional Analgesia of the Head and Neck			
Pt 1	16mm MP	USVA	D-32
Pt 2	16mm MP	USVA	D-33
Rules of the Nautical Road— Crossing at Night	16mm MP	USN	MN 202-U
Russia	16mm MP	USDOD	AFIF 87
Sam'l and Social Security	16mm MP	USSSA	
Sanitary Landfill, Pt 1—Operating Procedures (English)	35mm FS	USPHS	F-229A
Sea River, The	16mm MP	USGS	
Share a Proud Tradition	16mm MP	USMC	MH 8485
Shelter on a Quiet Street	16mm MP	USDOD	CD-5-221
Ships, Men, and Ice	16mm MP	USN	MN 7419
Single Sideband Radio—Introduction	16mm MP	USMC	MH 8930
SL-1 Accident, Phases 1 and 2, The	16mm MP	USAEC	
SL-1 Accident, Phase 3, The	16mm MP	USAEC	
Soft Tissue Wounds	16mm MP	USN	MN 3762D
South of the Sahara	16mm MP	USDOD	AFIF 125
Story of Old Glory, The	16mm MP	USMC	MH 10539
Study of the USSR, A	16mm MP	USDOD	AFIF 105
Submandibular Triangle	16mm MP	USVA	D-62A
Submental Triangle	16mm MP	USVA	D-51A
Superficial Structures and Boundaries of the Carotid Triangle	16mm MP	USVA	D-48
Support in Emergencies—Riot Control	16mm MP	USA	TF 19-1701
Surgical Anatomy of Thyroid Gland, Trachea and Larynx	16mm MP	USVA	
Swinging into Step	16mm MP	USA	TF 8-2083
Sword and the Shield	16mm MP	USDOD	CD 20-230
Take a Deep Sea Dive	16mm MP	USN	MN 105-B
Target—Urban Mobility	16mm MP	USFHWA	
Technique of Hand Sending	16mm MP	USN	MN 2621 B
Traditions and Schievement of the Army	16mm MP	USA	MF 20-8668

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Twenty-Seventh Infantry Division	16mm MP	USA	CMF-130-7929
Various Methods of Fixation For the Control of Fractured Jaws	16mm MP	USVA	
Wake Turbulence	16mm MP	USFAA	FA 610
Workshop for Peace	16mm MP	USDOD	AFIF 74
World at the UN Plaza. The	16mm MP	USDS	
You and Medicare	16mm MP	USSSA	
You in Germany	16mm MP	USDOD	AFIF 67
Your National Archives	16mm MP	USGSA	
Your Top Four	16mm MP	USDOD	AFMR 664

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GENERAL SERVICES ADMINISTRATION
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CHANGES AND ADDITIONS
FEBRUARY 1972

Attached is the 1971 Supplement to the 1969 Sales Catalog of U.S. Government films available from the National Audiovisual Center. It contains nearly 2,000 titles available for sale and rental.

There are a number of changes, including prices (usually lowered), since the Supplement went to press.

Please read the contents of the "Changes and Additions" carefully before ordering materials listed in the Supplement. We urge referring to them while preparing your order.

The staff of the Center will be happy to answer any questions you may have.

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U.S. GOVERNMENT FILMS - 1971 SUPPLEMENT

Changes and Additions

Pg.	Title	Price	Pg.	Title	Price
5	Factory Worker Turns Farmer	\$ 50.75	25	Career Development	\$ 3/
8	Aeromedical Research and the Controller's Health.	91.00	25	Communication Conference	52.75
8	At the Other End of the Mike.	108.00	25	Communications Revolution, The	39.50
8	Controller-computer Partnership	26.00	25	Communication Theory--A Series	468.50
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8	Airports in Perspective	56.75	25	First Grade Reading.	17.50
8	All It Takes Is Once.	84.75	26	Fourth Grade Vocabulary.	23.75
8	Dulles International Airport - Port of the Future.	1/	26	Home-school Inter-action	3/
8	Dulles International Airport - Progress Report.	95.00	26	Information Explosion, The	71.50
8	Flying Clubs.	74.75	26	Music Research	42.25
8	How Airplanes Fly	63.25	26	Perception and Communication	65.00
8	International Skies	19.50	26	Process of Communication, The.	88.75
9	This is FAA	18.00	26	Some Glimpses of Anthony	3/
9	Theory of Helicopter Flight, The.	89.75	26	Stages of Instruction, The - Prep.	22.25
9	Kites to Capsules	18.00	26	Teacher and Technology, The.	87.50
9	Disassembling the Engine.	28.75	27	Teaching Machines and Sidney Pressey	22.25
11	From the Ground Up.	109.50	27	Team Analysis and Planning	3/
11	Inspectors, The	84.75	27	Teams for Learning	3/
11	Instrument Landing System, Pt 1	74.75	27	Teams for Learning--a Series	3/
11	Instrument Landing System, Pt 2	48.50	27	Third Grade Science.	19.25
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11	Stable and Safe	68.25	30	Basic Electricity-AC Parallel Circ.	11.50
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13	Today for Tomorrow.	51.75	33	Electronics - Special Circuits	32.00
14	Faces of America.	85.75	33	Radar Set AN/PPS-5	101.75
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14	MacArthur Story, The.	45.25	40	Transistors, Pt 7, Troubleshooting	64.25
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16	Computer Fluid Dynamics	115.00	42	Are Drugs the Answer	96.25
16	Inside Story, The	51.75	42	Hangup, The.	1/
16	It Can Happen to You.	51.75	42	Here's Help.	96.25
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16	Calendar Game, The.	47.00	43	Ticks and Tickborne Diseases (Sp.)	65.00
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17	They're Out to Get You.	43.75	45	Anatomy of the Head and Neck - Pterygoid Muscles and Infra-pt.	66.75
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21	Anything Is Possible - with Training	47.00	45	Dental Office Emergencies, Pt 1.	54.00
22	In the National Interest.	201.75	46	Dental Office Emergencies, Pt 2.	67.25
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25	Path to Fulfillment	152.75	46	Dental Office Emergencies, Pt 4.	52.50
25	Adult as Enabler, The	3/	46	Sit Down, Doctor - And Live.	45.75
			46	Dynamics of Occlusion-Mandibular.	61.75
			46	Dynamics of Occlusion-Maxillary.	44.25

1/ Withdrawn
 2/ Change in Number - NMAC-MIS 298
 3/ Write for Availability
 4/ Change in Sponsor - NIMH

<u>Pg.</u>	<u>Title</u>	<u>Price</u>	<u>Pg.</u>	<u>Title</u>	<u>Price</u>
46	Dynamics of Occlusion-Nomenclature	\$ 61.25	51	Keep Clean-Stay Well (Spanish-American Cast) (color)	\$ 34.00
46	Dynamics of Occlusion-Occlusal Adjustment of Natural Detention	59.00	51	Keep Clean-Stay Well (Spanish-American Cast-Spanish) (b&w)	5/
46	Occlusal Adjustment, Pt 1, Centric	63.75	51	Keep Clean-Stay Well (Spanish-American Cast-Spanish) (color)	34.00
46	Occlusal Adjustment, Pt 2, Lateral	48.50	51	Milk and Public Health (Spanish)	22.25
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47	Double Papillae Repositioned Flap	55.75	52	Safe Food (Spanish-American Cast-Spanish (b&w))	5/
47	Anatomic Landmarks in Panorex	54.00	52	Safe Food (Spanish-American Cast-Spanish) (color)	7/
47	Panoramic Radiography-Operating Pro.	46.25	52	Serving Food (Spanish)	37.25
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47	Intra-oral Fixation of Jaw Fractures, Pt 2 (Rev Ed)	59.25	55	Evaluation of Proteinuria	8/
47	Marsupialization of an Anterior Maxillary Cyst	29.75	56	One Door	9/
47	Operative Dentistry - Advanced Concepts-- A Series	102.25	56	Infectious Diarrheas, The	51.75
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47	Surgical Implant of the Lost Mandibular Condyle	32.50	56	Tuberculin Testing, Pt 1	22.75
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51	Fly Control through Basic Sanitation	31.00	73	Simple Foundation, Pt 1, Layout	48.75
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51	Healthier Place to Live, A (Spanish-American Cast) (b&w)	5/	74	Spotlight on Recovery	53.50
51	Healthier Place to Live, A (Spanish-American Cast) (color)	45.25	80	Final Game, The	5/
51	Healthier Place to Live, A (Spanish-American Cast - Spanish) (b&w)	5/	81	Flight	94.50
51	Healthier Place to Live, A (Spanish-American Cast - Spanish) (color)	47.00	81	Path to Safety	68.25
51	Keep Clean-Stay Well (Black Cast)	15.75	81	Restraint for Survival	27.75
51	Keep Clean-Stay Well (Spanish-American Cast) (b&w)	5/	81	Safety by the Numbers	104.25
			81	To Save a Life	5/
			81	Transport Crash Safety Tests, Pt 1	51.75
			81	Transport Crash Safety Tests, Pt 2	88.00
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			82	Firefighting Aboard Tankers	131.00
			82	Safety in Army Hospitals	47.00
			82	Capsizing, Sinkings and Falls Overboard	52.00

- 5/ Withdrawn
- 6/ Change in Stock and Price - color, \$40.50
- 7/ Change in Number and Price - M-0935-SP, \$40.50
- 8/ Addition of Number - T 1818X
- 9/ Write for Availability
- 10/ Change in Title - see Good Place to Start

<u>Pg.</u>	<u>Title</u>	<u>Price</u>	<u>Pg.</u>	<u>Title</u>	<u>Price</u>
83	Atom, The - Year of Purpose.	\$125.00	89	Combat Bulletin No. 103.	\$ 37.00
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12/ Addition of Number - TVK 30-204C

13/ Withdrawn

14/ Change in Time - 30 min.

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