This document reports on a management development study within the Department of Transportation (DOT). The aim of the study was to develop a systematic approach to management development for military and civilian personnel. A variety of methods was used to gather data including having DOT staff members gather the information to be passed on to the consultants comprising the study team, field trips, formal briefings, interviews, and informal discussions. The study team's views on what steps to take to increase managerial effectiveness were gauged largely on the gravity that executives gave to various programs and the scope of activity that generally applies to sound programs. From the results, the following recommendations are made to the Secretary of DOT: (1) a comprehensive management development program should be established in all elements of the Department; (2) each element should design and implement a program to meet its current and future needs; (3) each element should utilize a cost-benefit analysis to determine what portions of the program should be done in-house or outside, (4) institutes a department-wide executive development program for high level managers; (5) the Office of Personnel and Training, OST, should provide every assistance; and (6) budgetary priority should be exercised. (JS)
MANAGEMENT DEVELOPMENT STUDY

DEPARTMENT OF TRANSPORTATION

NOVEMBER - 1970
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- **ATTACHMENT 5:** Federal Personnel Manual, Chapter 410, Appendix A  ... B-9
I. INTRODUCTION

A. Background

On April 1, 1967, the Department of Transportation came into existence as the result of the passage of the DOT Act (PL 89-670). The Department was made up of existing independent agencies; agencies transferred intact from other departments; components of agencies transferred from other departments; and the creation of some entirely new organizational elements (Attachment 1). Since that time, the Department has added one new administration—the Urban Mass Transportation Administration—and the National Highway Safety Bureau has been elevated to the status of an operating administration. The first two years of the Department's operation were years of change, marked by a clarification of organizational roles and responsibilities, and the first steps were taken toward the development of a unified, integrated DOT approach to the development of a nationwide transportation system.

As the Department developed in maturity, the attention of top management has turned to organizational refinements and one of the first areas which was considered was the development of career management personnel—those employees who are responsible for ensuring that policy is implemented and that on-going programs are effectively operated. Preliminary staff reviews by the Office of Personnel and Training, OST, showed a wide diversity of programs designed to develop the skills of management people, ranging from no programs to fairly extensive training programs in some of the operating administrations. In addition, there appeared to be a need to more fully relate the Coast Guard system for developing officers, and civilian management development approaches, since military managers formed as critical a link in the effective operation of the Department as their civilian counterparts.

On December 10, 1969, Secretary Volpe initiated a full study of management development in DOT (Attachment 2). The charter for the study was the development of a systematic approach to management development for military and civilian personnel. The Secretary directed the Assistant Secretary for Administration to form a three-man panel of consultants to undertake this study, with the assistance of OST staff personnel. The consultants who were selected for the study team, provide a diversity of background and experience, intended to provide a balanced, objective approach to the study. The consultants comprising the study team are:
--William H. Kushnick, Management Consultant. Mr. Kushnick served as the Director of Civilian Personnel for the War Department and later was responsible for the establishment of the American Management Association's Management School. He has held positions as an association executive and as a consultant for numerous private companies and government agencies.

--Oliver H. Laine, Consultant to the Under Secretary on Education and Training. Dr. Laine was President and founder of two junior colleges. In addition, he has served as a consultant on development, finance, curriculum and management to various community colleges, as well as a consultant on manpower development and training to the Job Corps and various hospitals.

--Mahlon T. Puryear, Consultant. Dr. Puryear has served as a Personnel Counselor with the Wright Aeronautical Corporation and as an Assistant Field Director with the American Red Cross. He spent several years with the Urban League and occupied the position of Deputy Executive Director before leaving to form the firm, Manpower Consultants, Inc. He has served as a consultant to numerous government agencies and private corporations.

Assisting the consultants in this study were Howard R. Richardson, Chief, Training and Career Development Division, Office of Personnel and Training, OST, and James B. Clark, Management Development Officer, Training and Career Development Division.

B. Conduct of the Study

A variety of methods was used to gather information for the study. In some instances, information was gathered by DOT staff members for the consultants. Much of the information relating to the dimensions of management development efforts in the Department during FY-69 was requested by the Assistant Secretary for Administration on February 10, 1970 (Attachment 3). A report was developed as a cooperative effort by staff personnel of OST and the operating administrations. Because of differences in approach, information was requested separately on civilian management development efforts and the military officer development system in the USCG.

In addition to this report, information was gathered by Dr. Laine in the following field trips (summary in Appendix A):
--FAA Eastern Region, New York
--USCG Eastern Area HQ, Governor's Island, N. Y.
--FAA Western Region HQ, Los Angeles
--USCG Western Region HQ, San Francisco
--FHWA Region VII, San Francisco
--USCG Twelfth District, San Francisco
--FAA Pacific Region, Honolulu

The entire panel participated in:

--Formal briefings by FAA, USCG and FHWA on the current status of their programs (April 29-30, 1970).

--Interviews with the Under Secretary and top secretarial and operating administration executives, as well as some officials from outside DOT (Attachment 4).

--Informal discussions with personnel and training officials at all levels within OST and the operating administrations.

C. Means Used to Appraise Management Development

The consultant panel used a variety of methods to appraise management development in DOT. With regard to the extent of development activity, information came primarily from reports and the interviews held with operating and training officials of the administrations. With regard to the effectiveness of results from on-going programs, the panel relied in large part on contributed information. The panel also leaned heavily on its own experiences in industry, education and government to appraise whether the present activities were reasonably complete to permit a sound basis for improving managerial effectiveness. Included among such comparative standards were these areas of major concern to the consultants:

1. Extent of present programming for each of these groups:
   a. first-line supervisors
   b. middle managers
   c. supergrade managers
   d. converting professional specialists to managers

2. Level of concern for building a managerial resource:
   a. internships
   b. selection methods in upgrading nonsupervisors to supervisory positions
   c. utilization of appraisals to reflect training needs
3. Adequacy of consideration for developing managers by means other than formal courses alone:
   a. on-the-job coaching
   b. special assignments
   c. rotational activities

4. Organizational emphasis:
   a. availability of training staff
   b. budgetary concepts
   c. personnel skills inventories

   In short, the consultants' views of what might be done further to increase managerial effectiveness are gauged largely by the gravity that executives give to these programs and the scope of activity that generally applies to a sound and well-designed program.

D. Definitions

   One perplexing problem which seems to exist in any study of management development is the matter of definitions. All too often, during the information-gathering phase of this study, it was apparent that the same words meant different things to different people. Because of this confusion, the panel decided to use the following definitions for the purposes of this study:

1. Supervisor - Normally is immediately responsible for the work output of employees assigned to his direction or has comparable duties, with no intervening levels of supervision. In some instances, his effort is production-centered and places primary, if not sole, emphasis on production by his work unit. Any policy or procedures effort on his part usually consists of day-to-day operating procedures relating to the work output of the immediate work unit for which he is responsible.

2. Middle Manager - Typically manages a significant program area or has comparable staff responsibilities. He is usually responsible for resources utilization, management of funds assigned to his area of responsibility, and the establishment of procedures implementing established policy relating to his program area. Although the middle manager may, in some instances, be directly responsible for employee output, he is normally responsible for others who are so engaged.
3. **Executive** - Usually serves in a position at the "supergrade" level or has duties involving the management of diverse program and administrative activities, rather than activities centered around particular fields of skill or knowledge.

4. **Management Development** - The complete range of activities designed to develop the management capabilities of personnel at all levels of management from the first level of supervision through the executive level. Management development involves more than just attendance at formal management courses. It includes, but is not limited to, formal training; the use of acting and rotational assignments designed to broaden management experience; study of various aspects of management; and any of a variety of other activities intended to develop or enhance management skills. By implication, management development involves a cooperative effort between the individual and the organization with the needs of both being met to the greatest extent possible.

5. **Training** - Usually those activities designed to provide specific skills or knowledge to employees. Training may be conducted by "outside" organizations, but it is nonetheless intended as a way of providing knowledge or skills needed by the employee to perform his job duties.

6. **External or Outside Training** - Training conducted by organizations outside the Department of Transportation.
II. SUMMARY

The consultant panel makes these observations regarding the present state of management development in DOT:

There is general recognition among key officials that management development is a vital and continuing need. However, this favorable attitude is not always reflected in actions within their administrations.

While FAA and FHWA are inaugurating new and expanded development activities, other elements should be encouraged to plan and execute programs appropriate to their present and future needs.

Supervisory training is made reasonably available in the majority of the administrations. Mid-level management training, for civilians and military, on the other hand, is usually given sporadic attention. Relatively little is done at the executive level.

Most existing management development programs offer formal classes. A better and more realistic balance should be provided by on-the-job exercises in dealing with management situations.

Managers need to maintain the concept that one of their principal functions is to develop competent subordinates. Encouraging self-development attitudes, offering constructive suggestions for subordinates' education and training in management, and providing on-the-job counseling in dealing with management situations would be evidences of meeting that function.

In this same vein, selection, as well as appraisal processes, should become more closely related to the total effort of building managerial effectiveness.

Finally, training staffs also require stronger support from line supervisors. Seesawed between the ups and downs of budget availability, the staffs maintain such training activity as the moment permits, neglecting a systematized total package. In such circumstances, the OST training staff can have little influence in stimulating and coordinating the management development activities of the administrations.
Consequently, the panel urges that:

... The Secretary declare his active and immediate interest in having a comprehensive management development program established in all elements of the Department;

... each element design a management development program to meet its current and future needs for management personnel, and that such plans be executed within a reasonable time frame consistent with operating schedules;

... each element view from a cost-benefit analysis what portions of its program should be conducted in-house or which might be best committed to external institutions;

... there be instituted a departmentwide executive development program for high level managers, whose major purpose would be to involve them in meaningful developmental activities and provide for an interexchange of knowledge of policy and management systems concepts inherent in each administration and in the department as a whole;

... to actively support the entire program of the department, the Office of Personnel and Training, OST, should provide services to those elements requesting it and should set standards of inclusion and provide evaluations of effectiveness;

... budgetary priority for the program be given commensurate priority with other efforts to fulfill the missions of the Department of Transportation.

The specific recommendations of this report, which cover the full range of the consultant panel's findings, may be found on Pages 30 - 45.
III. CURRENT STATUS OF MANAGEMENT DEVELOPMENT IN DOT

A. General

The consultant panel found the management training being offered by the operating administrations and OST to vary widely. This section of the report deals with what is found to exist now, and includes not only efforts which are strictly management development efforts, but also a brief look at other program efforts such as Intern programs, which are designed to bring young people with high management potential into the organization and train them to develop their capabilities to take on higher level responsibilities. The programs of each of the operating elements are discussed in brief in the following parts of this section. There is also a brief discussion of intern programs and the concept of Organizational Development as it applies to DOT.

B. Civil Service Commission Requirement for Management Training

In Federal Personnel Manual (FPM) Chapter 335-16, 3-8b, the Civil Service Commission required that "...suitable training be provided all newly selected first-level supervisors, either before they assume their new duties or as soon after as possible." This instruction was further supplemented by FPM Chapter 410, Appendix A (Attachment 5) which requires 80 hours of formal training for each newly selected supervisor, during his first two years as a supervisor. At least 40 hours of this training must be conducted during the first six months. This requirement is being met in DOT, either through the use of specially developed courses or existing courses developed by the Civil Service Commission.

In addition to the requirement for supervisory training, the Civil Service Commission also stresses the need for Executive Development in FPM Chapter 412-3, 1-1. The Commission states that, "Employees with executive potential in positions below the top career levels must be identified, trained and developed over a period of time to increase their capacity to perform the complex functions of career managers. Each agency [i.e., Executive departments and independent agencies] must take steps to find persons of executive potential and to train and develop them to assume the full responsibilities of agency management."

In addition to these FPM directions, the report of the Presidential Task Force on Career Advancement, which was completed in 1967 under the auspices of the Civil Service Commission, recommended the establishment by agencies of three levels of management training: [1] supervisor, [2] manager, and [3] Executive.
C. Status of DOT Management Development Efforts

1. Federal Aviation Administration (FAA)

   a. Background

   The FAA has traditionally conducted a series of programs for its management personnel. These programs have been either conducted by FAA personnel or by outside organizations for FAA. In part, due to recommendations of the Secretary's Air Traffic Controller Career Committee Report ("Corson Committee"), and other influences, the FAA has moved well along the way toward a substantial change and reorientation of its training efforts for supervisors and middle managers. This report, therefore, will treat the FAA program in two parts: the current, existing management development program and the planned program.

   b. Current Program

   The current FAA management development program incorporates correspondence training and classroom training, both centrally and field-administered. The following list is a summary of FAA-developed and conducted and externally conducted courses, the number of manhours of such training, and the total number of trainees participating in FY-69, as reported by FAA:
<table>
<thead>
<tr>
<th>Course</th>
<th>No. of Trainees</th>
<th>Manhours of Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction to Supervision (Correspondence) [40 hours]</td>
<td>889</td>
<td>35,560</td>
</tr>
<tr>
<td>MITTS (Correspondence &amp; Team Discussion) [40 hours]</td>
<td>325</td>
<td>13,000</td>
</tr>
<tr>
<td>Introduction to Supervision [40 hours]</td>
<td>525</td>
<td>21,000</td>
</tr>
<tr>
<td>Management for Supervisors [40 hours]</td>
<td>335</td>
<td>13,400</td>
</tr>
<tr>
<td>External Training</td>
<td>270</td>
<td>10,800</td>
</tr>
<tr>
<td>Middle Managers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management Institute [80 hours]</td>
<td>61</td>
<td>4,880</td>
</tr>
<tr>
<td>ADP for Managers [24 hours]</td>
<td>19</td>
<td>456</td>
</tr>
<tr>
<td>EMC for Managers [40 hours]</td>
<td>37</td>
<td>1,480</td>
</tr>
<tr>
<td>Personnel Management for Managers [40 hrs]</td>
<td>228</td>
<td>9,120</td>
</tr>
<tr>
<td>External Training</td>
<td>800(app)</td>
<td>20</td>
</tr>
<tr>
<td>Middle Managers and Executives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executive School [80 hours]</td>
<td>93</td>
<td>7,440</td>
</tr>
<tr>
<td>External Training</td>
<td>6</td>
<td>1,200</td>
</tr>
</tbody>
</table>

During FY-69, budget restrictions caused a severe cutback in training travel funds, which are the heart of a management development program. This was the case in FY-68 and FY-67 also. In fact, in FY-68, due to budget restrictions, there was no management training conducted in FAA, with the exception of correspondence courses and some small field programs. From all indications, this situation occurred at other times in the past, and training travel for management training has been one of the first programs cut in a time of budgetary tightness. According to FAA sources, this is in large part the reason for the fact that of over 10,000 management personnel in FAA, only about 50% have ever received training appropriate to their positions.
c. Planned Programs

The FAA has developed a plan for an extensive reorientation of supervisory training efforts to meet an increasing demand for improved supervisor and middle manager training. In a study, approved by the FAA Deputy Administrator on May 15, 1970, the FAA proposed the centralization of all supervisory and middle management training. Since that time, training facilities have been located at Cameron State College, Lawton, Oklahoma, and the decision has been made to locate the training there. The training program, to be designed by a contractor, is due to begin some time after January 1, 1971. A task analysis of the FAA supervisor's and manager's job has been performed and the training will be based on that, to make it as job-related as possible. Trainee groups will also be grouped as homogeneously by occupational groups as can be arranged. All trainees will receive three weeks of training at Cameron State College. Provision has been made to use the training as part of the supervisor and middle manager selection process.

The training will be provided to all incumbent and tentatively selected supervisors and middle managers with a total of 3,000 people being trained annually at the supervisory level and 600 at the middle manager level, until the backlog of incumbents needing training has been substantially eliminated, sometime in FY-74. Also, beginning with FY-73, refresher training for supervisors and middle managers will be provided on a continuing basis to ensure that skills are kept up-to-date. To undertake this job, FAA proposes a need for 66 positions, of which 40 will be instructors, who would teach the contractor-developed courses.

COMMENT: The FAA's plan to conduct a task-oriented supervisory and middle manager training program is commended by the panel.
2. Federal Highway Administration (FHWA)
   
a. Background

A large proportion of the management personnel in the FHWA are graduates of the Highway Engineer Trainee (HET) Program, and to understand the process of management development in FHWA, it is necessary to first view the success of this program, after which many of the in-house training efforts in FHWA are modeled. The HET program has actually been in operation since 1946. It provides for a semi-annual input of young civil engineers into a 27-month training program, designed to expose them to a complete range of engineer assignments in FHWA. During this 27-month period, the trainees receive 10 weeks of classroom training and they may move to different training assignments as many as five to seven times during this period, depending on the kind of exposure planned for the trainee. Every attempt is made to ensure that both the desires of the trainee and the needs of the administration are met in the training and post-training program assignments that are made. The program is well-funded and administered by two HET Program graduates on a substantially fulltime basis. FHWA officials point to a very low annual attrition rate of less than 5% among HET program participants and graduates as a key indicator of the program's success. The success of the HET Program has been such that its conceptual approach has been extended to other FHWA occupational areas, such as Right-of-Way Location. In addition, a new program is slated to begin in FY-71 for administrative trainees. This program will also follow the "Career Program" approach of the HET program and incorporate many elements of the Management Intern Programs found in many agencies. With these programs, FHWA has made provision for a steady influx of trained college-caliber personnel with assumed capability for eventually taking on management responsibilities.

b. Current Programs

For its management development, FHWA uses external resources extensively. For example, during FY-69, 196 FHWA management personnel out of a total management workforce of 1001, attended management training programs sponsored by outside organizations, while 113 attended FHWA-conducted management training programs. The outside training received covered a wide variety of courses but most typically, training was conducted by
groups such as the Civil Service Commission, the Brookings Institution, and professional groups such as the National Highway Management Institute. Plans for management training are incorporated into the FHWA Annual Training Plan which is used as a basis for funding training. The following chart summarizes the formal management development programs which FHWA reported during FY-69:

<table>
<thead>
<tr>
<th>Course</th>
<th>No. of Trainees</th>
<th>Manhours of Training</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supervisors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisory Responsibilities [20 hrs]</td>
<td>53</td>
<td>1,060</td>
</tr>
<tr>
<td>Personnel Problems, Performance and Attitudes [16 hrs]</td>
<td>19</td>
<td>304</td>
</tr>
<tr>
<td>Counselling Techniques [4 hrs]</td>
<td>14</td>
<td>56</td>
</tr>
<tr>
<td>External Training</td>
<td>142</td>
<td>6,772</td>
</tr>
<tr>
<td><strong>Middle Managers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisory Management [35 hrs]</td>
<td>14</td>
<td>490</td>
</tr>
<tr>
<td>External Training</td>
<td>40</td>
<td>2,559</td>
</tr>
<tr>
<td><strong>Executives</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisory Management [35 hrs]</td>
<td>13</td>
<td>455</td>
</tr>
<tr>
<td>External Training</td>
<td>14</td>
<td>990</td>
</tr>
</tbody>
</table>
In addition to these courses, FHWA released a directive which indicated that the regions were to use training courses conducted by the Civil Service Commission to satisfy the requirement for 80 hours of training for new supervisors.

c. Planned Programs

While no specific new programs were planned, an FHWA Training Officer has recently been freed from all other responsibilities to devote full time to a study of management training needs in FHWA. This study is designed to lead to the development of in-house management development programs at all three levels of management.

COMMENT: The panel was impressed by FHWA's programs for bringing young people into the organization and providing for their development in the early stages of their careers. The panel is encouraged by the apparent interest on the part of the FHWA to increase the attention being given to management development.
3. Federal Railroad Administration (FRA)

The Federal Railroad Administration receives Personnel Management support from the Personnel Operations Division of the Office of the Secretary. For its management workforce of 50, FRA used outside resources for all of its management development efforts during the reporting year of FY-69, and conducted no management training internally except for on-the-job training for foremen and other supervisors conducted by the Alaska Railroad. FRA reported the following formal management development for FY-69:

<table>
<thead>
<tr>
<th>Course</th>
<th>No. of Trainees</th>
<th>Manhours of Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External Training</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>Middle Managers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External Training</td>
<td>5</td>
<td>326</td>
</tr>
<tr>
<td>Executives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External Training</td>
<td>4</td>
<td>272</td>
</tr>
</tbody>
</table>

Despite the fact that FRA does not have its own training unit to conduct training, FRA and the Personnel Operations Division did conduct a 12-hour course in Personnel Management for Supervisors for 19 supervisors during FY-70, and plans are being developed for a more complete in-house supervisory program during FY-71.

COMMENT: The current emphasis which is being placed on supervisory development in FRA is encouraging and plans should be implemented as soon as possible.
4. **National Highway Safety Bureau (NHSB)**

Prior to its elevation to operating administration status on March 22, 1970, the NHSB participated in FHWA training programs. Since that time, no management development programs have been established, but consideration is being given to conducting a management development course for NHSB personnel which meets CSC requirements for supervisory training and which also takes into consideration the highly technical nature of NHSB work and the relatively high grade levels of NHSB supervisors. In total, approximately 50 NHSB personnel occupy positions which include supervisory or managerial responsibilities.

**COMMENT:** The panel feels that it is too early to make specific comments on NHSB's management development efforts. In view of the fact that NHSB is developing its own Personnel and Training staff, the panel encourages the development of a three-level program of management development in the NHSB.
5. **National Transportation Safety Board (NTSB)**

The NTSB receives personnel management support from the Personnel Operations Division of OST, but as yet no relationship has been established for training NTSB employees. NTSB has sent some of its 60 management personnel to courses sponsored by other organizations, such as the Civil Service Commission. NTSB reported the following formal management development for FY-69:

<table>
<thead>
<tr>
<th>Course</th>
<th>No. of Trainees</th>
<th>Manhours of Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisors</td>
<td>None</td>
<td>--</td>
</tr>
<tr>
<td>Middle Managers</td>
<td>External Training</td>
<td>1</td>
</tr>
<tr>
<td>Executives</td>
<td>External Training</td>
<td>2</td>
</tr>
</tbody>
</table>

**COMMENT:** Top management in NTSB has indicated an interest in management development. The panel encourages the development of a three-level approach to management development, perhaps in conjunction with the Personnel Operations Division of OST.
6. **Saint Lawrence Seaway Development Corporation (SLS)**

The SLS, with its relatively small workforce, has not conducted any in-house management training for its 38 management personnel, although use has been made of programs which are available outside, such as at nearby academic institutions. The remoteness of the SLS from the other DOT activities has made participation in DOT programs difficult. The Seaway reported the following formal management development during FY-69:

<table>
<thead>
<tr>
<th>Course</th>
<th>No. of Trainees</th>
<th>Manhours of Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Middle Managers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External Training</td>
<td>2</td>
<td>96</td>
</tr>
<tr>
<td>Executives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External Training</td>
<td>1</td>
<td>40</td>
</tr>
</tbody>
</table>

**COMMENT:** Top management in SLS is supportive of management development. The panel encourages this interest.
7. U. S. Coast Guard (USCG)

a. Background

The Coast Guard represents two separate personnel systems—the civilian and military. Therefore, the report deals with them separately.

b. Civilian Management Development

There are approximately 5,800 civilians in the total USCG workforce of about 43,000. Of this number, just under 1,000 civilians are employed in what are considered to be management positions, and the great majority of these (747) serve in first-level supervisor jobs. Coast Guard civilian training officers conduct courses in supervisory development at field locations as well as at headquarters. Supervisors and middle managers attend these courses together, and most classes typically include some military personnel. No special programs which are specifically designed for civilian middle managers are conducted by the USCG. The following chart summarizes the Coast Guard's formal management development programs for civilians during FY-69:

<table>
<thead>
<tr>
<th>Course</th>
<th>No. of Trainees</th>
<th>Manhours of Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civilian Supervisors-Middle Managers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civilian Personnel Management (40 hrs)</td>
<td>162</td>
<td>6,480</td>
</tr>
<tr>
<td>(147 supv)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(15 Mid Mgrs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civilian Personnel Administrative Training (40 hrs)</td>
<td>15</td>
<td>600</td>
</tr>
<tr>
<td>(12 supv.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3 mid. mgrs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leadership &amp; Group Perf. (40 hrs)</td>
<td>78</td>
<td>3,120</td>
</tr>
<tr>
<td>Supervision &amp; Group Perf. (40 hrs)</td>
<td>25</td>
<td>1,000</td>
</tr>
<tr>
<td>Personnel Management Training for Supervisors (8 hrs)</td>
<td>13</td>
<td>117</td>
</tr>
<tr>
<td>Variety of Shorter Courses</td>
<td>516</td>
<td>1,248</td>
</tr>
<tr>
<td>External Training</td>
<td>126</td>
<td>4,417</td>
</tr>
</tbody>
</table>

Civilian Executives

None
COMMENT: It appears to the panel that the Coast Guard's civilian management development efforts provide good coverage of Coast Guard civilian supervisors. This is indicated by the fact that during FY-69, 35% of Coast Guard civilian supervisors received in-house training of 40 hours' duration or more. Some refinements in the Coast Guard program should be considered, however, particularly in the need to recognize the broader responsibilities of the middle manager and to provide him with training which is broader and more conceptual than that provided the supervisor.

c. Military Management Development

In gathering information for this study, the panel was faced with the problem of how to include the military in a study of "management development", which is a term normally used in reference to civilians. Since all USCG career officers at one or more times in their careers are responsible for managing men, money and materials, the panel decided to gather information on the system of officer development, since that should reflect the development of management skills and abilities in USCG officers.

Under the system for officer development, reliance is placed primarily on a wide variety of academic resources and the exposure which an officer gains as he rotates through a series of assignments during the course of his career. The foundations for this developmental system are the Officer Candidate School (OCS) and the U. S. Coast Guard Academy. The entering officer receives 25 hours of classroom training in leadership, during the OCS course, plus practical experience through observation and practice. The Academy offers five undergraduate courses in management or management-related subjects as part of a complete undergraduate program in engineering science, social science, or ocean science. Upon completion of OCS or the Academy, the junior officer undertakes a program of on-the-job training (OJT), as well as participation in at least one of the other programs which are used to develop officers: (a) formal fulltime graduate or specialized training; (b) formal short courses and seminars; (c) correspondence courses; and (d) off-duty training. Training under these programs, with the exception of fulltime graduate training, is made available to all officers throughout their careers.
(1) Formal graduate or specialized training is provided to approximately 63% of all officers advancing through the grades of lieutenant and lieutenant commander. The annual input of trainees into this program is about 120, and there are 165 billets reserved. Training in the program typically leads to a Master's or comparable advanced degree in one of 35 curriculum areas which the Coast Guard indicates represent the needs of the various occupational specialties. Examples of graduate training curricula are: aviation engineering; administration; law; management; industrial engineering; and public administration. Approximately 20 of the officers participating in the postgraduate education program each year are enrolled in programs in management or related areas, such as public administration.

(2) Formal short courses and seminars are provided by the Coast Guard, other Federal agencies, business and industry, and universities during duty hours. The courses cover a wide range of subjects and range in length from one to six weeks. The courses are used to supplement technical knowledge and to enhance an officer's career development by providing an insight into new areas of knowledge or skill. Examples of these courses are minority recruiting, Decision Logic Tables, and advanced aids-to-navigation. This program, which is operated on a decentralized basis, had approximately 1,000 separate enrollments during FY-69.

(3) Correspondence courses are offered by Coast Guard officers who wish to use them. Courses are offered by the Coast Guard Institute, the Armed Forces Institute and other organizations. The orientation of these courses is primarily technical or academic.

(4) Off-duty training is offered to both officer and enlisted personnel, but extensive use is made of this program by officers. As indicated in the Coast Guard Personnel Manual, this program "...is designed to broaden the technical and academic achievement of Coast Guard personnel for the purpose of enhancing their value to the service." Personnel may attend courses at any of a variety of accredited institutions. The needs of the individual participants as he perceives them, usually control the course selected. Funding is provided to a maximum of $200 per student per semester.
COMMENT: The program for developing career officers provides an exceptional number of opportunities for skill and personal development for the officer as he moves forward in his career. Against this background of exceptional opportunities, however, the development of military managers is treated as an option with the individual, once he leaves the Academy or OCS. This is apparently done on the assumption that the career officer develops sufficient management skills through rotational assignments and attendance at courses which he chooses. In view of the significant management responsibilities held by many officers at all levels, the Coast Guard could profitably establish its own internally developed program to ensure a consistent program of military management development.
8. **Urban Mass Transportation Administration (UMTA) and Office of the Secretary (OST)**

OST and UMTA are being considered together, since they receive all of their personnel management service from the Personnel Operations Division of OST. Neither organization has an on-going program of management development, although OST does make use of programs offered by other organizations, such as the Civil Service Commission. UMTA reported no management development during FY-69. OST indicated the following management development during FY-69:

<table>
<thead>
<tr>
<th>Course</th>
<th>No. of Trainees</th>
<th>Manhours of Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External Training</td>
<td>8</td>
<td>152</td>
</tr>
<tr>
<td>Middle Managers</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Executives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External Training</td>
<td>7</td>
<td>132</td>
</tr>
</tbody>
</table>

**COMMENT:** Both UMTA and OST could benefit from a three-level management development program with particular emphasis on in-house supervisor development.
D. The Office of the Secretary and Departmentwide Management Development

The mission statement for the Office of Personnel and Training, OST, contained in DOT 1100.23 Change 2, states that it: "Plans and develops policies and programs for, and coordinates Departmental occupational, managerial, and executive development activities designed to ensure the availability of qualified manpower to meet immediate and long-range operating requirements; coordinates major training efforts to ensure maximum utilization of resources." In keeping with these responsibilities, a directive has been issued to guide the various elements of the Department in developing and conducting supervisory training under the Merit Promotion Plan. Some additional programs for executives of the Department have been established and conducted, including: (1) two 12-hour Executive Orientation Programs conducted during April and July 1968 for 230 of the top Washington-based executives and designed to help these key personnel understand the functions and organization of every part of the Department; (2) a series of monthly DOT Executive Dinners designed to acquaint about 100 Washington executives with national political figures and to provide an atmosphere for executives to get to know each other better and exchange ideas in a DOT environment; and (3) a one-day Labor-Management Relations (LMR) conference designed to orient about 175 field and headquarters executives to the newly developing and highly significant area of labor relations in Government.

Shortly after assuming office, the Under Secretary expressed a strong interest in having a Departmentwide executive development program, and a five-point program was proposed to the Under Secretary on March 20, 1969, by the Assistant Secretary for Administration. This program was proposed as a way of assisting the DOT in developing into a well-integrated, smooth-functioning organization, by increasing the effectiveness of military and civilian executives to perform as arms of the Department. The five-point program included:

1. Executive Orientation, discussed previously.

2. The Secretary's Fellowship - a program which would bring specially selected mid-level employees with potential for higher level responsibilities at the GS-12/15 grades to OST to work as a group on special problems for a period of up to 12 months. This program would be a high-visibility, high-prestige effort. Some work has been done on this program, but it is still in the formative stages.

3. Executive Exchange Program - a number of technical difficulties have delayed implementation of this program, but the plan calls for movement of the most promising mid-level (GS-12/15) employees across organizational boundaries in DOT.
4. **Executive Development courses** - were proposed to cover a wide variety of subjects of vital interest in the Department. These programs would begin with short seminars on subjects such as urban transportation and evolve into much more sophisticated programs, using techniques such as management gaming and computer simulation.

5. **Adaptation of FAA's Advanced Management Development Program** - this program was discontinued by FAA in 1968 after four years of operation, and it was recommended to the Under Secretary that it be modified for Departmental use as a tool for developing management capabilities. The program involves the selection of top technical personnel in grades 12-14, who would be developed over a 12-month period into generalists and then reassigned to jobs which would make use of their skills as both generalists and specialists. The assumption is that the graduates of this program will be ready to move into middle management and executive jobs in a fairly short time.

To accomplish this goal, the FAA put its participants through an intensive one-semester residence program at Syracuse University, which provided for an almost total immersion in public administration, political, science, economics and management. Upon completion of this course, the participants were assigned to Washington headquarters, where they worked on special projects of broad interest to FAA. Approximately 80 people completed this program during its four years of operation and their progress into higher level in FAA jobs has been generally very good.

**COMMENT:** Using its mission statement as a basis for action, the Office of Personnel and Training prepared plans for what seemed to be a worthwhile series of program to develop management and executive talents. Programs such as those recommended by the Assistant Secretary for Administration to the Under Secretary should be pursued, if they can be integrated into an overall departmental system for management development.
E. Intern Programs

Although Intern programs, which involve special training for highly qualified younger people upon their entrance into the Federal service, are not strictly management development programs, traditionally they have provided agencies with a source of high-quality personnel with management potential. They are, therefore, a part of any overall program to develop managers. The most commonly found Intern program is that which has an intake of people who pass the Management Intern option (MI) of the Federal Service Entrance Examination (FSEE). There are two such programs in DOT--in the FAA and the Coast Guard. Both programs are designed to train people for administrative management responsibilities. The FAA typically hires five interns and the Coast Guard two, except that the Coast Guard has not conducted its program since FY-68. The Federal Highway Administration plans to begin a program in FY-71 or 72 for management interns and other people with comparable qualifications.

The Transportation Intern Program, which is a departmental program formed in FY-70, is another kind of Intern program found in the Department. It can take management interns, but is oriented primarily toward the technical specialties of the Department. The program is also different from other intern programs in the sense that the participating Secretarial Offices and Operating Administrations hire the interns and they undergo a year of classroom and job rotation training conducted by the Office of Personnel and Training, OST, before being reassigned to the employing administrations or Secretarial Offices.

COMMENT: Regular input of high-quality young people into any organization is a goal which should constantly be sought. The panel recommends increased use of intern programs and the development of follow-up programs which are needed to ensure that the very best of them reach the upper levels of the Department and that each is properly utilized.
F. Organization Development (OD)

The systematic development of an organization—involving both the human and nonhuman elements of the organization—is a concept which has proven extremely popular in recent years. "OD" or organizational renewal, as it has also been called, has been used in such diverse organizations as TRW Systems, Champion Paper, Standard Oil of New Jersey, the Internal Revenue Service, the U. S. Forest Service, and the State Department. Much has been written about organization development and there is considerable confusion over just what the term implies. Among the more recent definitions is a particularly good one against which the panel viewed efforts in DOT: "Organization development is directed toward developing the capabilities of an organization in such a manner that the organization can attain and sustain an optimum level of performance; it is a problem-solving process; it is undertaken on a collaborative basis by the members of an organization and behavioral science practitioners; and it reflects the belief that even in organizations which are operating satisfactorily or adequately there is room for improvement."1 Organization development has also been defined as a "...response to change, a complex educational strategy intended to change the beliefs, attitudes, values and structure of organizations so that they can better adapt to new technologies, markets, and challenges, and the dizzying rate of change itself."2

"OD" has not always been fully successful, in part at least, because of the extensive commitment in manpower and frequently in money, which must be made for such an effort to be effective. A variety of techniques have been used as vehicles for "OD", but the most widely publicized approaches are through the use of "sensitivity training" and the managerial grid.


The consultant panel found no complete "OD" programs being undertaken in DOT, but a new FAA program growing out of a paper entitled, "Plan to Promote a More Effective Communications--Work Environment", has many of the elements of an "OD" program. This program, which has been decentralized to the regions, is designed to open more effective channels of communication between management and employees. This is an area which the "Corson Committee" report touched on as a weakness needing considerable attention. The FAA has engaged a well-known organization development expert to assist in this program.

COMMENT: The concept of Organization Development/Organizational Renewal has very wide implications and should be studied further to determine its application to DOT. The continuing results of the current FAA program should be incorporated into such a study.
IV. SELECTION OF MANAGEMENT PERSONNEL

Although the charter for this study is to delve into and make recommendations on management development, the panel feels that the process of developing personnel for management responsibilities is so intertwined with the processes used for the selection of these personnel that the two should not be completely separated. Selection systems frequently lack adequate consideration of management potential, and in the panel's estimation, this lack can be a deterrent to the full effectiveness of a development program, since a sound development program usually assumes that the best qualified people for the job are participating in the program.

Regular appraisal of potential for advancement to higher level management responsibilities is a critical element in any good selection system. This is particularly true in the move from non-supervisory work, since appraisal can be based only on the potential of the selectee. The conversion of specialists into supervisors is too critical to rely on a selection system which may result in the best specialists being selected, regardless of their potential for supervision. The selection system must provide for appraisals which are as near to being objective as possible. This implies reliance on more than the individual supervisory appraisal. Some of the appraisal methods which have been successfully used are:

[1] Panel interviews of candidates;
[2] Observation of the candidate's performance; in an "acting" assignment comparable to the job for which he is being considered;
[4] Peer-Group ratings; and
[5] Observation of the candidate during the course of a management simulation.

This list is not intended to be all-inclusive, nor does it attempt to support particular methods of appraisal. It does suggest, however, that balance and objectivity are vital to the selection system and that complete reliance should not be placed on a single appraisal method in choosing people to supervise work units or manage programs.

COMMENT: Selection of the best qualified people for the job is an extremely important process and should not be separated from development--particularly in jobs at the supervisor level and above. Greater attention should be given in DOT to the development of formal, systematic selection systems, keyed to management development efforts.
V. CONCLUSIONS AND RECOMMENDATIONS

A. Management Development in DOT

Management development is an effective tool of the organization if used properly. The management development program can be invaluable, if it is carefully developed and involves issues which are pertinent to the organization, or management approaches which top management wishes to develop. By the same token, a good series of management development programs provides an excellent communications device for "speaking" to field managers in a way which ensures their effective participation in the implementation of policies. The panel feels that there has been a lack of this kind of emphasis in management development programs in DOT, although programs at the supervisor and middle manager level which are being planned in FAA bear promise for the future. The priority often assigned to management development has left it vulnerable to cuts in times of budgetary restrictions and it is indicative of its priority that management development has been one of the first programs cut and it has usually been cut severely.

The panel finds the three-level (supervisory-middle management-executive) approach to management development generally in use in government and industry, to be an acceptable structure against which a DOT program for military and civilians should be developed. This structure includes the systematic and continual development of management personnel at all levels. Obviously, in an organization the size of DOT, no one unit is equipped to handle all three levels of training for the Department. This implies considerable delegation, which will be covered separately in discussions of each of the three levels of management development, the panel wishes to note that a management development program will never be truly effective if it is considered the sole domain of personnel and training officials. The program must be a cooperative effort between personnel and training and line or program officials, to ensure that it effectively fosters the goals of the Department.

RECOMMENDATION 1: That the Secretary declare his active and immediate interest in establishing development programs in all elements of the Department which would aim at improving managerial effectiveness at each level. That such programs include the preparation of qualified candidates for management positions, and the development of incumbent supervisors, middle managers and executives in the knowledge and skills needed for them to perform their managerial jobs effectively.
The implementation of supervisory and middle management programs proposed in this report should not require large amounts of money or manpower, except perhaps in the FAA and the USCG. In the instance of the FAA, plans have been laid for funding and staffing a program comparable to that proposed here, and the USCG, while it does not presently conduct the military programs recommended here, does have its own academic resources and a history of well-funded training. The remaining operating elements of the Department must be prepared to budget funds for management development programs. Each must also decide on the manpower required, after determining how the training is to be handled. The important thing to the panel, however, is the need to recognize management development as a continuing process which is a long-term investment designed to help accomplish the mission of the organization. In order to accomplish this, a degree of budget priority should be assigned to it which ensures that it is not arbitrarily cut out in times of budgetary restrictions.

RECOMMENDATION 2: That the Secretary require all management development programs to be given the same degree of budgetary priority as other programs designed to foster mission accomplishment.

B. Civilian Supervisor Development in DOT

The Civil Service Commission in FPM Chapter 410, Appendix A, requires that after July 1, 1969, all newly selected supervisors receive at least 80 hours of formal training during their first two years of duty in the supervisor's job. The panel feels that this Civil Service Commission requirement, which emphasizes human relations, management techniques, and personnel management awareness, should be reflected in the development of supervisory training in DOT.

Based on the FAA's report that only 50% of its management personnel have ever received appropriate training, as well as from information gathered in interviews with officials of other elements of the Department, it is probable that many first level supervisors have never received appropriate supervisory training. There may also be some supervisors who have received training, but it is now outdated. Both of these situations require attention, in the panel's estimation.

RECOMMENDATION 3: That all supervisors who have not received comparable training within approximately five years, as well as those selected after July 1, 1969, receive training which meets the CSC 80-hour supervisory training requirement. The panel also recommends that the design and conduct of supervisory training should be the responsibility of the operating elements of the Department.
In addition to meeting the 80-hour requirement for supervisory training, however, the panel feels that since many supervisors do not progress to middle management responsibilities, and spend a number of years as supervisors, there is a need to provide them with continuing training. This need is particularly critical at this level, because the first level supervisor forms such a vital link between management and the great mass of employees. The supervisor is responsible for ensuring that the operating programs of the Department are successfully carried out, while at the same time, he must develop a human-centered work environment in which his subordinates are able to develop and grow and perform their jobs with a minimum of friction within the organizational setting. Refresher training needs arise from two major sources: (1) Redirection of program emphasis in such areas as Labor-Management Relations, Equal Opportunity, or organizational relationships; and (2) individual training needs of a supervisor. These training needs can be met through internal or external resources, but they are critical if the supervisory workforce is to continue to be effective.

RECOMMENDATION 4: That refresher or "update" training be required as part of the supervisor development program. This training should be based on an individual's training needs or a group's needs, but a continuing appraisal of such needs is necessary. Certain training may be designed by OST, if there is a Departmentwide need, but generally, refresher training should be the responsibility of the operating elements.

C. Civilian Middle Management Development in DOT

The panel finds the training needed for civilian middle managers to be more difficult to define than that necessary for supervisors and executives. The Presidential Task Force on Career Advancement tended to view the middle manager's job as broader than the supervisor's but less so than the executive's. While this is an indicator of middle management training needs, the panel feels that an analysis of the duties which a middle manager performs would better indicate the kind of training needed. The panel feels, for example, that middle managers are more properly concerned with management tools, such as budgeting, than first level supervisors. The middle manager must be skilled in human relations, but since he is not typically concerned with the immediate group of workers actually performing the work, he must learn how to deal more effectively with people in a situation in which he is not usually able to take a direct hand in the day-to-day work which is being performed. Some of the other elements of the middle manager's job which training might cover are: delegation, planning processes, communication and organizing. Perhaps most important,
however, the middle manager is an important link in the operations of the operating element of the department to which he is assigned, and as a consequence, he must be trained to ensure that he effectively assists top management in carrying out the programs of the operating element and the department. Obviously, middle management training requires a training staff which many elements of the Department do not possess. Where this is so, the Office of the Secretary should be prepared to provide assistance.

RECOMMENDATION 5: That middle management development programs in DOT be established, which are a continuation of the development system begun at the supervisory level. The responsibility for this training should be delegated to the operating elements of the Department. The training should be based on an analysis of the middle manager's job in his employing organization, and should include a unit of instruction on the structure of the administration and the Department and their overall goals.

RECOMMENDATION 6: That the Office of the Secretary develop a middle management training program, which can be provided to middle managers in the smaller elements of the Department on a reimbursable basis. This training should be supplemented by extra sessions in the manager's employing organization, in which the organization's goals and objectives are discussed, as well as any other pertinent material.

D. Role of OST in Supervisory and Middle Management Development

In an organization of the size and complexity of the Department of Transportation, it is usually necessary to assign the staff responsibility for overseeing departmentwide programs and providing advice and assistance in the implementation of these programs. Despite the fact that this report recommends the delegation of supervisory and middle management programs to the operating elements, it will still be necessary to ensure that the programs which are developed meet departmental standards. In addition, staff assistance will probably have to be provided the smaller elements which do not have the capability to develop their own programs. The most logical place for this responsibility is with the Office of Personnel and Training, as indicated in the charter for this office, which is quoted on Page 24.
RECOMMENDATION 7: That the Director of Personnel and Training, OST, be charged with the staff responsibility to develop standards for supervisory and middle management training and to prepare an evaluation program to ensure that these standards are met. In addition, he should provide all necessary staff assistance to the DOT elements needing it in meeting these standards.

E. Development of Military Supervisors and Managers

The panel recognizes the historical differences in the military and civilian personnel systems, while at the same time taking note of the fact that several of the top ranking USCG officers who were interviewed feel that there is little difference between military and civilian managers. Certainly both military and civilians manage people, money and materials. The panel recognizes that in a strictly military setting such as aboard ship, there may be differences in management approaches to that found in the shore setting, and it is here that the panel assumes the major differences between military and civilian managers exist.

The USCG officer development system, which is reviewed earlier in this report, is certainly well-funded and seemingly well administered. The overall approach to breadth of exposure through rotational assignments and a variety of educational efforts, is, in fact, quite similar to that used in the Department of Defense and the Department of State. The early development of the USCG officer, since it is geared to a technical area in which he has received school training, certainly gives every indication of meeting his and the Coast Guard's needs. It is concerning the later stages of the career officer's development, however, that the panel has questions. There is no clear program to provide the officer (or senior enlisted man) who is directly responsible for supervising civilians (approving leave, taking disciplinary action, preparing performance appraisals, etc.), with an opportunity to develop appropriate techniques for supervising civilians. Since civilian subordinates may respond somewhat differently from military subordinates, the panel feels that career officers and senior enlisted men should be prepared to understand these differences, and that training can make this adjustment easier for them. It is fair to note here, that a number of USCG officers have attended civilian supervisory development courses, but on an ad hoc, "as able" basis. The panel feels this kind of training should be a requirement for military personnel supervising civilians.
The panel did not review in detail the adequacy of training provided career officers in the supervision of military personnel, but assumes it is adequate, based on information received in discussion and briefings by USCG personnel.

RECOMMENDATION 8: That the Commandant ensure that all officer and senior enlisted personnel who exercise full supervisory control over civilians, receive supervisory training comparable to that provided civilian supervisors. This training should be designed to introduce military personnel to the civilian personnel system and to help them adjust to any differences in relationships between military-military and military-civilian supervision.

At the middle level, the panel noted that despite the extensive educational efforts which are being undertaken, the Coast Guard offers no formal training which is for and about the Coast Guard, particularly as it relates to Coast Guard management. The panel feels that the Coast Guard should continue to make use of outside training resources to develop officer personnel, but also feels that a Coast Guard management course (or series of courses) for mid-level officers (LCDR's, CDR's and some Captains) would have the following additional advantages for the Coast Guard: (1) It would give the Commandant an opportunity to ensure himself that all mid-level officers are fully aware of the management approaches he wishes them to use; (2) The Commandant can also ensure himself that officers fully understand the direction of departmental policies and USCG programs; (3) It would provide the opportunity for an officer to benefit from the ideas of fellow officers in a classroom setting and should greatly enhance his ability to deal with his own management problems. Such a program can also help to bring USCG officers into the total DOT management development system which is proposed in this study.

In the panel's opinion, the Coast Guard has all of the necessary ingredients for designing a mid-level program of its own: (1) there is an atmosphere of ready acceptance of training; (2) adequate financing has always been available to support officer training; and (3) the Coast Guard has the Academy, plus its training centers, which provide both academic and classroom resources and should be available during certain periods of the year.
RECOMMENDATION 9: That the Commandant develop a USCG-oriented training program for mid-level Coast Guard officers. This program should teach these officers more about the Coast Guard’s role in national transportation policy; it should give them some additional insight into the Department of Transportation and its organization, missions and functions; and it should cover those management topics which the Commandant deems appropriate for mid-level officers.

F. Executive Development

All executive level personnel (supergrades) and admirals are members of the Department’s top management team. They are frequently, in fact, the senior DOT representatives in a community and must act as departmental representatives. There are also many field GS-15’s and senior captains, who because of the breadth of their responsibilities (i.e., FAA Center Chiefs; FHWA Deputy Regional Directors; USCG District Chiefs of Staff) also perform as executives who actively participate in the implementation of departmental policy. The panel considers all of these to be executives in the truest sense and suggests that their development as executives and their identification with the Department are critical to effective DOT operations. The panel concludes, therefore, that training for these executives should be departmental in scope and should be undertaken by the Office of the Secretary in coordination with the operating elements of the Department.

The Civil Service Commission states the need for executive development in FPM Chapter 412-03, Subchapter 1-1, when it says that, “Each agency (i.e., Executive Department) must take steps to find persons of executive potential and to train and develop them to assume the full responsibilities of agency management.” While the Commission does not offer specific guidance on executive development programs, aside from suggesting job rotation as a means for developing management skill, the implication is very clear that the OST should take the leadership in executive development.

The panel’s review of existing programs in DOT indicates no duplication of effort, since even the FAA’s Executive School, which is the highest level program now being conducted, is for upper-middle managers in the GS-14 and 15 grade levels. Otherwise, DOT executives have available to them a limited number of spaces in long-term programs such as the Federal Executive Institute, Industrial College of the Armed Forces, Naval War College, and Air War College, plus a variety of programs offered by academic institutions and commercial resources.
Any new executive development program which is prepared will, therefore, be a new effort in DOT. The panel feels that such a program should provide for the maximum involvement of the participants, and should cover subjects of DOT policy interest rather than purely management principles and concepts. The training should help the participant identify himself as an executive of the DOT, rather than just as an executive representing the interests of any particular operating element. The training might, for instance, involve the development of simulated departmental policies covering all modes of transportation and taking into consideration all of the other factors upon which an intermodal decision is made, such as budget and the political environment. Another approach might be the development of a series of exercises designed to help the executives balance the resources which should be allotted to the Department's programs, thereby giving them a broader perspective of the operation of the Department and how the various elements relate to each other. Exercises of this sort should be interspersed with an opportunity for the participants to meet and talk with the top appointed officials of the Department. The design of the program should be such that participants are completely "involved" in the training and have the maximum opportunity to practice their own decision-making and policy implementation skills.

RECOMMENDATION 10: That the Office of the Secretary establish and conduct an Executive Development Program for all persons with executive responsibilities—both civilian and military. This program should provide participants with a departmental perspective and be oriented toward the management abilities required to implement national transportation policies. A portion of the program should be allotted to the operating elements of the Department to provide specialized executive training to their own executives, either in the classroom or on-the-job.

In addition to a major executive development course or courses, the panel feels that the DOT Executive Development Program should also cover a number of important management and policy issues of departmentwide interest, which would merit the development of a curriculum of special executive seminars. These seminars, which would be from two to five days long, include such subjects as: Urban Transportation, Transportation and the Environment, DOT and Safety, Decentralization of Services and Programs, and the DOT Political Environment.

RECOMMENDATION 11: That the Office of the Secretary develop a series of seminars on key policy issues to ensure that executives understand, and are able to deal effectively with, problems revolving around these issues.
6. Funding and Staffing for Executive Development

It is a fact of organizational life that no major new program effort can be undertaken without the additional funds and manpower necessary to make the program work. The same is true of the recommendations in this report. If the Department is to have a viable program for developing management personnel, the money and manpower which are needed must be provided. The panel does not feel in a position to address itself in this report either to specific amounts of money or numbers of people needed. As a result of this study, there are, however, two general conclusions which can be reached:

1. The panel does not find significant overlap or duplication of effort between any of the existing programs in DOT and a proposed DOT Executive Development Program. Because of this, the panel feels that the DOT Executive Development Program should be funded as a new departmentwide program and funds should be provided for its establishment either through the budget process or as a cooperative effort of all of the elements of the Department. The continuing costs of running this program can be underwritten through per capita charges for participation.

2. Since there is no duplication of existing efforts involved, the positions for staffing the Executive Development Program should be provided from the total pool of DOT manpower resources. The panel feels that the method selected for accomplishing this staffing should penalize individual DOT elements as little as possible, while bearing in mind the need to provide staff for the program as quickly as possible.

RECOMMENDATION 12: That the necessary funds and positions for establishing the DOT Executive Development Program be provided by the Secretary as soon as possible. The priority for accomplishing this should be as high as for other programs designed to develop the Department's long-term capabilities. When the Executive Development Program is fully operational, its costs may be borne on a proportionate share basis by the elements of the Department.
H. Site Location and Administration for DOT Executive Development Program

Over the years, the practice which has been generally accepted in industry and government is to conduct executive development programs at sites removed from the office. This is done for several reasons, but most particularly because the participants are removed from office distractions which might interfere with the training, and because executives are felt to benefit most from discussions and the opportunity to work with peers in an informal setting, which extends past the normal hours of training. The panel feels this approach is best to follow where the cost is not excessive. Except in special circumstances, the large number of trainees at the first level of supervision may not make training at a site away from the office, a cost effective alternative, so it may be necessary to hold this training close to the trainee's work site. Certainly, however, at the middle management and executive levels, training can and should be conducted away from the office.

The DOT Executive Development Program should be located at a site removed from Washington, D.C., but close enough to allow top departmental officials to participate in the program as lecturers or discussion leaders. A permanent facility for such training would be most desirable, although the panel recognizes that it may be necessary to use rented space initially. It may be appropriate for many middle management programs to be housed in this facility, and space requirements can be determined by a survey, once it is determined which kinds of programs will be established by the operating elements of the Department.

RECOMMENDATION 13: That the Secretary endorse the principle of conducting executive development programs away from the participants' work stations whenever possible. In keeping with this principle, a survey should be conducted to determine space requirements for executive development programs and to seek a permanent site for an executive development center which is convenient to Washington, D.C., but sufficiently removed to keep office distractions to a minimum.

RECOMMENDATION 14: That the director of the executive development center have the stature which commands the respect of the executives of the Department, both for his managerial ability and training knowledge. The center should be staffed at a level which is consistent with a high-quality executive development program. The center could operate under the general direction of the Assistant Secretary for Administration through his Director of Personnel and Training.
I. Management Development as a Continuing Activity

In too many instances, management development is seen as a "one-time" activity, consisting of participation in a management course and return to the job, without further development until another course comes along. An effective management development program is far more complete than this kind of effort. Many experts believe, in fact, that on-the-job training is the most useful element in a good management development program, and that formal courses should be designed to sharpen and crystallize the OJT experience. Other activities should be worked into a management development program, many of them requiring an assessment of the individual's developmental needs and the preparation of a program tailored to his needs.

Before he enters a management job, the selectee might be involved in the following kinds of developmental experiences: job rotation assignments; assignments in an "acting" capacity; assigned readings and individually selected readings; correspondence courses in aspects of management; and discussions with experienced supervisors, middle managers and executives. Provision should be made to provide continuing experience and developmental assignments which add to and expand on the knowledge and experience of the incumbent in a management position.

By the same token, the selectee should be strongly encouraged to follow a regular program of self-development. Self-development involves those activities he undertakes on his own time and at his own expense. This might include selected reading; attendance at meetings and conferences; participation in correspondence training; or attendance at management courses at the selectee's expense. This kind of development supplements government-sponsored training and can be used effectively by the individual to fill in gaps in his management training or expand his knowledge in certain areas in which he desires to have more knowledge, but which are unavailable under government sponsorship.

RECOMMENDATION 15: That the DOT management development system provide for continuing training both to prepare selectees for the assumption of management duties and to provide follow-up developmental experience to meet the needs of the incumbent. An important part of the system which also must be stressed is the need for continuous self-development by managers and prospective managers.
J. Management Development Programs Sponsored by Organizations Outside of DOT

A wide variety of management development programs are offered by universities, other government agencies, associations and commercial organizations all over the country. These courses range in length from a matter of hours to two years, and cover an equally wide variety of subject matter. While the great number of these offerings inevitably means that there will be some inadequate programs, the panel feels that the use of such resources is an excellent way of assisting in the continuing development of management personnel.

While not recommending them over other offerings, the panel finds the variety of courses offered by the Civil Service Commission and culminating with the Federal Executive Institute (FEI), to be designed to meet the needs of Federal supervisors, middle managers and executives, and they provide a good resource for management development efforts which supplement in-house efforts. In any consideration of CSC courses, the panel feels that the FEI must be given special consideration. Without attempting to make any specific evaluation of the FEI, the panel does feel it is a worthwhile effort and sees no conflict between the FEI and a DOT Executive Development Program. The FEI's sphere of interest is the whole Federal Government while a DOT program must, of necessity, be more limited in scope. The FEI is also a broad educational effort, while the training objective of the DOT program is more narrowly defined.

RECOMMENDATION 16: That the Office of the Secretary encourage the practice of using quality nonDOT management development programs to assist in achieving management training objectives. These programs may be conducted by universities, commercial organizations, associations, or other government agencies such as the U. S. Civil Service Commission.
K. Selection for Management

Despite the fact that the charter of this panel was to consider only the area of management development, it is an inescapable fact that optimum results cannot exist without effective selection which is designed to ensure that the best qualified people available participate in management development programs. In these times of complex organizations and highly complex management responsibilities, we cannot rely solely on technical or professional competence as the basis for selection as a supervisor, middle manager or executive. Rather, he also must have the potential to do these jobs, and then be developed to ensure that his potential is crystallized.

The panel feels strongly that effective methods for selection of management personnel should be given early attention.

RECOMMENDATION 17: That the Office of the Secretary undertake a study of selection methods for civilian managers at all levels, but particularly at the executive level. This study should ensure that the same attention which will be given to development of management personnel is also given to their selection.
L. Career Development Programs

1. Intern Programs

Many successful organizations lay at least part of this success on their ability to hire the highest caliber of young people and develop them to assume management responsibilities. The Management Intern (MI) Program is one way in which the Federal Government has attempted to achieve this same objective. The panel finds that allowance has been made for bringing bright, young people into DOT, but there is little apparent work being done to develop them for careers in management. The technical nature of much of the work in the Department obviously precludes too much emphasis of such a management career approach, but the panel feels that more attention could be given to early identification and development of the best of the young people being hired. The increased use of the MI register is one way of accomplishing this, but even more, greater attention should be given to early identification and development of management potential among the younger employees in the Department's technical specialties.

RECOMMENDATION 18: That the Office of the Secretary encourage the development of programs to provide the early identification and development of management potential among the younger employees who are being hired. In addition, greater use should be made by all elements of the Department, of programs such as the Transportation Intern and Management Intern programs, which provide for entry level training for young people with management potential.

2. Mid-Level Programs

The preparation of mid-level employees (GS-12-15) who show high potential for the assumption of broad responsibilities of both a managerial and technical nature is another area which seems to need attention in DOT. This problem was addressed in the proposed Secretary's Fellowship, Executive Exchange and Advanced Management Development Programs which were recommended by the Assistant Secretary for Administration and mentioned earlier in this report. All of these programs provide for the early identification of people with high potential, and are geared to giving these people the kind of development designed to instill in them a broader outlook which should benefit them, their
employing organizations, and the Department. It does seem that elements of the programs recommended by the Assistant Secretary could be combined into one or two programs which could be highly beneficial to the Department.

RECOMMENDATION 19: That the Office of the Secretary study the possibility of developing programs for high quality mid-level employees (GS-12-15) which will provide them with a broader background and outlook than they would normally receive in their employing organizations. These career development programs should lead into and relate to the DOT management development system proposed in this report.
M. Organization Development or Renewal

A program to develop the effectiveness of the Department or an element of the Department, to deal with its program responsibilities, has considerable appeal. Before such efforts are given too much consideration, however, their cost in time and money should be carefully considered. If it is then determined that organization development, or a similar approach, is what is needed, the panel feels that it should be encouraged.

RECOMMENDATION 20: That the Office of the Secretary undertake a study of organization development to determine its possible application to the Department.
It has been said that "hypocrisy is the tribute that vice pays to virtue." And if we make obeisance to the concept of planning for management training and career development, while continuing in most of the country to practice nonplanning, I suppose its better than making a virtue of nonplanning. Perhaps in time our actions will catch up with our profession.

My survey of selected industries and Federal agencies showed that while most are active in planning programs that purport to train managers and executives, much more needs to be done. There is little evidence of a consistent approach to manpower planning, selecting, appraising and developing of managers which constitute a career development system.

Despite well developed programs on paper, past efforts by certain Federal agencies and business and industry have fallen short of their goals for some or all of the following reasons:

[1] A lack of commitment to the program on the part of top management.
[2] A failure to relate the management training program to the organization's mission.
[3] Little opportunity for experience-based learning activities. Too much emphasis was placed on inputs of new knowledge alone.
[4] Preoccupation with structure and procedure which overlooked the fact that an organization is made up of people.
[5] Impatience with improvement efforts even though the plans point out the long-term nature of benefits to be derived.

More recently, however, as my visits revealed, there is new emphasis on management training—or management development—which is based on insights gained from the social and behavioral sciences. Motivation and human effectiveness are central to the theme of many published works on the subject of modern management by Argyris, McGregor, Myers, Herzberg, Lippett, Bennis, Likert and others. These concepts and methods treat simultaneously the individual and the environment in which he works rather than more refined methods for individual learning.

The major target in each case where there is evidence of progress is the attitude, behavior, relationship, and performance of people in the organization. The underlying assumption is that groups and teams are the basic units or organization to be changed as one moves toward organization effectiveness. Texas Instruments, Inc., Dallas, Texas, for example, in its publication Management Philosophies and Practices states, "T.I. is goal-oriented and must be so managed that each individual T.I. associates achievement of his personal goals with the achievement of T.I. goals." Similar professions of philosophy of management were received from Motorola, General Motors and Martin-Marietta. In each instance, the procedures used to achieve these lauditory goals were designed in relation to the particular structure and operation of that organization.
The R. G. Barry Corporation, Columbus, Ohio, as reported by the Foundation for Research of Human Behavior, Ann Arbor, Michigan, has implemented the first Human Resource Accounting System wherein human resource investment measurement techniques are now being used as a basis for long-range manpower planning by reflecting human resources in the firm's capital budget, which in the past has been confined to physical asset planning. Gordon Zacks, President, states that "through the process of measuring human assets, our managers will receive, as part of the operating statements, an adjusted profit-and-loss statement and a balance sheet for the human assets within their control. The fact that these assets are being recognized and measured is a way of bringing their importance to the attention of everybody in the organization." This attempt to assess human resources in financial terms is a harbinger of the increasing attention to the importance of the human resources of an organization.

There is evidence, too, of some important recent activity in management development in other Federal agencies, such as the Park Service, the Forest Service, the Department of Labor and the Internal Revenue Service. These efforts, however, are centered generally in offices of training and thus are hampered by the characteristically low status that training traditionally has suffered. However, there are encouraging signs for ultimate success, particularly as more top level managers personally experience some of the various workshops that are available, both within their organization and outside.
All in all, both industry and government have come to the realization that management development efforts will result in desired changes only when the executive leadership is willing to support formal development with necessary organizational motivators and reinforcers. Personnel departments may be adept at augmenting training and development programs, but management development is a line, and not a staff, responsibility.
Memorandum

From: The Secretary

To: Secretarial Officers
Heads of Operating Administrations

Subject: Management Development in DOT

DATE: December 10, 1969

In reply refer to: TAD-14

To a very large extent, the performance of this Department is measured by the manner in which our employees carry out their work all over the world. The direction of the activities of these employees is one of the most critical elements in the effective performance of our mission, and I want to ensure that we are doing everything necessary as a Department to develop the skills of the supervisors, managers and executives who have such a critical role.

With this thought in mind, I have asked the Assistant Secretary for Administration to initiate a complete study of management development in DOT. This study, which will involve both military and civilian programs, should determine what we are presently doing in the area of management development and recommend any necessary programs which we need to establish to have a logical, systematic approach to management development at all levels. The study will attempt to decide what training we should be doing, and who should be doing it.

I have also directed the Assistant Secretary for Administration to form a distinguished panel of three people from outside the Department to assist in conducting the study. This panel should consist of a professional educator, an expert on management development in the Federal service, and a third member who is an authority on the development of people in an organizational setting.

The panel and staff officials who will be assisting them will soon begin gathering the data which will be necessary for the study. I hope you will offer them every assistance in this very important undertaking.

John A. Volpe
I. SUPERVISOR* (Report on all civilian supervisors and separately on military personnel with full first-level supervisory responsibility for civilian subordinates)

A. 1. What is the total number of personnel in your organization who were eligible for supervisory training as of June 30, 1969? (Include all eligible personnel in this grouping, whether or not they have previously received supervisory training.) What range of grade levels are you including in this grouping?

2. From the total listed in A.1. above, please indicate a breakdown by following categories:
   a. Incumbent Supervisors -
   b. Nonsupervisory Staff Personnel -
   c. "Straw Bosses" or other personnel, performing some supervisory duties, but not having a full range of supervisory responsibilities -
   d. Other (specify) -

B. What is the approximate annual turnover among the entire group of personnel eligible for supervisory training?

C. How many of your incumbent supervisors or comparable personnel were engaged during FY-69 in each of the following kinds of management training activities?
   1. Internal Classroom Training - (list each course by title, number of hours of training for each course, and total number of trainees enrolled by course during FY-69).
   2. External Classroom Training - (indicate total number of personnel involved during FY-69 and approximate total number of manhours of training).

D. What was the cost of supervisory training during FY-69, excluding salary and expense costs attributed to your own training staff?
   1. Travel -
   2. Per Diem -
   3. Contract Instructional Services -
   4. Registration, Tuition and Related Costs -
   5. Facilities Rental -
   6. Other (specify) -

E. What additional supervisory training programs are you developing?

* See definition in covering memorandum
II. MIDDLE MANAGER* (Report on civilian managers only)

A. 1. What is the total number of personnel in your organization who were eligible for middle management training as of June 30, 1969? (Include all eligible personnel in this grouping, whether or not they have previously received middle management training.) What range of grade levels are you including in this grouping?

2. From the total listed in A.1. above, please indicate a breakdown by the following categories:
   a. Incumbent Middle Managers -
   b. Staff Personnel performing duties requiring mid-management skills -
   c. Other (specify) -

B. What is the approximate annual turnover among the entire group of personnel eligible for middle management training?

C. How many of your incumbent managers or comparable personnel were engaged during FY-69 in each of the following kinds of management training activities?
   1. Internal Classroom Training - (list each course by title, number of hours of training for each course, and total number of trainees enrolled by course during FY-69)
   2. External Classroom Training - (indicate total number of personnel involved during FY-69 and approximate total number of manhours of training)

D. What was the cost of middle management training in FY-69, excluding salary and expense costs attributed to your own training staff?
   1. Travel -
   2. Per Diem -
   3. Contract Instructional Services -
   4. Registration, Tuition and Related Costs -
   5. Facilities Rental -
   6. Other (specify) -

E. What subject-matter areas do you feel form the most significant training needs of middle managers?

F. What additional middle management training programs are you developing?

* See definition in covering memorandum
III. EXECUTIVES*  
(Report on civilian executives only) 

A. 1. What is the total number of personnel in your organization who were eligible for training as executives on June 30, 1969? (Include all eligible personnel in this grouping, whether or not they have previously received executive training.) What range of grade levels are you including in this grouping?

2. From the total listed in A.1. above, please indicate a breakdown by the following categories:
   a. Incumbent Executives - (include those in positions approved at the supergrade level, but not yet allocated)
   b. Other (specify) -

B. What is the approximate annual turnover among the entire group of personnel eligible for training as executives?

C. How many of your incumbent executives or comparable personnel were engaged during FY-69 in each of the following kinds of management training activities?

1. Internal Classroom Training - (list each course by title, number of hours of training for each course, and total number of trainees enrolled by course during FY-69)

2. External Classroom Training - (indicate total number of personnel involved during FY-69 and approximate total number of manhours of training)

D. What was the cost of executive training during FY-69, excluding salary and expense costs attributed to your own training staff?

1. Travel -
2. Per Diem -
3. Contract Instructional Services -
4. Registration, Tuition and Related Costs -
5. Facilities Rental -
6. Other (specify) -

E. What subject-matter areas do you feel form the most significant training needs of career executives?

* See definition in covering memorandum
INTERVIEWS BY CONSULTANT PANEL

Oscar Bakke, Associate Administrator for Plans, FAA
Roy L. Barton, Chief, Civilian Personnel Division, USCG
James R. Beck, Jr., Deputy Director, Federal Executive Institute
James M. Beggs, Under Secretary
ADM Chester R. Bender, Commandant, USCG
L. S. Casazza, Deputy Director of Administration, FHWA
Alan L. Dean, Assistant Secretary for Administration
Kent W. Fendler, Chief, Personnel and Training Division, FHWA
William E. Gerow, Director of Career Management Division,
Department of Navy
RADM Robert W. Goehring, Chief of Staff, USCG
Bertrand M. Harding, Associate Administrator for Manpower, FAA
Clarke Harper, Associate Administrator for Administration, FAA
Brendon T. Jose, Assistant Administration,
St. Lawrence Seaway Development Corporation
Richard F. Lally, Director of Civil Rights, OST
CAPT James L. Lathrop, Deputy Chief, Office of Personnel, USCG
Carl V. Lyon, Deputy Administrator, FRA
George S. Maharay, Director of Personnel and Training
David C. Oberlin, Administrator, St. Lawrence Seaway
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John P. Olsson, Deputy Under Secretary
Victor J. Onachilla, Manager, FAA Executive School
Michael O'Rourke, Director of Administration, FRA
RADM Ellis L. Perry, Chief, Office of Personnel, USCG
John H. Reed, Chairman, National Transportation Safety Board
Ralph Salvagno, Head of the Institute of Management Branch, Department of Navy
VADM Thomas R. Sargent III, Assistant Commandant, USCG
Dr. Frank P. Sherwood, Director, Federal Executive Institute
Kenneth M. Smith, Deputy Administrator, FAA
Douglas W. Toms, Director, National Highway Safety Bureau
Francis C. Turner, Federal Highway Administrator
Ernest Weiss, Executive Director, National Transportation Safety Board
Robert H. Willey, Director of Civilian Manpower Management, Department of Navy
Appendix A. Supervisory Training

A-1. INTRODUCTION

a. Rationale. (1) Management effectiveness and efficiency are directly dependent upon the quality of supervision. Supervisory training is, therefore, essential: it is both a way to prepare the supervisor for the responsibilities imposed by the modern organization and a way to assure capacity to meet the challenge of constant change in management processes and technology. Training should equip the supervisor with those skills which will enable him (a) to help his organization accomplish its mission and (b) to discharge his individual responsibilities to the maximum satisfaction of his superiors, his subordinates, and himself.

(2) Chapter 335, Promotion and Internal Placement, recognizes the critical role of the supervisor by establishing improved criteria for the selection of persons with supervisory abilities and potential and by requiring the training of all new first-level supervisors either before they assume their new duties or as soon after as possible. (See section 3-8b of chapter 335.) This appendix gives the criteria for the initial training of first-level supervisors as well as for the subsequent training which is desirable for all supervisors. Within these criteria supervisory training programs—as indeed all internal training programs—should reflect the mission, philosophy and tradition, organizational structure, problems, realities, and needs of the agency.

b. Management responsibility. Training is a line responsibility, and the ultimate responsibility for the quality and sufficiency of supervisory training lies with the head of the agency. (See section 1-4 of chapter 250.) Agency management must insure that each first-level supervisor receives appropriate initial preparation for his job as well as continued development in the art of supervision; that supervisory training has full management support and interest, in practice as well as in policy; that the content of training programs is not only appropriate to agency needs but also is relevant to the needs of the individual supervisor; that the training is of high quality; and that the work environment is conducive to the practice of good supervision. Agency management should evaluate its supervisory training programs periodically to ascertain how well they are meeting the needs of the agency and its supervisors, to determine what should be done to improve these activities, and to effect needed change. (See section 3-5 of chapter 410.)

A-2. INITIAL TRAINING OF FIRST-LEVEL SUPERVISORS

a. Coverage. The provisions of this section apply to all employees selected after June 30, 1969, for positions in the competitive service classified or graded as first-level supervisor, regardless of pay system or manner of selection (promotion, internal placement, or other means). (In the context of this appendix, a first-level supervisory position is one which meets the standard of minimum supervisory responsibility defined in the job standards of the applicable pay schedule.) Persons in working- and project-leader type positions are not subject to these requirements; however, agencies should also provide them with training appropriate to the duties and responsibilities of their positions.

b. Goals to be achieved. (1) The position of first-level supervisor has unique characteristics. The person occupying this position is literally a man-in-the-middle with direct responsibilities to the employees he supervises as well as to management. His is a dual role because he is both a representative of management and a representative of his work group to management. He is required to play a significantly dif-
ferent role than he had as an employee, and the supervision of people is an extremely important aspect of this new role.

(2) Training for all supervisors should encompass the knowledges and skills necessary to do the job. The good supervisor needs a well-founded knowledge of his occupation and an equally solid understanding of the structure and operations of the organization. In varying degrees he must have administrative skill, analytic and conceptual ability, skill in human relations, ability to provide leadership, the capacity to get the job done, and technical know-how.

(3) The new first-level supervisor does not ordinarily enter into his position possessing the knowledges and skills necessary to cope with its complex requirements. His promotion to supervisory rank often reflects a recognition of his competence in some specialized occupational area and an estimate of his potential for supervision. The ultimate goal of training for the new or prospective first-level supervisor should be the development of this potential by providing him with an understanding of good supervision, teaching him how to apply good supervisory techniques, helping him develop a capacity for doing his job effectively and preparing him for more advanced training.

(4) The training needs of the new or potential supervisor should be identified before training. Since needs vary for each person and for the job he performs, his training should be geared to these needs. The new supervisor's training and developmental program should be based on his background (his education, previous experience, and training), the supervisory situation (the type of employees supervised, their level of work, and the organizational activity), and the needs of the organization.

c. Commission requirements. (1) The Commission requires that suitable initial training be provided all newly selected first-level supervisors either before they assume their new duties or as soon after as possible. (See section 3–8b of chapter 335.) To meet this requirement, the content of agency training programs should be geared to the needs of the individual supervisor and should include, as appropriate, the 10 subject areas indicated in section A-2d of this appendix.

(2) A successful supervisory training program, one which meets the objectives of initial training and the requirements of this appendix, generally necessitates a minimum of 80 hours instruction. Therefore, as a general rule the required training for each new first-level supervisor should be no less than 80 hours of formal instruction or its equivalent (when formal instruction is not feasible or possible) within his first two years as a supervisor; however, each new supervisor is required to have at least 40 hours of training either before (preentry training) or within six months after entry on duty as a supervisor.

(3) In applying the foregoing, each agency shall make the determination of the individual supervisor's need, based upon such factors as previous training, education, and experience. When the person's background has equipped him with skills and knowledges equivalent to those which would be acquired through certain aspects of the training required in this appendix, the 80 hours (including the initial 40 hours) may be reduced accordingly. The personnel file of each new first-level supervisor must be documented to clearly indicate the following:

(a) What determination was made concerning training needs;
(b) The basis for the determination;
(c) What training was provided to meet those needs; and
(d) If training given is less than 80 hours, the basis for the lesser amount.

Although 80 hours meets the minimum standard for initial training, it is strongly recommended that the new supervisor receive substantially more preparation so that he may be properly equipped to function as a supervisor.

d. Required program content. (1) While it is recognized that important training occurs on the job with the coaching of one's superior or peer, formal training (i.e., off-the-job training which is a part of a planned, prepared, and coordinated curriculum) is necessary to build that body of knowledges and skills needed to perform a wide variety of tasks. Thus, formal training should provide the latest, most useful
information, and knowledge of the field; permit the participant to profit from the findings of the social and behavioral scientists working in fields of group dynamics, human relations, and related disciplines; and enable him to build a reservoir of techniques for his own use. Finally, formal training should provide a conceptual framework for use in assessing the work situation and for taking action in or upon it.

(2) General content requirement. Although primary responsibility for the content of training programs lies with the agency, the Commission recommends that these programs for all new first-level supervisors include instruction in the following subject areas, depending upon individual need (see section A-2b(4) above):

(a) Personnel policy, practices, and procedures (with particular emphasis on merit promotion policy, equal employment opportunity, and labor relations);
(b) Supervisory responsibilities within the agency and organization;
(c) Communicative processes in management;
(d) Human behavior, motivation, and interpersonal relationships;
(e) Work planning and productivity;
(f) Basic theories of supervision and management;
(g) Concepts of organization;
(h) Techniques for problem-solving and decision-making;
(i) Methods of performance appraisal and evaluation;
(j) Learning theory and training techniques.

Agencies may continue to use previously developed courses and programs which meet the standards of this paragraph. Courses and programs which do not meet these standards should be revised. But because of the time and expense usually involved in curriculum development, agencies may have until June 30, 1971, to complete their revisions. Specific topics which should be treated under each subject above will be described (and revised from time to time) in bulletins and other issuances of the Commission.

(3) Introductory content. The introductory content should give an overview of the responsibilities of the supervisor and of the body of knowledges he will need to perform effectively. Since the first problems encountered by the new supervisor usually occur in the areas covered in the content of the first five subjects listed in paragraph d(2) of this section, the Commission strongly recommends that they be given particular emphasis in the supervisor's introductory training (either preentry training or that received within the first six months of incumbency). Agency experience should determine, of course, which subject-matter is most appropriate.

e. Provision of training. Agencies should conduct their own training whenever possible. Training may be provided, however, through the facilities of the Commission, other Federal agencies, or appropriate non-Government educational institutions. (See section A-4.) When a nonagency facility is used, agencies should supplement training of this kind internally in order to communicate fully their characteristic attitudes and philosophy.

A-3. ADVANCED TRAINING

a. General considerations. The need for developing and training experienced supervisory personnel as well as other employees is continuous. Knowledges and skills acquired in initial training must be extended and reinforced periodically if they are not to become obsolete. Experienced personnel are continually confronted with changes in job requirements and with new situations which demand more information, broader knowledge, and improved technique. Therefore, advanced training, particularly for supervisors, should be built upon a continuous, systematic appraisal of individual need and the needs of the agency. This applies not only to first-level supervisors but to all supervisors and to managers who have supervisory responsibilities. In any event, individual plans for the continued development and training of each supervisor should be established and adhered to as much as possible. Such planning
is not only advantageous for preparing the employee to do his job well but is also an effective method for developing a competent staff while assuring individual career advancement.

b. Recommended program content. Advanced training programs for supervisors should enable them to keep up with the state of the art and should be built on training already received, individual experience, and the appraisal of current and future agency need. They should concentrate on the functional aspects of supervision and should emphasize how best to apply supervisory knowledge, skill, and technique. Above all, advanced training should teach the policies of the agency and how it really operates. The Commission recommends, therefore, that all advanced programs include additional or more intensive training in the following: (1) Agency personnel practices and procedures; (2) communication skills and techniques; (3) interpersonal relationships; and (4) work planning and control. Consideration should also be given to more intensive coverage of other subjects listed in section A-2d of this appendix.

A-4. RESOURCES, METHODOLOGY, AND MATERIALS

a. Resources. (1) Agency. Since good training is essential to the maintenance of an effective management team, each agency should acquire the internal capacity to train and develop its supervisory personnel. Whenever it is not feasible to have this capacity, agencies should secure assistance from the Commission or interagency sources. If nonagency resources are used, the training must be made relevant (as indicated in section A-2e above).

(2) Commission. The Commission has developed four courses for internal use by agencies which are specifically designed to provide training for supervisory personnel. They are: Introduction to Supervision; Supervision and Group Performance; Basic Management Techniques I; and Basic Management Techniques II. Agency instructors may be prepared to present these courses by participating in the courses and in the related instructors institutes. (These courses are described in bulletins and other publications of the Commission's central and regional offices. Those agencies whose supervisory training needs require more instructors than could be trained by the Commission may be authorized by the Commission to prepare their own instructors to conduct these four courses. In addition, the Commission will: Assist agencies in developing programs for initial or advanced supervisory training; promote and facilitate the use of interagency training resources and the development of curricula (by colleges, universities, and private sources), self-development programs, and self-study materials to meet specific supervisory training needs; and collect and disseminate useful data on supervisory training in the Federal service. Commission training activities are intended to supplement agency training programs and in no way relieve the agencies of primary responsibility for the development and training of their employees.

(3) Interagency. Some agencies' courses and programs may be as appropriate as those of the Commission for training supervisors in agencies which lack the necessary capacity and resources. Information about these programs will be announced in the Interagency Training Programs Bulletins. Agencies not having suitable supervisory training resources within their own organization are urged to use these programs as well as those sponsored by the Commission.

(4) Non-Government. Agencies may utilize the resources of local schools, colleges, universities, and other non-Government facilities under the conditions specified in this appendix and in subchapter 5 of chapter 410. These resources, however, normally should be used only to supplement and extend agency training activity and only when the objectives of this appendix would be met in a more economical and timely fashion.

b. Methodology. The methodology used in supervisory training should be appropriate to the program's goals and objectives, its content, and the nature of its audience. Since the free exchange of information is invaluable for developing good supervisors, classroom training
Appendix A. Supervisory Training

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should be used whenever practicable because it brings together people who are sharing the challenge of newly acquired supervisory responsibility and the possession of only a limited experience. Whenever classroom-type training is not possible—e.g., when the supervisors are stationed in remote locations—agencies may use whatever instructional method is judged to be most suitable. Agencies with employees in these circumstances should consider the advantages of jointly sponsored supervisory training.

c. Materials. Although the Commission will develop and provide (upon request) certain prototype materials for supervisory training, agencies should develop and maintain their own materials and resources for this purpose. These might include books, pamphlets, other publications; bibliographies and catalogues; correspondence courses, programmed or self-study materials; films, slides, transparencies, tapes, or other audiovisuals, as well as those devices and equipment suitable for effective training. These materials should also be made available for use in the personal self-development programs of individual employees. (See section A-5.)

A-5. ENCOURAGING SELF-DEVELOPMENT

a. General. Self-development is the cornerstone of training in the Federal service. Employees, therefore, should be apprised of management's interest in and support of their efforts to improve their abilities and skills. They should clearly understand what the agency can and will provide to assist them in their self-improvement, but they should also be made aware of their own responsibilities for self-development. Agencies should assist and encourage those employees who attempt to prepare themselves for supervisory positions and those employees already in supervisory positions who want to enhance and improve supervisory skills. To the extent possible, agencies should provide staff and facilities to aid employees in achieving personal goals which may be directly or even indirectly related to the functions of their organization.

b. Specific services. Specific services which an agency can furnish include providing assistance in developing a personal training program, counseling, experiential opportunities, and the use of in-house facilities and materials. An agency may also provide limited training through its own facilities as long as this training is made available in a manner consistent with equity, merit, and applicable Federal regulations. Employees should be encouraged to use agency resources which are appropriate for self-study, such as the agency library or materials used in the regular supervisory training program. They should also be advised of supervisory or management training available through local community resources and by correspondence. Whenever possible, agencies should evaluate these programs and inform employees of their quality and relevance.
Chapter 412
Executive Development

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1-1. NEED FOR EXECUTIVE DEVELOPMENT

The imperative need for a continuous supply of high-quality career executives in the Federal service is widely recognized. This situation emphatically and clearly points to the importance of instituting a positive program which will assure the filling of the anticipated vacancies with persons of outstanding leadership ability, creative imagination, and sound judgment. Employees with executive potential in positions below the top career levels must be identified, trained, and developed over a period of time to increase their capacity to perform the complex functions of career managers. Each agency must take steps to find persons of executive potential and to train and develop them to assume the full responsibilities of agency management.

1-2. AGENCY RESPONSIBILITIES

a. The head of each agency, in connection with his general and continuing responsibility to achieve the highest quality of leadership and management, can insure a sound basis for executive development by taking the following actions:

(1) Surveying in detail on a recurrent basis prospective losses of key career personnel in grades GS-15, -16, -17, and -18, or equivalent.

(2) Considering the problems involved in replacing key career personnel losses and developing and installing a formal, orderly plan for developing capable replacements.

(3) Assigning specific responsibilities at the executive level to provide for the training of managers through selected assignments and formal training programs and assuring that implementation of these responsibilities is monitored.

(4) Developing each manager's skills in the techniques of management and the processes of administration, increasing his effectiveness in dealing with employee resources, and broadening his understanding of agency and Government missions and the relevance of those missions to national goals.

(5) Assuring that managers provide increased on-the-job training and guidance to their subordinate supervisors.

(6) Identifying employees with potential and providing the assignments, experiences, and training needed to prepare them to assume leadership posts.
Subchapter 2. Plans for Executive Development

2-1. GENERAL

The Civil Service Commission recommends that agencies adopt executive training and development programs. The Federal service as well as the person concerned benefits by systematic career development of outstanding employees. In order to facilitate programs of this kind, two plans are suggested. The Commission, as far as resources permit, will cooperate with agencies in planning specific executive development programs to meet their particular needs.

2-2. SUGGESTED PLANS

a. Plan 1—Assignment of administrative personnel to other branches of administration. In order to broaden the experience of employees who are now engaged in one phase of administrative work, the Commission encourages their assignment to other administrative fields. Therefore, under the conditions specified in section 2-3 of this chapter, agencies may reassign or promote employees who are currently in one of the following administrative series to any of the others listed, even though they do not meet open-competitive standards for the new assignment, provided that they are otherwise eligible for reassignment or promotion of this kind, and provided that nominees to positions in series which require a written test in noncompetitive actions must pass the specified test unless they have previously passed the same or equivalent written test:

- GS-201 Personnel Management Series
- GS-212 Personnel Staffing Series
- GS-221 Position Classification Series
- GS-222 Occupational Analysis Series
- GS-223 Salary and Wage Administration Series
- GS-230 Employee-Management Relations and Cooperation Series
- GS-235 Employee Development Series
- GS-340 Program Management Series
- GS-341 Administrative Officer Series
- GS-343 Management Analysis Series
- GS-504 Budget and Accounting Series
- GS-505 Financial Management Series
- GS-560 Budget Administration Series

An agency may propose, in addition to the codes listed above, agreements covering other codes which in the practice of that agency have positions with a large content of administrative or executive responsibility.

b. Plan 2—Administrative training for specialized personnel. Since many Federal administrators are selected from professional, scientific, and technical fields, the Commission urges agencies to provide systematic training in administration for specialized personnel who demonstrate an aptitude for administration. Reassignment or promotion of these specialists to administrative positions may be made under the conditions specified in section 2-3 of this chapter, even though they do not meet open-competitive standards for the new assignment, provided that they are otherwise eligible for reassignment or promotion of this kind.

2-3. EXECUTIVE DEVELOPMENT AGREEMENTS

a. All executive development agreements require prior approval of the Commission. When an executive development program is to be considered an approved training program for the purposes of accelerated promotion, the program must also meet the criteria for training agreements provided in Chapter 271, Developing Policies, Procedures, Programs, and Standards.
In either event, all requests for executive development agreements must give:

1. The basis for selecting employees for executive training and development.

2. An outline of the executive development plan and the training which employees will receive, including duration, content, and methods.

b. The Commission will approve executive development agreements which indicate that, within a reasonable time after assignment, employees will have acquired the knowledge necessary to perform fully their new duties. Reassignments or promotions under approved executive development agreements are not subject to further prior approval but will be reviewed on inspection.

c. When an agency plans, in its executive development plans, to reassign or promote an employee who is being developed, to a line of work not covered by the executive development agreement, prior approval of the employee concerned or of the general amendment of the agreement must be obtained from the appropriate office of the Commission. An agency must outline the training that it proposes to give the employee and show that within a reasonable time he will have received sufficient training to acquire the knowledge necessary to perform fully his new duties.