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TECHNICAL REPORT 144

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**INSERVICE TRAINING NEEDS OF  
TRAINING EXECUTIVES AND  
CURRICULUM AND INSTRUCTION  
STANDARDS OFFICE PERSONNEL**

MAY 1983

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ORLANDO, FLORIDA 32813

Technical Report 144

INSERVICE TRAINING NEEDS OF TRAINING EXECUTIVES AND  
CURRICULUM AND INSTRUCTION STANDARDS OFFICE PERSONNEL

Larry H. Ford  
Eugene R. Hall

Training Analysis and Evaluation Group

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*Alfred F. Smode*

ALFRED F. SMODE, Ph.D., Director  
Training Analysis and Evaluation Group

*W. L. Maloy*

W. L. MALOY, Ed.D.  
Deputy Chief of Naval Education and  
Training for Educational Development  
and Research and Development

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20. ABSTRACT (continued)

The Chief of Naval Education and Training (CNET) tasked the TAEG to assess IST needs on a command-wide basis rather than for individual training activities. The CNET will use the information developed by TAEG to plan for the acquisition of needed training materials to support training activities in carrying out their IST functions.

This study assessed the IST needs of personnel assigned to CNET training activities and developed a prioritized listing(s) of command-wide inservice needs.

Four groups of training activity personnel were identified as potential candidates for IST:

- Curriculum and Instruction Standards Office (CISO) personnel
- Training Executives (i.e., commanding officers, executive officers, and directors of training)
- Training Managers (i.e., training department heads, school/course heads, and instructor supervisors)
- Instructors.

This report documents inservice requirements for the CISO personnel and the training executive groups. A companion report (Ford, Whitten, & Hall, 1983) delineates the needs of the other two personnel groups.

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## SECTION I

### INTRODUCTION

The Chief of Naval Education and Training (CNET) requires that his subordinate schools provide inservice training (IST) to assigned personnel. The general intent of IST is to enhance and maintain personnel skills and knowledge necessary for the efficient and effective management and delivery of training. Currently, IST is most often designed at the local level to meet needs at a specific activity. Thus, IST varies in content and emphasis across Naval Education and Training Command (NAVEDTRACOM) activities. Attention to the provision of IST on a command-wide basis has typically been directed to meeting specific needs as they arise. Systematic attempts to identify and contend with the, perhaps, more enduring and critical school staff training needs have been lacking.

CNET tasked the Training Analysis and Evaluation Group (TAEG) to assess IST needs for personnel assigned to NAVEDTRACOM training activities<sup>1</sup> with the emphasis on command-wide needs rather than just those of individual training activities. The information developed by TAEG will be used by CNET to plan for the acquisition of training materials needed to support IST.

#### PURPOSE OF THIS STUDY

The purpose of this study was to (1) assess the inservice training needs of personnel assigned to CNET training activities and (2) develop a prioritized listing(s) of command-wide inservice needs for CNET attention.

Four groups of training activity personnel were identified by TAEG as potential candidates for inservice training:

- Curriculum and Instruction Standards Office (CISO) personnel
- Training Executives (i.e., commanding officers, executive officers, and directors of training)
- Training Managers (i.e., training department heads, school/course heads and instructor supervisors)
- Instructors.

The present report documents inservice requirements for the CISO personnel and the training executive groups. A companion report (Ford, Whitten, & Hall, 1983) delineates the IST needs of training managers and instructors.

<sup>1</sup>CNET ltr Code 022 of 25 Sep 1981 (NOTAL).

## SECTION II

### THE INSERVICE CONCEPT

This section addresses the concept of inservice training. Certain general considerations relevant to the concept are presented, followed by a brief description of current inservice requirements.

#### GENERAL CONSIDERATIONS

IST is formal training that individuals receive after reporting for duty at a training activity. The training is formal if it has a curriculum, objectives to be achieved, and criteria for success or failure. Inservice training is distinguished from on-the-job training in that IST occurs during periods when individuals are not involved in the performance of their normal job duties.

Most inservice training assumes that assigned personnel are basically qualified for the positions they occupy. Thus, the purpose of IST, generally, is to enhance and/or maintain the skills of currently qualified personnel rather than to impart basic skills to previously unqualified personnel. There are at least three applications for which IST is appropriate: refresher training, training in new procedures and techniques, and training in specialized procedures and techniques. For these purposes, IST is likely to be more desirable than sending personnel to a centralized school. A centralized approach would require more time and money and would also remove qualified personnel from their duty stations during training periods. One of the advantages inservice training is that personnel being trained are still available to the activity to perform their duties. Despite its advantages, inservice is not the optimal mode for all kinds of training. For lengthy programs in particular, centralized training may have advantages such as requiring fewer personnel to conduct and maintain programs. It may also permit more efficient use of equipment and facilities.

#### CURRENT INSERVICE REQUIREMENTS

Official publications of the CNET and the Chief of Naval Technical Training (CNTECHTRA) refer to inservice training.

Procedures for Instructional Systems Development (NAVEDTRA 110A) provides guidance for the analysis, design, development, implementation, and control of instructional programs under CNET cognizance. The need for inservice training is recognized with the following statement:

**INSERVICE TRAINING.** All activities will provide a formal inservice training program monthly for instructional and supervisory personnel.

CNET Instruction 1540.6A (1982) delegates to training activity CISOs the responsibility for maintaining the quality of local technical training through instructor and staff inservice training programs.

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CNTECHTRA Instruction 1540.47 (1979) provides "policy and guidance for the conduct of an instructor/staff inservice training program" for training activities under CNTECHTRA cognizance. Several guidelines are provided. Inservice should be "formal, scheduled, and periodically evaluated." The purpose of inservice training is to correct deficiencies and provide for professional growth. Inservice programs should be developed with the guidance of the CISO. Also, not only are instructors to be given inservice training, but so should staff and supervisory personnel. The instruction states that needs for specific inservice training can be determined by internal evaluation and day-to-day supervision.

The documents cited above establish a formal requirement for inservice to be conducted at training activities. The content of inservice is, however, largely left to the discretion of each local activity. Currently, there is a lack of information concerning inservice needs across the Naval Education and Training Command (NAVEDTRACOM). The present study was designed to assess NAVEDTRACOM-wide needs. The technical approach taken to assess these needs is described in the next section of this report.

### SECTION III

#### TECHNICAL APPROACH

This section presents the technical approach used to assess inservice training needs of CISO personnel and training executives (i.e., commanding officers, executive officers, and directors of training) across the NAVEDTRACOM. The procedural steps consisted of project planning and coordination, questionnaire development, designing study samples, data collection, and data analysis. Each of these steps is discussed below.

#### PROJECT PLANNING AND COORDINATION

At the beginning of the project, planning and coordination meetings were held with selected training activity personnel and with CNET and CNTECHTRA staff.

Open-ended interviews were conducted with training activity personnel to obtain information concerning:

- the functions performed at the activity by various personnel groups
- the existence and success of formal inservice training programs at that activity
- the target populations of those programs
- who designs, delivers, and evaluates inservice programs
- the inservice needs of assigned staff.

Information obtained from these interviews was used in project planning to delimit the inservice training study and as input to data collection instruments.

During individual meetings with CNET and CNTECHTRA staff personnel, various inputs to the program were received. At CNTECHTRA, a general staff briefing was provided by the TAEG project team. Subsequently, open-ended interviews were conducted with groups of Training Program Coordinators (TPCs). At these sessions, TPCs provided inputs concerning the adequacy of function lists generated through interviews with training activity personnel and/or extracted from other sources. The TPCs also assisted the TAEG project staff in selecting a representative sample of training activities from which data would be collected.

To ensure maximum participation in the study by personnel at the training activities of interest, CNET transmitted letters to the CNET functional commanders and to the Naval Education and Training Center requesting support for the study.<sup>2</sup> The functional commanders, in turn, requested maximum participation from their subordinate activities.

<sup>2</sup>CNET ltr Code OOA2 of 8 Feb 1982.

## QUESTIONNAIRE DEVELOPMENT

To minimize project costs, questionnaires were used to obtain information from CISO personnel and training executives.

The first step in questionnaire development was to determine the functions that were performed by each particular type of personnel. The findings of a recent study of CISO personnel and their functions (Hall, Ford, & Middleton, 1981) were used to create an initial list of CISO functions. Various general sources were used to identify functions performed by training executives. Information extracted from these general sources was supplemented by interviews conducted with incumbent training executives. In addition to identifying functions that training executives perform, areas in which specialized knowledge might be required were also identified.

The lists of functions and knowledge areas were subsequently reviewed by personnel knowledgeable of training activity operations (e.g., TPCs and education specialists) to determine if there were any significant omissions or inappropriate inclusions.

The resulting CISO questionnaire had two sections; the training executive questionnaire had three. A copy of each questionnaire is shown in appendix A. In both cases, the first section dealt with general respondent information and also asked questions about the degree to which the incumbent's job had changed during his/her tenure. Again, in both cases, the second section was concerned with specific job functions. For each function, six questions were asked:

- On the average, how often do you perform this function?
- How difficult is it for you to perform this function?
- When you first arrived at this activity, how difficult was it for you to perform this function?
- How important is the performance of this function to success at your job?
- Did you receive any formal inservice training in how to perform this function when you arrived at this activity?
- If not, how useful would inservice training in how to perform this function have been when you first arrived at this activity?

Those interested in the specific response options for each question should refer to appendix A.

The questions listed above were used because they form the foundation of a training task analysis. Similar questions have been used previously (Hall, Ford, and Middleton, 1981; Hughes, Ford, Heidt, and Copeland, 1981) to analyze specific jobs and to assess training needs of job incumbents.

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The third section of the training executive questionnaire was concerned with knowledge areas. Five questions were asked about each knowledge area listed:

- How familiar are you with this area?
- How important is familiarity with this area to success at your job?
- How familiar were you with this area when you first arrived at this activity?
- Did you receive any formal inservice training in this area when you first arrived at this activity?
- If not, how useful would inservice training in this area have been when you first arrived at this activity?

To establish training priorities for tasks that constitute a job, three basic items of information are required:

- Frequency of performance of a function
- Importance of performance of a function
- Difficulty of performance of a function.

The frequency of performance of a function is self-explanatory. It simply means how often an individual does a particular thing. Difficulty of performance is also self-explanatory. The term "importance" is essentially synonymous to the term "criticality," which is more frequently used in operational contexts. Criticality indicates the cost of failure to perform a function correctly. Aircraft maintenance functions, for example, may have an extremely high criticality. Thus, even if a particular function is performed infrequently, it may be extremely important that it be done correctly when it is done.

The priority of training for particular functions should be established on the basis of a combination of these three dimensions. Those functions that are frequently performed, very important, and very difficult would be given the highest priority for training. Likewise, those functions that are infrequently performed, are not important, and are easily done would be given the lowest priority for training. Training priorities for functions that fall in the middle could be ordered using a variety of rules for combining the three dimensions.

Questions concerning difficulty of performance of particular functions upon arrival at a training activity were included on the questionnaires to determine if there were differences in inservice needs for personnel when they first arrived compared to the current time. Also, since this study was oriented to a particular type of training (i.e., inservice) respondents were specifically asked about the usefulness of inservice. Finally, to assess

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the extent of current, formal inservice training within the NAVEDTRACOM, respondents were asked if they had received any formal inservice in each function upon arrival at their duty station.

### **SAMPLING STRATEGY**

Sampling for this study required two steps. First, the population of training activities had to be determined and sampled. Second, personnel within each training activity had to be sampled.

To determine the population of training activities, a list of all staff unit identification codes (UIC) was compiled for all Navy courses listed in the Navy Integrated Training Resources and Administrative System (NITRAS). Next, this list of staff UICs was compared with the Navy Comptroller's Manual, Vol. 2, Chapter 5, Revision 42, to identify all Navy activities that were conducting training. There were over 100 activities identified. The next step in reducing the population was to limit it to CNET activities. The reduced list was then presented to TPCs at CNTECHTRA with the request that they nominate as few activities as possible that would be representative of all CNET training activities on the list. The resulting sample of 35 training activities and detachments is shown in table 1. Although the sample of activities was not randomly drawn, there is no reason to believe that it was not representative. Further, TPCs who had intimate knowledge of the activities involved agreed that the sample did adequately represent the larger group.

With the sample of activities drawn, it was then necessary to determine how to sample individuals within activities. As a preliminary step in this process, a message<sup>3</sup> was sent to all sampled training activities. Each activity was requested to provide the numbers of personnel at the activity who occupied specific billets/positions. Subsequently, a sampling strategy was selected and a procedure for distributing questionnaires was enclosed with each packet of questionnaires sent to an activity (see appendix A). For the CISO group and the training executive group, all assigned personnel were sampled.

### **DATA COLLECTION**

Questionnaire packets were mailed to the training activities on 8 April 1982. To promote candor, respondents were requested to return the completed questionnaires directly to the TAEG rather than through command channels. Preaddressed envelopes were provided for this purpose. It was further requested that each training activity return all unneeded, excess questionnaires, so marked, to the TAEG.

<sup>3</sup>TAEG msg 091450Z MAR 82.



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TABLE 1. TRAINING ACTIVITIES AND DETACHMENTS SAMPLED

Naval Diving and Salvage Training Center, Panama City  
Naval Air Maintenance Training Group Detachment, North Island  
Naval Amphibious School, Coronado  
Naval School, Explosive Ordnance Disposal, Indian Head  
Naval Air Technical Training Center, Millington  
Service School Command, Orlando  
Naval Submarine Training Center, Pacific  
Service School Command, San Diego  
Submarine Training Facility, San Diego  
Naval Technical Training Center, Corry Station  
Naval Damage Control Training Center, Philadelphia  
Naval Air Technical Training Center, Lakehurst  
Naval Technical Training Center, Meridian  
Naval Supply Corps School, Athens  
Naval Justice School, Newport  
Naval Air Maintenance Training Group Detachment, Oceana  
Naval Construction Training Center, Port Hueneme  
Service School Command, Great Lakes  
Naval Submarine School, Groton  
Naval Air Maintenance Training Group, Millington  
Trident Training Facility, Bangor  
Combat Systems Technical School Command, Mare Island  
Naval Technical Training Center, Treasure Island  
Naval School, Civil Engineer Corps Officers, Port Hueneme  
Naval Construction Training Center, Gulfport  
Surface Warfare Officers School Command, Newport  
Human Resource Management School, Millington  
Naval Education and Training Center, Newport  
Fleet Anti-Submarine Warfare Training Center, Atlantic  
Fleet Training Center, Norfolk  
Fleet Combat Training Center, Atlantic  
Fleet and Mine Warfare Training Center, Charleston  
Fleet Anti-Submarine Warfare Training Center, Pacific  
Fleet Training Center, San Diego  
Fleet Combat Training Center, Pacific

### DATA PROCESSING AND ANALYSIS

As the questionnaires were returned by mail, they were entered into computer storage. The Statistical Package for the Social Sciences (Nie, Hull, Jenkins, Steinbrenner, and Bent, 1975) software package was used for data management and analysis. The computational facilities of the Northeast Regional Data Center of the State University System of Florida, located at the University of Florida, Gainesville, Florida, and of the University of Central Florida, Orlando, Florida, were used.

## SECTION IV

### RESULTS

This section presents the results of the analysis of questionnaire responses to the CISO and Training Executive Inservice Training Needs Assessment Questionnaires.

#### RETURN RATES

For the entire study of all four groups of personnel, 1,623 questionnaires were distributed and 1,343 usable questionnaires were returned, for an overall response rate of 83 percent.

A total of 244 CISO questionnaires were distributed to CISO personnel and 199 were returned, for a response rate of 82 percent. Of the 199 usable CISO returns, 57 were from civilians, 23 were from commissioned officers, and 116 were from enlisted personnel. Three respondents did not identify themselves or fell into other categories (e.g., warrant officers). Of the 57 civilians, 34 identified themselves as education specialists and 14 identified themselves as training specialists.

A total of 87 training executive questionnaires were distributed and 76 were returned, for a response rate of 87 percent. Of the 76 returns, 29 were from commanding officers (CO), 22 were from executive officers (XO), 20 were from directors of training (DOT). Five did not place themselves in a category.

#### ANALYTIC STRATEGY

In order to determine the priority of need for inservice training, several preliminary analytic steps were performed. First, the responses to frequency of performance of individual function items were factor analyzed for both training executives and CISO personnel. Based on these factor analyses, major function groups were identified. Second, scales consisting of items comprising major function groups were constructed for frequency, difficulty, and importance of performance, and usefulness of inservice. These major function groups served as the basis for further analysis, including the current extent of IST, differences among groups of personnel in types of major functions performed, and, finally, in the development of priorities for IST. Priorities were developed separately for groups of personnel identified as having different functional requirements.

#### MAJOR FUNCTION GROUPS

The first step in the analysis was to determine if specific function items could be collected into major function groups. Two steps were required to establish these groups. First, specific function items were grouped by similarities in frequency of performance. Frequencies were used, instead of difficulty or importance of performance, since frequency would reflect a type of job. Second, the same function items grouped by frequency were used to build scales for the other questions (e.g., difficulty and importance of performance). This strategy was followed in analyzing both the CISO and the

training executive data. The results of the factor analyses used to determine major function groups are reported in appendix B.

**FACTOR ANALYSIS OF CISO FUNCTIONS.** From the factor analysis of CISO personnel, four major function groups were identified. Names or labels were assigned to each group based on inspection of the specific function items constituting a major function group.

The sets of items constituting each major function group were again factor analyzed to determine if there were meaningful subgroups. For the factor solutions, see appendix B. The four major function groups, with two subgroups for each, are listed in table 2. The four major function groups for CISOs are:

- Preliminary course development
- Secondary course development
- Evaluation
- Service to Activity

Preliminary course development is comprised of 10 functions falling into two subgroups based on the second factor analysis. Overall, preliminary course development corresponds roughly to the first two steps of the Instructional Systems Development (ISD) model (NAVEDTRA 110A). The first subgroup represents the Analysis, the second the Design phase of ISD.

Secondary course development is composed of five functions. The first four functions, listed as subgroup 1, correspond to the development phase of ISD. The fifth function, assisting with student testing, is somewhat of a surprise since it was expected to fall under the evaluation factor.

The major function of evaluation comprises seven specific functions (table 2). This major function, corresponding to the control phase of ISD, can be broken down into two subgroups, representing internal and external evaluation.

The final major function for CISO personnel is called service to activity. The six specific functions, shown in table 2, can be grouped into inservice and coordination functions. This major function does not correspond to any particular phase of ISD. It could be considered as a general training support function since its basic thrust is to assist training activity personnel to accomplish the training mission more readily.

The subgroups of the four major function areas, all based on secondary factor analyses, are presented primarily as an aid to curriculum developers who might use this list of functions to develop IST programs. While the major function areas constitute topics of an inservice program, the subgroups constitute subtopics, and the specific function items indicate the appropriate content for the topics and subtopics.

TABLE 2. COMPONENTS OF THE MAJOR FUNCTION GROUPS FOR CISO PERSONNEL

PRELIMINARY COURSE DEVELOPMENT

1. Analyze job/new requirements  
Select tasks to be trained  
Select job performance measures  
Analyze existing courses/modules  
Select instructional setting
2. Develop learning objectives  
Develop test items to measure objectives  
Describe entry level behavior  
Establish sequence of objectives  
Specify learning events/activities

SECONDARY COURSE DEVELOPMENT

1. Specify instruction management plan and media  
Select existing materials  
Develop instruction  
Validate instruction
2. Assist with student testing

EVALUATION

1. Study attrition and setbacks  
Design instruments for internal evaluation  
Collect data for internal evaluation  
Analyze data from internal evaluation  
Make recommendations based on internal evaluation
2. Assist with preparation of items for external evaluation  
Assist with interpretation of results of external evaluation

SERVICE TO ACTIVITY

1. Design interdepartmental inservice programs  
Conduct interdepartmental inservice programs  
Assist with intradepartmental inservice programs
2. Coordinate with external activities and agencies concerned with training quality assurance  
Coordinate accreditation requirements and review  
Advise commanding officer on CISO civilian affairs

**FACTOR ANALYSIS OF TRAINING EXECUTIVE FUNCTIONS.** From the factor analysis of training executives, four major function groups were identified. Again, names or labels were assigned to each group of items. The components of the major training executive function groups are shown in table 3. The four major function groups are:

- Quality Assurance
- Personnel Assessment
- Management of Student Throughput
- Personal Counseling.

TABLE 3. COMPONENTS OF THE MAJOR FUNCTION GROUPS FOR TRAINING EXECUTIVES

<p><u>QUALITY ASSURANCE</u></p> <p>Implement internal system of accountability for training quality Select criteria to monitor for training quality Determine corrective action if a criterion falls below desirable level Allocate funds internally for efficient achievement of training quality Plan for future support needs</p>
<p><u>PERSONNEL ASSESSMENT</u></p> <p>Assess subject matter expertise of personnel Assess instructional ability of personnel Assess personnel ability to design curricula</p>
<p><u>MANAGEMENT OF STUDENT THROUGHPUT</u></p> <p>Manage student pipeline Minimize delays in training for students arriving at activity Counsel students on academic matters</p>
<p><u>PERSONAL COUNSELING</u></p> <p>Recognize drug/alcohol abuse and take appropriate action Counsel staff and students on personal matters</p>

Quality assurance consists of five functions concerned with determining/ensuring current and future quality of training.

Personnel assessment, comprising three specific functions, concerns the evaluation of the capabilities of instructional personnel.

Managing student throughput deals with student scheduling and academic counseling.

The major function of personal counseling concerns assisting students and staff with personal problems.

The major functions for training executives were not factor analyzed again. The number of items in each was too small to allow for meaningful subgroups.

### SCALE DEVELOPMENT

To this point, major function groups have been established for CISO personnel and training executives based on frequency of performance of specific function items. The next step is to determine the extent to which attributes of these major function groups (i.e., the frequency, difficulty and importance of performance, and the usefulness of in-service training) can be measured reliably using scales created from individual items on the questionnaires.

A scale is a measure made of several specific items. It is usually a better measure than any one of the single items since single items usually do not adequately measure complex variables (Babbie, 1973). An overall test score is essentially a scale constructed of scores on single items on the test. Likewise, scales can be constructed of single questionnaire items. However, to use a scale made of several items as a variable to analyze, its internal consistency reliability should be established. This subsection describes the development of scales and establishment of their internal consistency reliability.

The results of the factor analyses of frequency of performance of function items were used to develop the major function areas for CISO personnel and for training executives separately. The same specific function items that constituted major function areas for frequency were used to create scales for the other questions on the questionnaires (e.g., difficulty, importance, usefulness of inservice). Each scale developed consists of the mean of the responses to all the specific function items that constituted the major function area for a particular question (e.g., how important or difficult). Thus, for example, each CISO respondent received as a score on the frequency of preliminary course development his or her mean score on the 10 frequency of performance items listed under preliminary course development in table 2.

For each of the scales developed, the internal consistency coefficient alpha (Cronbach, 1951) was computed. This coefficient indicates the internal reliability of the scale, or the degree to which each of the items constituting a scale measures the same underlying dimension. The internal consistency

reliability coefficients are shown in table 4 for the 20 major function scales developed for CISO respondents. The reliability coefficients for the 20 major function scales for training executives are shown in table 5. As the coefficients, with the exception of one, are all above .60, the reliabilities are satisfactory. Thus, these scales are reliable measures of the frequency, difficulty and importance of performance, and the usefulness of inservice training in the four major function groups of CISO personnel and in the four major function groups of training executives.

#### **OTHER FACTORS IN INSERVICE TRAINING**

Section I of both the CISO and training executive questionnaires requested certain background information from respondents and also asked about the extent to which facets of each respondent's job had changed since he or she began working in that position. Also, COs were asked if they had attended the Prospective Commanding Officer (PCO) Shore Station Management Course offered by the Personnel Management Institute, Naval Civilian Personnel Command. In section III of the training executive questionnaire, training executives were asked about areas of knowledge. Results obtained from these items are summarized below.

**BACKGROUND VARIABLES.** In general, the relationships between background variables and major function attributes were not significant for either CISO personnel or training executives, when corrections for simultaneous estimation were used (Wonnacott and Wonnacott, 1972). Specifically, level of education, previous job experience, time in position, and changes in the nature of job requirements were not significantly related to frequency, difficulty, or importance of performance of major functions of CISO personnel or training executives. Neither were they related to usefulness of inservice in these major functions.

**PROSPECTIVE COMMANDING OFFICER SHORE STATION MANAGEMENT COURSE.** Training executives were asked if they had attended the PCO Shore Station Management Course. This course addresses many topics relevant to the jobs of NAVEDTRACOM training executives. Of 13 training executives who attended, 12 recommended it.

**TRAINING EXECUTIVE AREAS OF KNOWLEDGE.** In addition to questions about performance of functions, training executives were also asked about their familiarity with 12 areas of knowledge. Specifically, they were asked how familiar they were with each area when they arrived at their current duty station, how important familiarity is, whether they received inservice in each area, and how useful inservice would have been.

There was no meaningful grouping of areas of knowledge. Several factor analyses were performed; none disclosed meaningful structures. Therefore, the individual area of knowledge items for training executives were rank ordered separately for commanding officers, executive officers, and directors of training. The rank orders were then used to indicate inservice training priorities. Three questions, concerning the degree of familiarity with the areas of knowledge, the importance of familiarity, and the usefulness of IST in the areas, were used to establish the rank orders.

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TABLE 4. INTERNAL RELIABILITY COEFFICIENTS OF THE MAJOR  
FUNCTION SCALES FOR CISO PERSONNEL

	<u>ALPHA</u>
Frequency of Performance	
Preliminary Development	.89
Secondary Development	.71
Evaluation	.87
Service to Activity	.72
Difficulty of Performance	
Preliminary Development	.95
Secondary Development	.87
Evaluation	.91
Service to Activity	.94
Difficulty of Performance Upon Arrival	
Preliminary Development	.94
Secondary Development	.93
Evaluation	.95
Service to Activity	.94
Importance of Performance	
Preliminary Development	.89
Secondary Development	.83
Evaluation	.90
Service to Activity	.87
Usefulness of Inservice	
Preliminary Development	.97
Secondary Development	.93
Evaluation	.96
Service to Activity	.93



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TABLE 5. INTERNAL RELIABILITY COEFFICIENTS OF THE MAJOR  
FUNCTION SCALES FOR TRAINING EXECUTIVES

	<u>ALPHA</u>
Frequency of Performance	
Quality Assurance	.83
Personnel Assessment	.83
Management of Throughput	.79
Personal Problems	.52
Difficulty of Performance	
Quality Assurance	.81
Personnel Assessment	.78
Management of Throughput	.69
Personal Problems	.63
Difficulty of Performance Upon Arrival	
Quality Assurance	.90
Personnel Assessment	.70
Management of Throughput	.81
Personal Problems	.64
Importance of Performance	
Quality Assurance	.76
Personnel Assessment	.84
Management of Throughput	.76
Personal Problems	.74
Usefulness of Inservice	
Quality Assurance	.88
Personnel Assessment	.91
Management of Throughput	.74
Personal Problems	.77

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The first step in rank ordering the areas of knowledge was to reduce them to a manageable number. For each of the three questions used, the areas of knowledge were broken down into three categories on the basis of low, medium, and high scores. Items in the highest third were assigned a score of "1," items in the middle third were assigned a score of "2," and items in the bottom third were assigned a score of "3."

The second step in rank ordering areas of knowledge was to add up the scores for each area on each of the three questions. This sum indicated the overall rank of each area on the three questions. For each group of personnel (commanding officers, executive officers, and directors of training) the rank ordered areas of knowledge are shown in tables 6, 7, and 8. In each table, the areas of knowledge are grouped when the overall rank is tied (i.e., all items in the first group received the same score and so on).

TABLE 6. PRIORITIES FOR INSERVICE TRAINING OF AREAS OF KNOWLEDGE FOR COMMANDING OFFICERS

### First

Reporting systems, including NITRAS, MILPERSIS, SHOROCS  
and SHORSTAMPS  
Manpower planning for training activities  
PPBS - the Planning, Programming and Budgeting System  
How curriculum is approved  
CNET training equipment support

### Second

Principles and practices of ISD  
Organization of training command  
Civil Service rules and regulations, including the merit  
pay system  
The UCMJ at shore activities

### Third

Subject matter taught at activity  
Administrative discharge procedures

### Fourth

Special terminology used in training

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TABLE 7. PRIORITIES FOR IN-SERVICE TRAINING OF AREAS OF KNOWLEDGE FOR EXECUTIVE OFFICERS

<p><u>First</u></p> <p>Reporting systems</p>
<p><u>Second</u></p> <p>Civil Service rules and regulations Manpower planning</p>
<p><u>Third</u></p> <p>PPBS - the Programming, Planning and Budgeting System</p>
<p><u>Fourth</u></p> <p>Principles and practices of ISD The UCMJ at shore activities How curriculum is approved CNET training equipment support</p>
<p><u>Fifth</u></p> <p>Subject matter taught at activity Organization of the training command</p>
<p><u>Sixth</u></p> <p>Special terminology used in training Administrative discharge procedures</p>

TABLE 8. PRIORITIES FOR IN-SERVICE TRAINING OF AREAS OF KNOWLEDGE FOR DIRECTORS OF TRAINING

<p><u>First</u></p> <p>Principles and practices of ISD Organization of the training command Manpower planning How curriculum is approved CNET training equipment support</p> <p><u>Second</u></p> <p>Subject matter taught at activity Civil Service rules and regulations Reporting systems</p> <p><u>Third</u></p> <p>Special terminology used in training PPBS - the Programming, Planning and Budgeting System</p> <p><u>Fourth</u></p> <p>The UCMJ at shore activities Administrative discharge procedures</p>
---

#### EXTENT OF INSERVICE TRAINING

To estimate the degree to which inservice training is offered currently within the NAVEDTRACOM, CISO personnel and training executives were asked if they received inservice for specific function items when they arrived at the activity.

**CISO PERSONNEL.** The percentages of CISO personnel who reported they had received IST are shown in table 9. An average of 21 percent of the CISO respondents overall reported inservice in particular functions. On the average, officers reported inservice in 12 percent of the specific functions, enlisted personnel and civilians reported inservice in 22 percent. Preliminary development was the area in which most IST was received by all three groups, followed in order by secondary development, evaluation, and service to the activity. Generally, however, it should be noted that, while IST is conducted, it is not widespread. Fewer than a third of the CISO personnel in any group reported inservice in any of the four major function areas.

The average percent of specific CISO function items covered by IST varies from activity to activity. For preliminary development functions, only one

activity provides inservice in all the specific function items. At five activities, no inservice is provided in any of the items. For secondary course development, no activity provides IST in all specific function items, while eight schools provide no inservice in any of the items. In the evaluation area, one school provides IST in all the items; 12 provide no inservice in any. Finally, no school provides IST in all service to activity items; only two schools provide it in half or more of the items. Thus, overall the extent of inservice provided varies widely from activity to activity, but only a few activities provide inservice in a majority of the specific function items.

TABLE 9. AVERAGE PERCENTAGES OF CISO RESPONDENTS WHO REPORTED THAT THEY RECEIVED INSERVICE IN MAJOR FUNCTION AREAS

	<u>Officers</u> (n=23)	<u>Enlisted</u> (n=116)	<u>Civilian</u> (n=57)	<u>Total</u>
Preliminary Development	14.8	30.1	32	29
Secondary Development	12	26.9	24.6	24
Evaluation	12.8	17.5	16.2	17
Service to Activity	5.8	11.2	12.9	11
Overall	12	22	22	21

Note: These percents indicate the percent of respondents who checked a "yes" response of the total who answered the item, averaged over all the items in each category.

**TRAINING EXECUTIVES.** The percentages of training executives who reported "yes" to whether they received IST are shown in table 10. An average of 10 percent of training executives overall reported IST in specific functions. On the average, commanding officers reported inservice for 7 percent of the functions; executive officers, 5 percent of the functions; and directors of training, 20 percent.

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TABLE 10. AVERAGE PERCENTAGES OF TRAINING EXECUTIVES WHO REPORTED THAT THEY RECEIVED INSERVICE IN MAJOR FUNCTION AREAS

	COs (n=29)	XOs (n=22)	DOTs (n=21)	Total
Quality Assurance	5	2	20	9
Personnel Assessment	3	5	27	12
Management of Throughput	4	3	15	8
Personal Counseling	22	20	24	22
Overall	7	5	20	10

Note: These percents indicate the percent of respondents who checked a "yes" response, averaged over all the items in each category.

Personal counseling, as a major function, receives the most IST overall. However, for DOTs, personnel assessment receives slightly more IST than personal counseling. As a group, DOTs receive more inservice than either COs or XOs. In fact, with the exception of personal counseling, COs and XOs receive very little IST. Generally, the amount of training provided training executives is less than the amount provided CISO personnel.

Most activities provide no IST at all for training executives. Specifically, about two-thirds do not provide inservice in quality assurance, personnel assessment, or management of student throughput. About half do not provide inservice in personal counseling.

The extent of IST for training executives in the 12 areas of knowledge was equally scanty. On the average, training executives report inservice in 10 percent of the areas of knowledge. However, IST in the areas of knowledge does appear to be more widespread than inservice in functions. More than two-thirds of the activities provide inservice in at least some of the areas of knowledge.

### COMPARISONS OF FREQUENCY OF PERFORMANCE

Differences in the frequency of performance of a function indicate different kinds of jobs. However, differences in difficulty of performance may indicate nothing more than the different abilities of individuals in the same job. Likewise, the reported usefulness of IST would perhaps indicate only whether or not an individual felt the need for improvement in a particular area. Thus, frequency of performance was used to determine if the three major types of personnel in CIS offices (civilians, officers, and enlisted) had different kinds of jobs and if the three types of training executives (COs, XOs, and DOTs) had different kinds of jobs.

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Figures 1 through 4 present bar graphs that show the differences in frequency of performance among the three types of CISO personnel for their four major function groups. In these figures, civilians are broken down into education specialists (n=34) and training specialists (n=14). Figures 5 through 8 present bar graphs showing the differences among the three types of training executives. In all the figures, the vertical axis is the frequency. The values given correspond to the numbers of the response options for the frequency question on the questionnaire (appendix A). The response options range from daily to never with an arbitrary midpoint set at every 3 months.

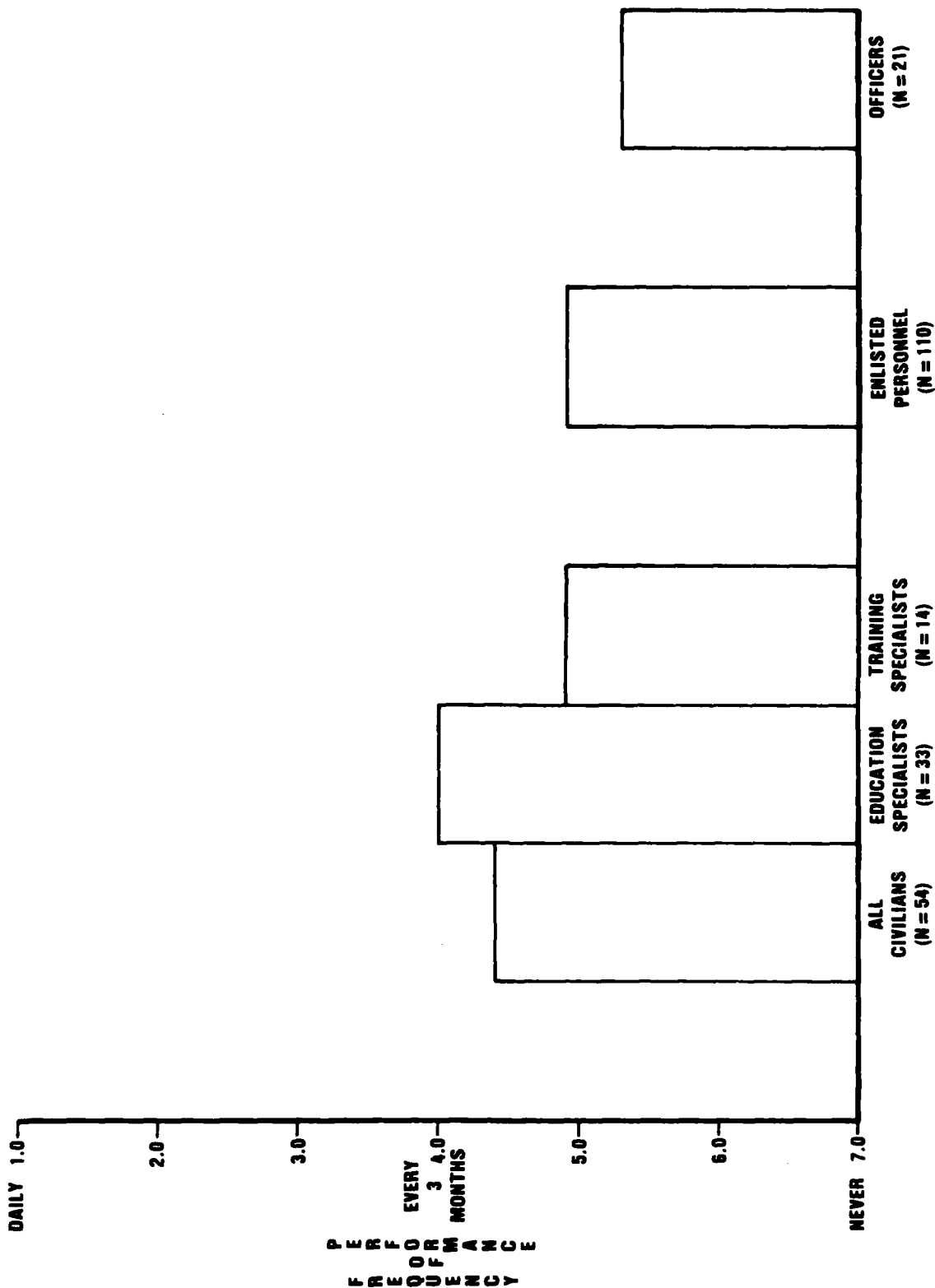
Care is required in interpreting the frequency means. No absolute assignments should be made (i.e., that someone does something every 3 months and others do it only every 6 months). The only safe inference is that some perform a function more often than others. This ordinal relationship is adequate for the purpose of this study, which was to determine an order of priority. Thus, from figure 1, for example, the only conclusion should be that education specialists perform preliminary development functions more than enlisted personnel and officers, not that they perform the functions with any particular frequency.

**CISO FREQUENCIES.** Figure 1 shows the relative frequencies of performance of the preliminary course development functions for civilians, education specialists, training specialists, enlisted personnel, and officers. Education specialists report a significantly higher frequency of performance than that reported by enlisted personnel or officers.

By visual examination of figure 1, it is apparent that education specialists also report more frequent performance of preliminary development functions than do training specialists. The difference, correcting for simultaneous inference using the least significant difference technique (Steel & Torrie, 1960), was not statistically significant. However, given an interest in ordinal relationships only and considering the small number of training specialists (n=14), it is probably safe to conclude that education specialists do perform this function more frequently than do training specialists.

From figure 2, enlisted personnel perform the secondary development functions more frequently than do officers or training specialists. Also, education specialists report a frequency very close to that of enlisted personnel. The evaluation functions (figure 3) are most frequently performed by education specialists. However, none of the differences between personnel groups are significant. Figure 4, concerning service to activity functions, shows that education specialists report the highest frequency.

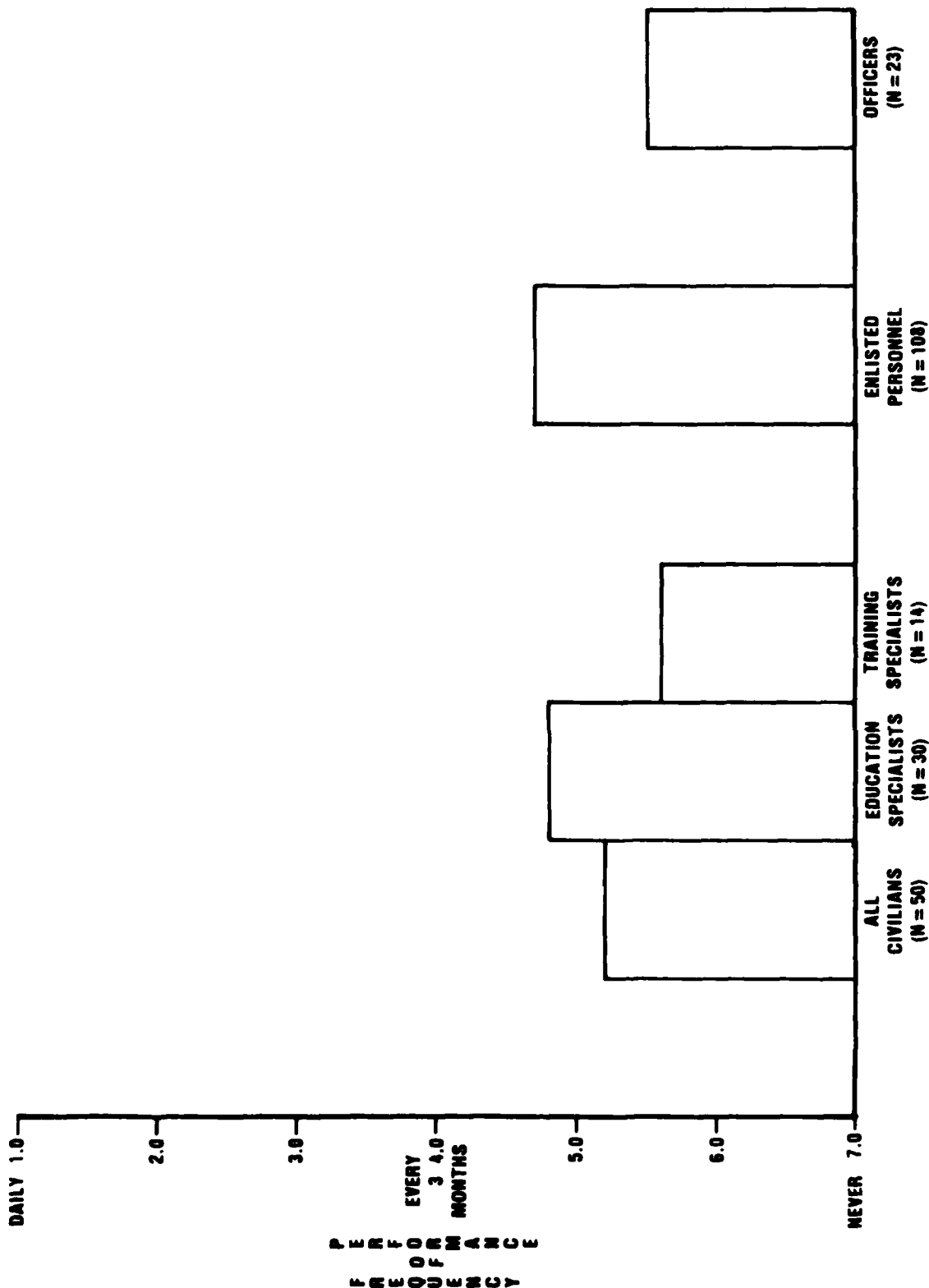
In summary, the education specialists appear to be involved principally in preliminary development, evaluation and service to activity functions; enlisted personnel have more to do with secondary development; officers seem to be involved primarily with evaluation functions; and training specialists, while too few in number to make strong statements about, seem generally similar to enlisted personnel. Since education specialists, enlisted personnel and officers perform differently, it appears useful to consider them separately. Training specialists are excluded mainly because there are so few of them. The remainder of the analysis of CISO results presented focus on the three groups mentioned above.



Note: Education Specialist frequency significantly higher than enlisted or officer frequency

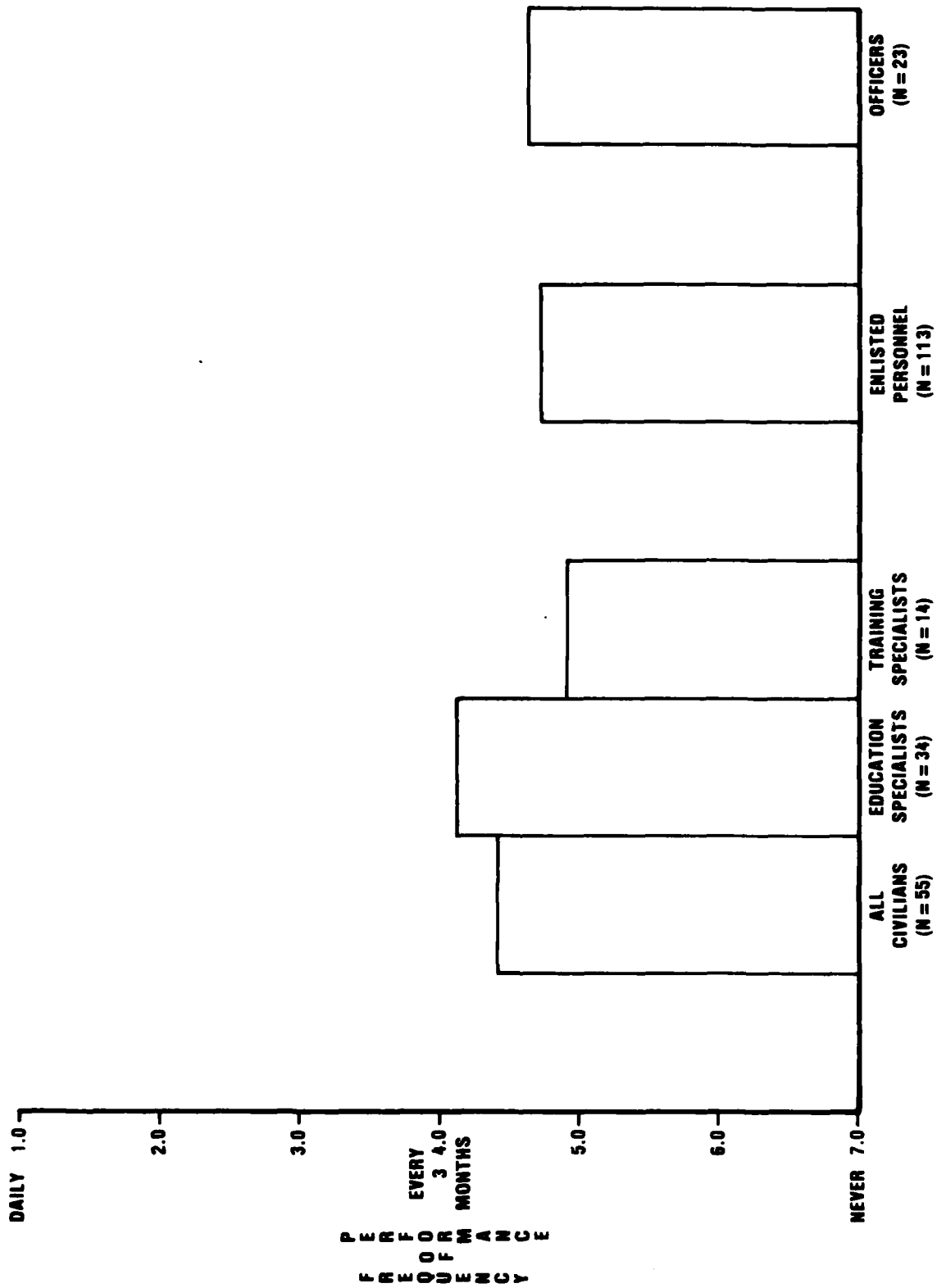
Figure 1. Frequency of Performance of Preliminary Development Functions





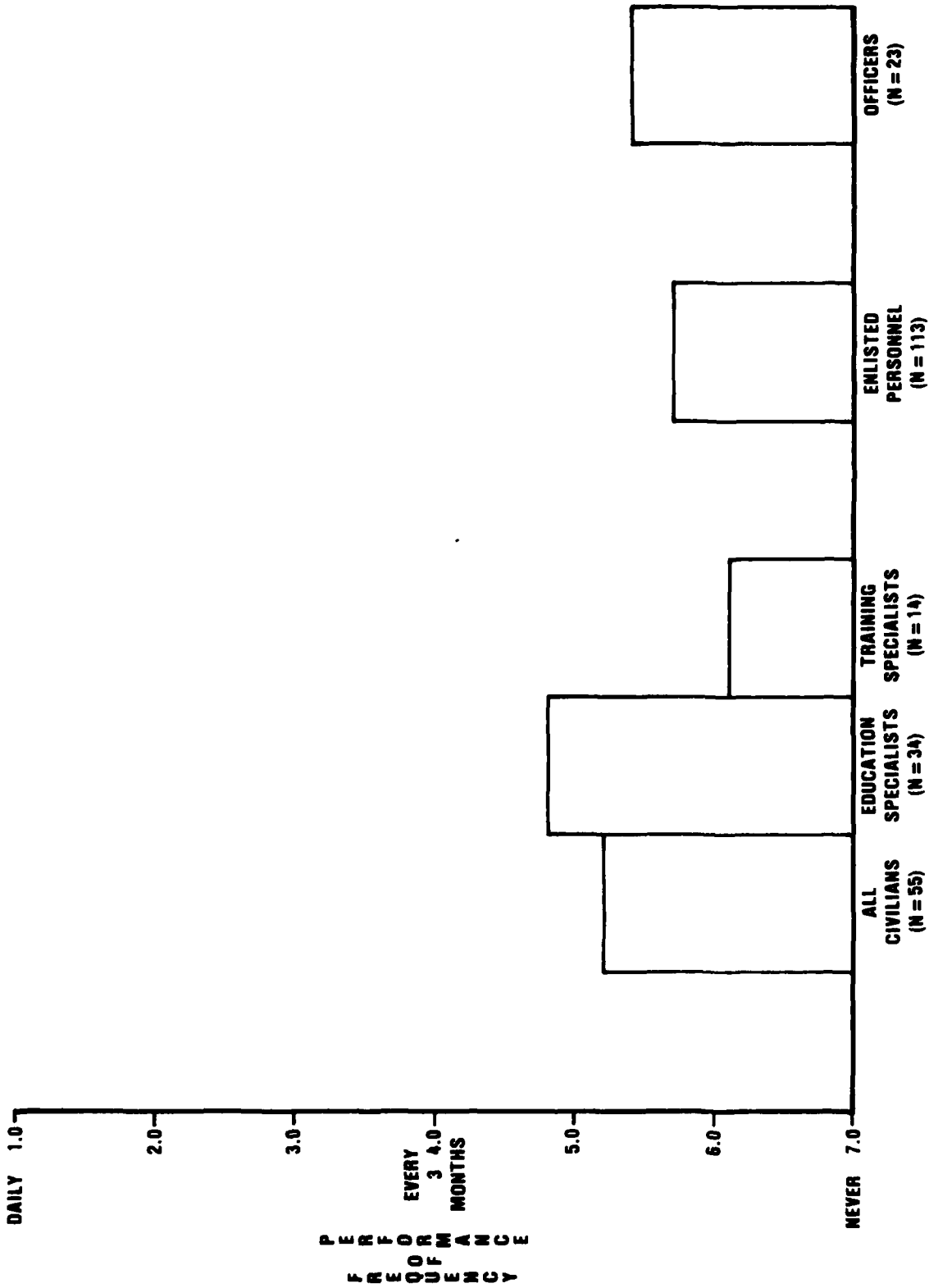
Note: Enlisted frequency significantly higher than Training Specialists or Officers.

Figure 2. Frequency of Performance of Secondary Development Functions



Note: No significant differences.

Figure 3. Frequency of Performance of Evaluation Functions



Note: Education Specialist frequency significantly higher than Officers or Enlisted Personnel.  
 Figure 4. Frequency of Performance of Service to Activity Functions

**TRAINING EXECUTIVE FREQUENCIES.** From figure 5, DOTs show a significantly higher frequency of performance of quality assurance functions than do XO's. Commanding officers fall in between DOTs and XO's. A similar relationship is observed for personnel assessment functions (figure 6).

Directors of training also report the most frequent involvement with managing student throughput functions (figure 7). Commanding and executive officers are quite close in reported frequency of managing throughput. Personal counseling (figure 8) is the most frequently performed function for all three groups of personnel, but the differences among the groups are not significant.

#### **DEVELOPING PRIORITIES FOR INSERVICE TRAINING**

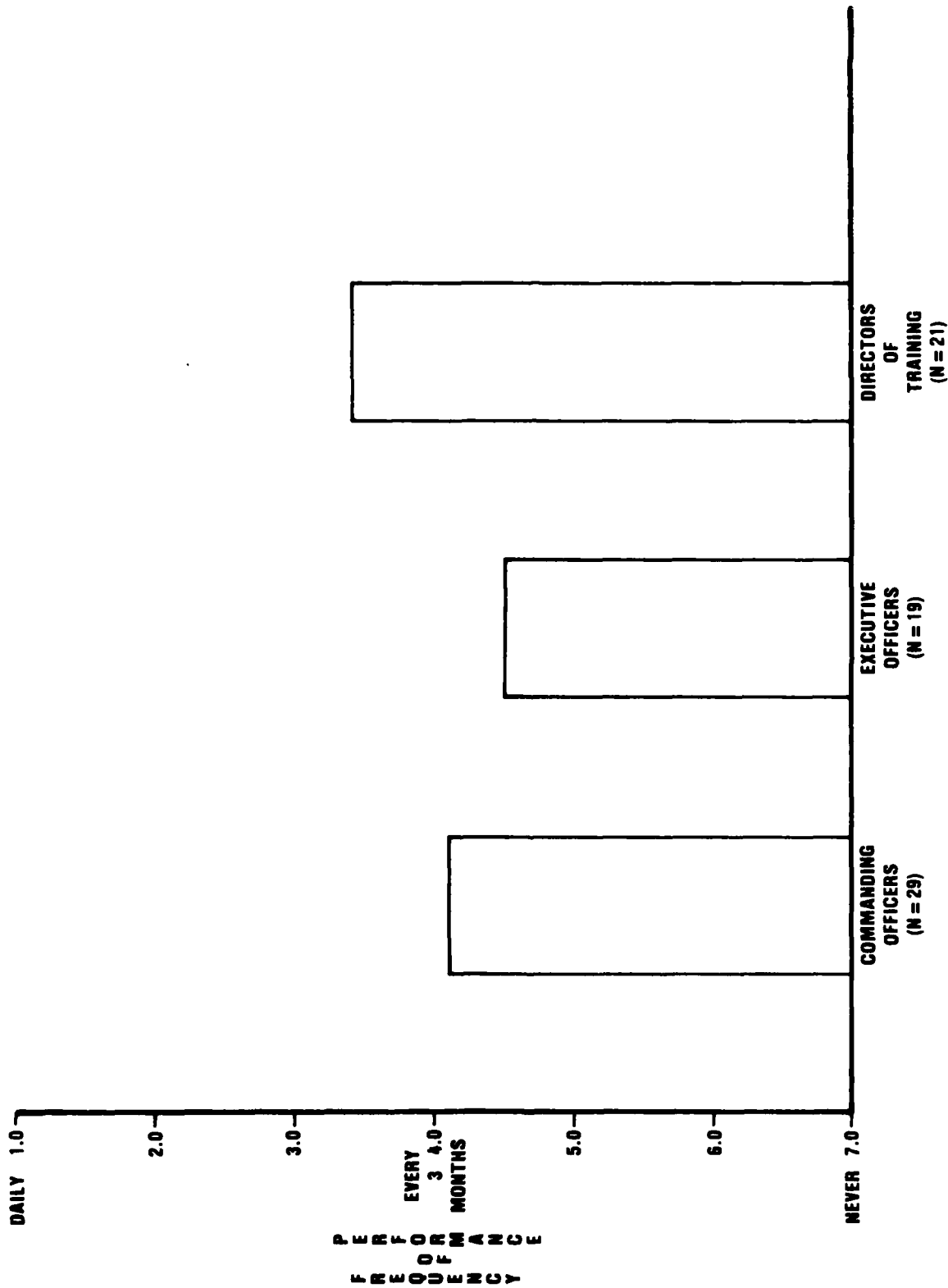
Overall priorities for inservice training for CISO personnel and training executives were established based on the major functions of these two groups of personnel. The procedures used and the results obtained are given below.

Scales that measure various attributes (e.g., frequency, difficulty and importance of performance, and usefulness of inservice) have been established for the four major CISO function areas: preliminary course development, secondary course development, evaluation, and service to activity. Based on differences in frequency of performance of the four major function areas, education specialists, officers, and enlisted personnel have essentially different jobs. Thus, the order of importance of inservice training was determined separately for each of these three CISO groups. Likewise, similar scales have been established for the four major function areas of training executives: quality assurance, personnel assessment, management of throughput, and personal counseling. Also, based on differences in frequency of performance, COs, XO's, and DOTs have different jobs; consequently, they are treated separately in subsequent analyses.

**RANKING ALGORITHM.** To establish priorities for inservice training, a ranking algorithm was developed. Four kinds of information were used to rank order (or prioritize) the major function areas: (1) frequency of performance, (2) difficulty of performance, (3) importance of performance, and (4) usefulness of inservice. Difficulty of performance upon arrival was so highly correlated with difficulty of performance now (the mean correlation for the four CISO functions was 0.74; for the four training executive functions it was 0.84) that it added no significant new information.

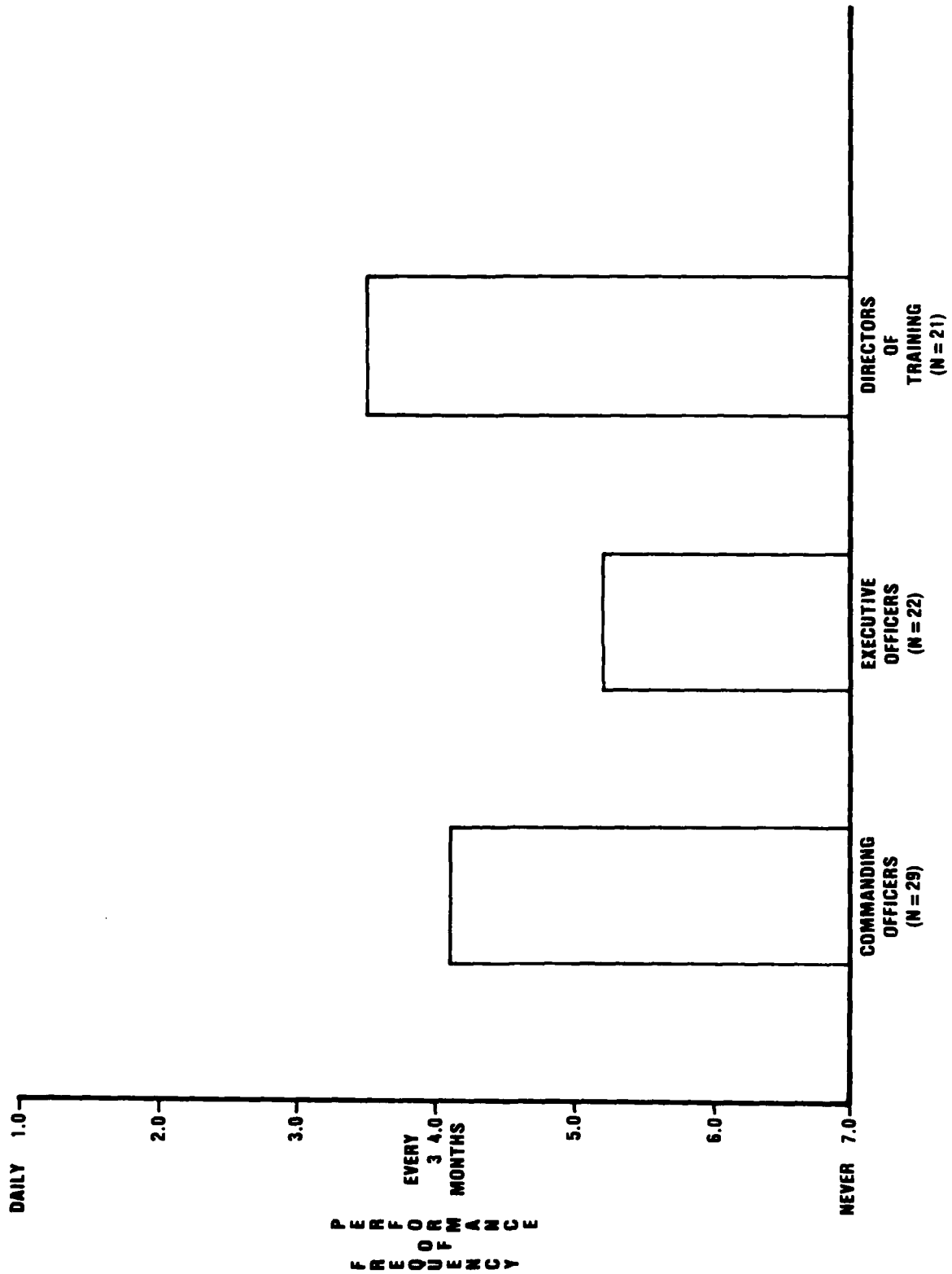
The selection of a ranking algorithm is, in some sense, arbitrary since there is no set rule to apply. Thus, while a description of an algorithm is presented, as well as a rationale for its use, it must be acknowledged that there is no right algorithm, only ones that have more or less intuitive appeal.

The first step in designing an algorithm was to determine if some of the scales used were more important than others. Intuitively, it would seem that frequency of performance is less crucial to priority of inservice than the other three scales. Thus, the ranking algorithm should give less weight to frequency of performance than to difficulty, importance, or usefulness.



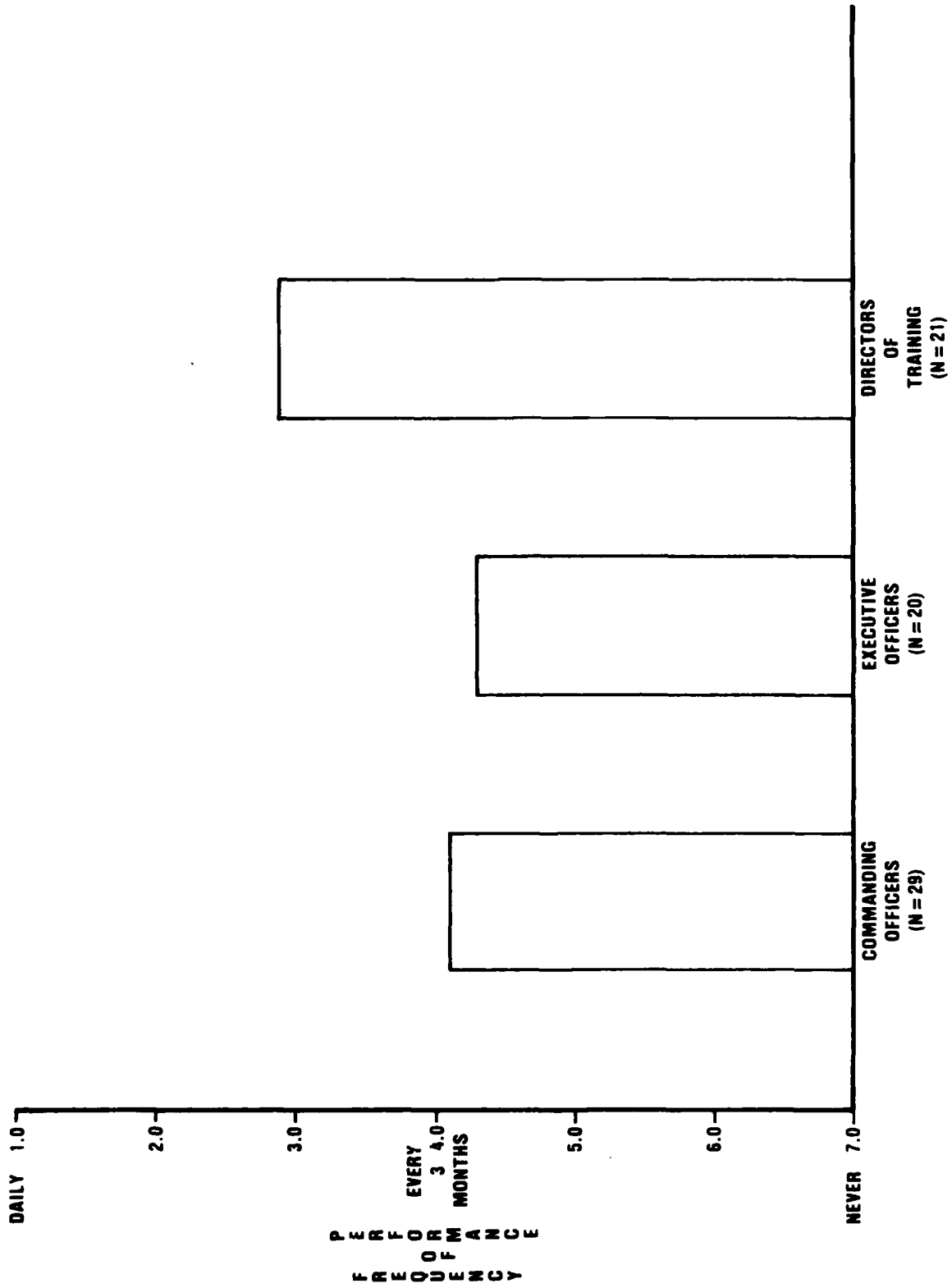
Note: Directors of Training are significantly higher than Executive Officers.

Figure 5. Frequency of Performance of Quality Assurance Functions for Training Executives



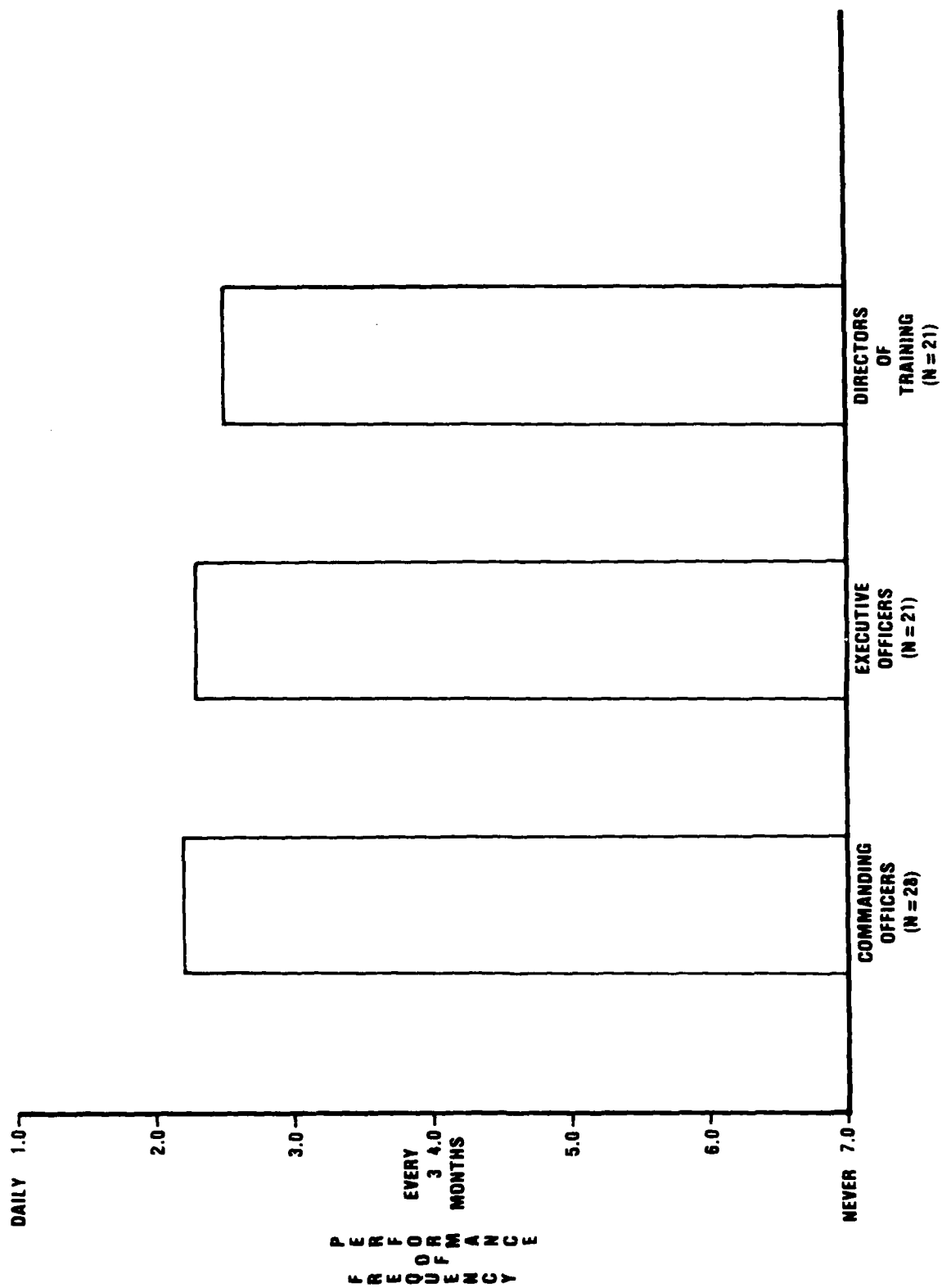
Note: Commanding Officers and Directors of Training are both significantly higher than Executive Officers

Figure 6. Frequency of Performance of Personnel Assessment Functions for Training Executives



Note: Directors of Training are significantly higher than Commanding and Executive Officers.

Figure 7. Frequency of Performance of Managing Student Throughput Functions for Training Executives



Note: No significant differences

Figure 8. Frequency of Performance of Personal Counseling Functions for Training Executives



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The next consideration was whether or not there should be different weights applied to difficulty, importance, or usefulness. A function that is difficult to perform, but not too important, may need inservice as much as a function that is more important but less difficult. Thus, importance and difficulty can be traded off with one another. Similarly, an important and difficult function with low usefulness of training needs inservice as much as a function with high importance, low difficulty and high usefulness. Therefore, all three were given equal weight. In order to give importance, difficulty and usefulness more weight than frequency, they were multiplied together, and frequency was added to the product. The algorithm used to develop overall ranks for inservice priority is:

$$\text{Priority} = (\text{Importance} \times \text{Difficulty} \times \text{Usefulness}) + \text{Frequency}.$$

The numbers used in this formula were the rank orders of the means of the importance, difficulty, usefulness, and frequency scales for each of the four major function areas for each of the three groups of CISO and training executive personnel. Table 11 shows these rank orders for CISO personnel and table 12 shows them for training executives.

These rank orders were obtained by ranking the means for each of the function scales within each group of personnel. Thus, from table 11, education specialists report preliminary development as the most frequently performed function, evaluation as the second most frequently performed function, and secondary development and service to activity are tied for third place (the 3.5 comes from averaging 3 and 4). The most difficult function for education specialists is service to activity; second is preliminary development; and tied for third are secondary development and evaluation. Similarly, the rank orders for officers and enlisted personnel can be determined by looking under the column labelled with a single letter ("F" indicates frequency, "D" indicates difficulty, "I" indicates importance, and "U" indicates usefulness) under the label referring to a specific personnel group. Rank ordering is done across the four function areas for a specific question. Rank orders for training executives, in table 12, show that the most frequently performed function is personal counseling. For commanding and executive officers, the most difficult function is personnel assessment; for DOTs, it is quality assurance. Other relative ranks can be determined by examining table 12.

**OVERALL PRIORITY.** To determine overall priority, the ordering algorithm is applied across the rankings for a specific function area. These overall rankings for each function area are then compared to determine the priority for IST for each of the three groups of CISO and training executive personnel. To calculate the overall ranks for functions for a group of personnel, the ranks of each function for the four questions used (from table 11 or 12) are entered into the ordering algorithm. For example, the score for preliminary development for education specialists would be  $(2 \times 4 \times 4) + 1 = 33$ . The "2" is the rank order difficulty of preliminary development, the "4's" are the rank orders of importance and usefulness and the "1" is the rank order of frequency. Similarly, the score for secondary development for education specialists is 35; their score for evaluation is 5.5 and their score for service to activity is 7.5. Since higher priority is indicated by a lower

TABLE II. RANK ORDERS OF FUNCTIONS BY PERSONNEL TYPE FOR CISO PERSONNEL

	PERSONNEL TYPE											
	Education Specialists				Enlisted Personnel				Officers			
	F	D	I	U	F	D	I	U	F	D	I	U
Preliminary Development	1	2	4	4	3	3	3	3	2	2	3	3
Secondary Development	3.5	3.5	3	3	1.5	1.5	1.5	1.5	4	3	2	2
Evaluation	2	3.5	1	1	1.5	1.5	1.5	1.5	1	4	1	1
Service to Activity	3.5	1	2	2	4	4	4	4	3	1	4	4

Note: Columns labelled F, D, I and U under the personnel types indicate, respectively, frequency, difficulty, and importance of performance and usefulness of inservice.

TABLE 12. RANK ORDERS OF MAJOR FUNCTIONS BY PERSONNEL TYPE FOR TRAINING EXECUTIVES

	PERSONNEL TYPE											
	Commanding Officers				Executive Officers				Directors of Training			
	F	D	I	U	F	D	I	U	F	D	I	U
Quality Assurance	3	2.5	1	1	3	3	2	2	3	1	1	1
Personnel Assessment	3	1	3	3.5	4	1	4	4	4	2	4	2
Management of Throughput	3	2.5	4	3.5	2	2	3	3	2	4	3	4
Personal Counseling	1	4	2	2	1	4	1	1	1	3	2	3

Note: Columns labelled F, D, I and U under the personnel types indicate, respectively, frequency, difficulty, and importance of performance and usefulness of inservice.

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number, the lowest number overall indicates the highest overall priority. Thus, for education specialists, the overall priority for inservice training, in descending order, is evaluation, service to activity, preliminary development, and secondary development. The identical procedure is followed for CIS officer and enlisted personnel and for the three types of training executives. The resulting overall priorities for inservice training are shown in tables 13 and 14.

Table 13 shows the overall rankings of the four function areas for each group of CISO personnel. Evaluation receives the highest priority for education specialists; service to activity is second; and preliminary and secondary development are, respectively, third and fourth. Evaluation is also the highest priority for officers, followed in order by secondary development, service to activity, and preliminary development. For enlisted personnel, secondary development and evaluation are exactly tied for highest priority. However, in the TAEG's opinion, somewhat more emphasis should be given to secondary development for enlisted personnel. Although evaluation is an important topic for enlisted personnel, evaluation of courses should be done primarily by individuals who are somewhat removed from the actual design of the course. Preliminary development and service to activity are third and fourth.

Table 14 shows the overall rankings of the four function areas for each group of training executives. Quality assurance receives the highest priority for COs and DOTs. Personal counseling has the highest priority for XOs. For COs, personnel assessment, personal counseling and management of throughput are second, third, and fourth in priority, respectively. For XOs, quality assurance is second in priority and personnel assessment and management of throughput are tied for third. For DOTs, personal counseling, personnel assessment, and management of throughput are second, third, and fourth, respectively.

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TABLE 13. OVERALL PRIORITY OF FUNCTIONS FOR  
INSERVICE TRAINING FOR CISO PERSONNEL

Function <sup>1</sup>	Type of Personnel		
	Education Specialist	Officer	Enlisted
Preliminary Development	3	4	3
Secondary Development	4	2	1
Evaluation	1	1	2
Service to Activity	2	3	4

<sup>1</sup>See table 2 for descriptions of the major function areas.

TABLE 14. OVERALL PRIORITY OF FUNCTIONS FOR  
INSERVICE TRAINING FOR TRAINING EXECUTIVES

Function <sup>1</sup>	Type of Personnel		
	Commanding Officer	Executive Officer	Director of Training
Quality Assurance	1	2	1
Personnel Assessment	2	3	3
Management of Throughput	4	3	4
Personal Counseling	3	1	2

<sup>1</sup>See table 3 for descriptions of the major function areas.

## SECTION V

### DISCUSSION

This section presents a discussion and interpretation of the results presented in the previous section. The limits on the interpretation and use of the results are also discussed.

#### MAJOR FUNCTION GROUPS

Major function groups were derived empirically for CISO and training executive personnel. These major function groups are discussed below.

**CISO FUNCTIONS.** The jobs of CISO personnel comprise four major function groups:

- Preliminary development of curriculum
- Secondary development of curriculum
- Evaluation
- Service to activity.

These four major function groups can be considered as the major tasks of the CIS office. While it is possible that some individuals, particularly in larger CISOs, may specialize in one or two of these areas, it is also possible that personnel may be involved in all four. However, these tasks represent relatively discrete components that constitute the majority of the mission of the CIS office. Thus, any IST program designed to improve the performance of CISO personnel should address each of these four areas.

There are three major types of personnel who work in CISOs: officers, enlisted personnel and civilians. Of the civilians, education specialists constitute the largest single group. There are significant differences among the three groups in how frequently they perform the major CISO functions. Thus, each group was considered separately in determining the order of priority for IST in each of these four functional areas.

Some general observations can be made concerning the differences in the types of functions that officers, enlisted personnel, and education specialists perform. Education specialists are most frequently involved in the performance of preliminary curriculum development functions. These functions correspond roughly to the analyze and design phases of ISD. Education specialists perform these functions more often than they perform any other function, and they also perform these functions more often than other CISO personnel do. Education specialists also report more frequent performance of evaluation functions than officers or enlisted personnel, and evaluation is the second most frequently performed task for education specialists. Thus, one could characterize education specialists, generally, as performing preliminary curriculum development and evaluation functions. Training specialists appear to function quite similarly to enlisted personnel.

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Secondary curriculum development functions, corresponding to the design phase of ISD, are primarily the province of enlisted personnel, although education specialists are also involved. Enlisted personnel in CISOs are probably subject matter experts. There is an apparent partnership between them and education specialists for the production of curriculum. The education specialists perform the more general preliminary development functions while the enlisted personnel perform the more specific secondary development functions. This is, of course, a general statement and there will be local variations. Also, there is some involvement of enlisted personnel in preliminary development functions and considerable involvement of education specialists in secondary development.

The most prevalent functions for officers are in evaluation. In fact, the other three functions do not represent a major component of activity for officers. It may be that officers tend to be more involved with the general management of operations than with the performance of specific CISO functions. However, the evaluation functions can certainly be considered of interest to general managers as well as to professional educators. For this reason, inservice training for officers should perhaps concentrate on how to evaluate education and training programs.

**TRAINING EXECUTIVE FUNCTIONS.** The jobs of training executives can be divided into four major function groups:

- Quality Assurance
- Personnel Assessment
- Management of Student Throughput
- Personal Counseling.

These four major function groups can be considered as the major tasks of training executives, just as the four major CISO functions mentioned earlier can be considered the major tasks of the CIS office. Inservice for training executives should address each of these four areas.

There are three distinct types of training executives: commanding officers, executive officers, and directors of training. As was the case with CISO personnel, these three types of personnel were considered separately. The most frequently performed functions for all three types of training executives are in the area of personal counseling. Although this counseling activity is no doubt important, one must ask whether or not such frequent involvement represents optimal use of these officers' time.

### **RANKING FUNCTIONS OVERALL**

An ordering algorithm was used to rank major functions overall, in terms of priority for inservice training, for each of the three major groups of personnel for both CISOs and training executives. The specific algorithm used is described in section IV. Again, it must be emphasized that the choice of an algorithm is largely arbitrary. This particular algorithm was chosen to give greater relative weights to importance and difficulty of performance and usefulness of inservice training. Frequency of performance was also used but was weighted less than the other three factors.

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As described in section IV, importance, difficulty, and usefulness were given a greater weight by multiplying them together, while frequency was added to the product. The resultant number indicates overall rank. An alternative method would have been to give each factor a weight, perhaps by multiplying some by two or three, and adding up those numbers. However, the weights chosen would also have been arbitrarily selected. The method chosen was considered as minimizing arbitrary choice and remaining as close to the original ranks of the four major function areas as possible.

The application of this ordering algorithm to CISO responses led to the overall rankings in table 13. For education specialists, the IST needs, in descending order of priority, are evaluation, service to activity, preliminary development, and secondary development. For officers, the training needs are evaluation, secondary development, service to activity, and preliminary development. For enlisted personnel, the training needs are secondary development, evaluation, preliminary development and service to activity.

Although each group of CISO personnel has a different order of priority for IST, evaluation stands out as important to all groups. One could interpret this to indicate that evaluation is the weak point in the abilities of personnel assigned to training activities. Thought should be given to a program designed to correct this weakness. The area of evaluation is highly technical and is not a skill that is easily or automatically acquired.

The application of this ordering algorithm to training executive responses led to the overall rankings in table 14. For commanding officers, the inservice training needs, in descending order of priority, are quality assurance, personnel assessment, personal counseling and management of student throughput. For executive officers, the training needs are personal counseling, quality assurance, and personnel assessment and managing throughput tied for third. For directors of training, the training needs are quality assurance, personal counseling, personnel assessment, and management of throughput.

### LIMITATIONS ON INTERPRETING RESULTS

The type of questionnaire data used in this study should not be used to make absolute judgments about frequency, importance, or difficulty of performance or the usefulness of inservice training. The interest in this study was primarily in establishing ordinal relationships. The data are more than adequate for this purpose. To make other interpretations would be to misuse the results of this study.

Two other limiting factors in this study should also be mentioned. First, the entire study is based on what personnel are currently doing in their jobs. It was beyond the scope of the tasking to determine if the current functions are, in fact, the most desirable ones to be performed. Second, the list of functions used on the questionnaire was only representative, not exhaustive. A questionnaire that included all possible functions that could be performed by personnel in CISO billets, or by training executives, would be prohibitively lengthy.



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Even with these limitations, the ordinal relationships are meaningful. Given the functions that personnel currently perform in CISO billets, and their reported difficulty and importance, the most efficient inservice training program for each of the three groups of personnel would be one that emphasized training in areas indicated as having the highest priority and gave relatively less emphasis to, but did not ignore, areas indicated as having lower priorities. Given the functions that training executives currently perform, most emphasis should be given to inservice in quality assurance functions. Next should come personal counseling, followed by personnel assessment and managing throughput.

Training executives would also benefit from some inservice training in certain areas of knowledge. Commanding officers express a need for inservice in the formal NAVEDTRACOM planning and reporting systems (e.g., NITRAS, PPBS) and in how training is conducted (e.g., ISD, organization of the NAVEDTRACOM). Executive officers report a need for inservice in reporting systems, manpower planning and Civil Service rules and regulations. Directors of training report their primary needs in specific training related areas, including ISD, curriculum approval and training equipment support.

## SECTION VI

### CONCLUSIONS AND RECOMMENDATIONS

#### CONCLUSIONS

There are several general conclusions to this study. First, inservice training is not given uniformly across the NAVEDTRACOM. The extent of inservice varies greatly across training activities. Even where there is IST, it often addresses only some of the functions covered in this study. Second, the instructions that deal with inservice training in the NAVEDTRACOM are quite vague as to the content. Although some flexibility should be left to local activities in providing IST, there should perhaps be greater specificity in the required coverage of IST. Third, there are three distinct types of CISO personnel and training executives who, in most cases, have distinct IST priorities that reflect the differing natures of their jobs.

All CISO personnel should have inservice training in evaluation functions. Officers need inservice training primarily in evaluation, but should also have an introduction to the other functions. Education specialists need IST in service to activity functions. Enlisted personnel need IST most in secondary development functions.

All training executives should have IST in quality assurance functions as a first priority. Personal counseling and personnel assessment also seem to be likely candidates for inservice. Managing student throughput can at least be given reduced emphasis and it may require no IST at all. All training executives would benefit from some introduction to the various reporting systems and to manpower planning. Some introduction to principles of training and to the training command itself is also indicated.

#### RECOMMENDATIONS

The recommendations presented below are based on the assumption that the personnel involved will continue to perform functions reported as typical for their classification. There may be local exceptions. If, for example, there is no civilian education specialist at an activity, then it is likely that an officer or senior enlisted person will assume those functions that would normally be delegated to the education specialist. In this case, the officer or enlisted person should receive IST as if he or she were an education specialist. Breaking CISO personnel into three groups should work quite well in most cases. However, in all cases, an individual should receive IST based on what he or she does, not on what he or she is. Since the types of training executives are based on specific positions occupied, these caveats do not apply.

The following recommendations are also offered.

1. Instructions requiring IST at training activities should specify a minimally acceptable level/content of training. Also, a single billet/position

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at each training activity should be responsible for ensuring that inservice training is done. The most reasonable position to assign this responsibility to is the CIS officer or senior education specialist.

2. A general introductory level orientation to all the functions that CISOs perform should be given to all CISO personnel as they arrive. If changes occur in the functions or requirements, through changes in policy, instructions or workload, then additional introductory level inservice should be given.

3. For all CISO personnel, there should be fairly extensive IST in evaluation functions. This is likely to be a continuing requirement. All CISO personnel should know how to evaluate a training program, including the strengths and weaknesses inherent in such evaluations. They should also know how external evaluation is conducted for the NAVEDTRACOM and how that information can be used to improve training.

4. Education specialists should also be given IST in the service to activity functions (see table 2). These functions deal primarily with assessing needs for and delivering inservice training at the local level; and coordinating with external activities. Enlisted personnel should receive further inservice training in secondary development functions. CIS officers probably do not need inservice training beyond the general introduction and the evaluation training.

5. Prospective commanding and executive officers of training activities should, as a matter of policy, be sent to the prospective Commanding Officer Shore Station Management Course offered by the Naval Civilian Personnel Command, if it is not already policy to do so.

6. All training executives should be given inservice in quality assurance functions, reporting systems, and manpower planning as a minimum. If additional IST is to be provided, the priorities discussed previously should be used as a guide.

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**APPENDIX A**

**QUESTIONNAIRES**

This appendix contains a copy of the cover letter, distribution procedures, and questionnaires given to all CISO personnel and training executives.



**DEPARTMENT OF THE NAVY  
TRAINING ANALYSIS AND EVALUATION GROUP  
ORLANDO, FLORIDA 32813**

TAEG:ERH  
W1371

From: Director, Training Analysis and Evaluation Group  
To: Commanding Officer

Subj: In-Service Training Needs Assessment

Ref: (a) CNET ltr Code 022 of 25 Sep 81 (NOTAL)

Encl: (1) Questionnaire Package

1. The Training Analysis and Evaluation Group (TAEG) has been tasked (reference (a)) to conduct a study to identify and prioritize the in-service training needs of instructor and staff personnel assigned to NAVEDTRACOM training activities. The information developed will be used by CNET in planning for the acquisition and delivery of training needed to upgrade local manpower quality.
2. The CNET tasking requires that the TAEG obtain specific information from various training activity personnel. This information is being collected via questionnaires. Your support of the TAEG effort and encouragement of your staff for a maximum questionnaire return rate is requested.
3. Enclosure (1) contains survey forms (questionnaires) designed for obtaining required information. It is requested that these forms be distributed to individuals occupying billets/positions identified on each questionnaire cover sheet. Detailed instructions for distributing questionnaires are contained within the questionnaire package.
4. To preserve anonymity of respondents and to promote candid responses and comments, it is requested that individuals complete the forms independently and return them directly to the TAEG in the envelopes provided. Completed forms should be returned within 10 working days after receipt.

/s/

A. F. SMODE

Copy to: (w/o encl)  
CNTECHTRA (N63P)

### QUESTIONNAIRE DISTRIBUTION PROCEDURES

Four sets of questionnaires are contained within the attached package. Each set is intended for a different group of personnel. Please distribute the questionnaires within your activity in accordance with the information below.

1. One copy each of the Training Executive survey should go to the activity Commanding Officer, the Executive Officer, and the Director of Training (if you have a DOT).
2. The form marked Training Managers should go to half of the training department heads, school/course heads, and all other individuals who function as supervisors of assigned instructors.
3. CISO Personnel survey forms should be given to all those military and civilian personnel assigned to the CISO who perform curriculum development or evaluation work. Personnel assigned to CISO who function purely in clerical (e.g., general typing) or administrative (e.g., student control) efforts need not complete questionnaires. If any CISO personnel function in dual capacities (e.g., the DOT or a department head is also the CIS Officer), please determine what job represents the major part of that individual's effort and give him/her the corresponding questionnaire.
4. The questionnaire marked for Instructors is intended to go to about 10 percent of assigned personnel who are currently functioning as instructors. This includes personnel from other services who are teaching Navy courses. However, it does not include contract instructors. It is important that the instructors and training managers designated by your activity to complete a questionnaire be randomly selected. This means that all instructors assigned to the activity should have an equal chance of being included in the sample regardless of how long they have been there, whether they are considered good or bad and irrespective of the particular course(s) they currently teach. Likewise, every training manager should have an equal chance of being selected.

One way to select a random sample of instructors is to pick a number between 0 and 9 and give a questionnaire to each instructor whose SSN ends in that number. This should give you a random sample of about 10 percent of your instructors. A random sample of training managers could be selected by giving a questionnaire to each training manager whose SSN ends in an odd number. Any questions may be addressed to the following TAEG personnel at the autovon numbers listed:

Larry Ford	791-4367
Gene Hall	791-5673
Gene Micheli	791-5198

5. If we have sent too many questionnaires for any group of people, please have them returned to TAEG with a notation on the cover sheet of each questionnaire that they are excess. Just the word "EXCESS" or "EXTRA" will

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do. This will allow us to keep an accurate record of response rate. Conversely, if we did not send enough questionnaires for any group of people, please call and let us know how many more you need.

These procedures are important because they allow us to determine how accurate the information we get is. Since decisions about inservice training will be made based on the information you provide, it is important that it be as accurate as possible.



INSERVICE NEEDS ASSESSMENT SURVEY  
FOR  
CISO PERSONNEL

The Training Analysis and Evaluation Group, at the request of CNET, is conducting a study to assess the inservice training needs of training activity personnel. This survey is part of that study.

Those of you who participated in the CISO study, which the TAEG recently completed, may notice some similarity in this questionnaire. The results of that study were used to help design this study. Your continued cooperation is appreciated.

This survey is to be filled out by all CISO personnel at each activity selected who are directly involved in instructional support efforts. Individual responses will not be disclosed to anyone outside of TAEG. The number in the upper right corner of this page will be used to identify training activities and to keep track of questionnaires returned. It will not be used to tie questionnaires to individual respondents. All data will be summarized in appropriate tables and charts.

Please return the completed form directly to the TAEG in the attached envelope. If you have any questions please call Larry Ford, autovon 791-4367, Gene Hall, autovon 791-5673, or Gene Micheli, autovon 791-5198.

INSERVICE TRAINING NEEDS ASSESSMENT SURVEY FOR CISO PERSONNEL

INSTRUCTIONS

This survey form is intended for CISO personnel. The form is divided into 2 sections. Complete the form independently of other personnel. Brief instructions for each section are given below.

Section I. This section asks for information concerning your educational and work background. Please answer each question as accurately as possible.

Section II. This section deals with functions that CISO personnel may perform. The functions are listed down the left side and questions for each function are listed across the top of each page. Every person in a CIS Office will not necessarily be involved in each function. Further, CISO personnel may be involved in the performance of a function, but they may not actually perform that function. Involvement could instead be in an advisory capacity or could consist of reviewing work done by others. Please answer the question for each function with which you are involved, regardless of the degree of your involvement.

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INSERVICE NEEDS ASSESSMENT  
FOR  
ALL CISO PERSONNEL

SECTION I. Respondent Data

- a. Series (civilian) or NEC/NOBC - \_\_\_\_\_
- b. Grade (civilian) or rate/rank (e.g., 03, E7, GS-12) - \_\_\_\_\_
- c. If enlisted, give rating (e.g., EM, YN) - \_\_\_\_\_
- d. Number of years/months in current position - \_\_\_\_ / \_\_\_\_
- e. What is the highest educational level you have attained? (circle one)
- (1) did not graduate from high school
  - (2) high school diploma or G.E.D.
  - (3) some college or technical training beyond high school, but not bachelor's degree
  - (4) graduated from college (B.A., B.S., or other bachelor's degree)
  - (5) some graduate school but no graduate degree
  - (6) Master's degree
  - (7) Ed.S., Ed.D., Ph.D., or other post master's or professional degree
- f. To what extent have the requirements of your job changed since you started in your current position?

(1)	(2)	(3)	(4)	(5)
Not at All	To a Slight Extent	To a Moderate Extent	To a Great Extent	To a Very Great Extent

- g. To what extent have new practices or techniques in instructional delivery been implemented since you started in your current position?

(1)	(2)	(3)	(4)	(5)
Not at All	To a Slight Extent	To a Moderate Extent	To a Great Extent	To a Very Great Extent

- h. To what extent have new practices or techniques in the evaluation of instruction been implemented since you started in your current position?

(1)	(2)	(3)	(4)	(5)
Not at All	To a Slight Extent	To a Moderate Extent	To a Great Extent	To a Very Great Extent

SECTION II  
CISO FUNCTIONS

For each function listed down the side, please answer the questions across the top by selecting the most appropriate response.	A. On the average, how often do you perform this function? (1) Daily (2) Weekly (3) Monthly (4) Every 3 months (5) Every 6 months (6) Yearly (7) Never	B. How difficult is it for you to perform this function? (1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Do not perform this function	C. When you first arrived at this activity, how difficult was it for you to perform this function? (1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Did not perform this function
a. Analyze job/new requirements	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
b. Select tasks to be trained	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
c. Select job performance measures	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
d. Analyze existing courses/modules	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
e. Select instructional setting	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
f. Develop learning objectives	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
g. Develop test items to measure objectives	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
h. Describe entry level behavior	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
i. Establish sequence of objectives	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
j. Specify learning events/activities	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)

SECTION II  
CISO FUNCTIONS

	A. On the average, how often do you perform this function?	B. How difficult is it for you to perform this function?	C. When you first arrived at this activity, how difficult was it for you to perform this function?
	(1) Daily (2) Weekly (3) Monthly (4) Every 3 months (5) Every 6 months (6) Yearly (7) Never	(1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Do not perform	(1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Did not perform this function
k. Specify instruction management plan and media	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
l. Select existing materials	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
m. Develop instruction	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
n. Validate instruction	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
o. Assist with student testing	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
p. Study attrition and setbacks	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
q. Assist with preparation of items for external evaluation	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
r. Assist with interpretation of results of external evaluations	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
s. Design instruments for internal evaluation	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
t. Collect data for internal evaluation	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
u. Analyze data from internal evaluation	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)

SECTION II  
CISO FUNCTIONS

	A. On the average, how often do you perform this function?	B. How difficult is it for you to perform this function?	C. When you first arrived at this activity, how difficult was it for you to perform this function?
	(1) Daily (2) Weekly (3) Monthly (4) Every 3 months (5) Every 6 months (6) Yearly (7) Never	(1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Do not	(1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Did not perform
v. Make recommendations based on internal evaluation	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
w. Design inter-departmental inservice programs	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
x. Conduct inter-departmental inservice programs	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
y. Assist with intra-departmental inservice programs	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
z. Coordinate with external activities and agencies concerned with training quality assurance	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
aa. Coordinate accreditation requirements and review	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
bb. Advise the commanding officer on CISO civilian affairs	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)

SECTION II  
CISO FUNCTIONS

A. On the average, how often do you perform this function?	B. How difficult is it for you to perform this function?	C. When you first arrived at this activity, how difficult was it for you to perform this function?
(1) Daily (2) Weekly (3) Monthly (4) Every 3 months (5) Every 6 months (6) Yearly (7) Never	(1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Do not	(1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Did not perform

cc. Monitor developments in training technology, methodology and research to make recommendations for improvements in local training

SECTION II  
CISO FUNCTIONS

	D. How important is the performance of this function to success at your job? (1) Not at all important (2) Slightly important (3) Somewhat important (4) Very important (5) Extremely important (6) Do not perform this function	E. Did you receive any formal inservice training in how to perform this function when you arrived at this activity? (1) No (2) Yes	F. If not, how useful would inservice training in how to perform this function have been when you first arrived at this activity? (1) Not at all useful (2) Slightly useful (3) Somewhat useful (4) Very useful (5) Extremely useful
a. Analyze job/new requirements	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
b. Select tasks to be trained	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
c. Select job performance measures	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
d. Analyze existing courses/modules	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
e. Select instructional setting	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
f. Develop learning objectives	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
g. Develop test items to measure objectives	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
h. Describe entry level behavior	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
i. Establish sequence of objectives	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
j. Specify learning events/activities	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)



SECTION II  
CISO FUNCTIONS

D. How important is the performance of this function to success at your job?  
 (1) Not at all important  
 (2) Slightly important  
 (3) Somewhat important  
 (4) Very important  
 (5) Extremely important  
 (6) Do not perform this function

E. Did you receive any formal inservice training in how to perform this function when you arrived at this activity?  
 (1) No  
 (2) Yes

F. If not, how useful would inservice training in how to perform this function have been when you first arrived at this activity?  
 (1) Not at all useful  
 (2) Slightly useful  
 (3) Somewhat useful  
 (4) Very useful  
 (5) Extremely useful

k. Specify instruction management plan and media	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
l. Select existing materials	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
m. Develop instruction	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
n. Validate instruction	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
o. Assist with student testing	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
p. Study attrition and setbacks	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
q. Assist with preparation of items for external evaluation	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
r. Assist with interpretation of results of external evaluations	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
s. Design instruments for internal evaluation	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
t. Collect data for internal evaluation	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)

SECTION II  
CISO FUNCTIONS

	D. How important is the performance of this function to success at your job? (1) Not at all important (2) Slightly important (3) Somewhat important (4) Very important (5) Extremely important (6) Do not perform this function	E. Did you receive any formal inservice training in how to perform this function when you arrived at this activity? (1) No (2) Yes	F. If not, how useful would inservice training in how to perform this function have been when you first arrived at this activity? (1) Not at all useful (2) Slightly useful (3) Somewhat useful (4) Very useful (5) Extremely useful
u. Analyze data from internal evaluation	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
v. Make recommendations based on internal evaluation	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
w. Design inter-departmental inservice programs	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
x. Conduct inter-departmental inservice programs	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
y. Assist with intra-departmental inservice programs	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
z. Coordinate with external activities and agencies concerned with training quality assurance	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
aa. Coordinate accreditation requirements and review	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
bb. Advise the commanding officer on CISO civilian affairs	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)

SECTION II

CISO FUNCTIONS

- D. How important is the performance of this function to success at your job?
- (1) Not at all important  
 (2) Slightly important  
 (3) Somewhat important  
 (4) Very important  
 (5) Extremely important  
 (6) Do not perform this function
- E. Did you receive any formal inservice training in how to perform this function when you arrived at this activity?
- (1) No  
 (2) Yes
- F. If not, how useful would inservice training in how to perform this function have been when you first arrived at this activity?
- (1) Not at all useful  
 (2) Slightly useful  
 (3) Somewhat useful  
 (4) Very useful  
 (5) Extremely useful

cc. Monitor developments in training technology, methodology and research to make recommendations for improvements in local training (1) (2) (3) (4) (5) (6) (1) (2) (1) (2) (3) (4) (5)

INSERVICE NEEDS ASSESSMENT SURVEY  
FOR  
TRAINING EXECUTIVES

The Training Analysis and Evaluation Group (TAEG), at the request of CNET, is conducting a study to assess the inservice needs of training activity personnel. This survey is part of that study.

This survey is to be filled out by all training executives at each activity selected. Training executive is the term used to refer to Commanding Officers, Executive Officers and Directors of Training. Individual responses will not be disclosed to anyone outside of the TAEG. The number in the upper right corner of this page will be used to identify training activities and to keep track of questionnaires returned. It will not be used to tie questionnaires to individual respondents. All data will be summarized in appropriate tables and charts.

Please return the completed form directly to the TAEG in the attached envelope. If you have any questions, please call Larry Ford, autovon 791-4367, Gene Hall, autovon 791-5673, or Gene Micheli, autovon 791-5198.

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INSERVICE TRAINING NEEDS ASSESSMENT SURVEY  
FOR  
TRAINING EXECUTIVES

INSTRUCTIONS. This survey form is intended for training executives (i.e., commanding officers, executive officers, and directors of training). The form is divided into 3 sections. Please complete the form independently of other personnel. Brief instructions for each section are given below.

Section I. This sections asks for information concerning your educational and work background. Please answer each question as accurately as possible.

Section II. This section deals with functions that training executives may perform. The functions are listed down the left side and questions for each function are listed across the top of each page. Every training executive will not necessarily be involved with each function. Please read each function and answer the questions across the top for that function as accurately as you can.

Section III. This section is concerned with areas of knowledge that training executives might find useful in the performance of their duties. These areas of knowledge do not necessarily reflect any specific duties or functions of training executives. However, familiarity with some of these areas may be helpful to the training executive in carrying out other duties or responsibilities. Please read each area carefully and answer the questions across the top as accurately as possible.

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INSERVICE NEEDS ASSESSMENT FOR  
TRAINING EXECUTIVES

SECTION I. Respondent Data

- a. Rank (e.g., 04, 06) - \_\_\_\_\_
- b. Current position (please circle one)
- (1) Commanding Officer
  - (2) Executive Officer
  - (3) Director of Training
- c. Number of years/months in current position - \_\_\_\_ / \_\_\_\_
- d. Number of previous tours of duty as a training executive \_\_\_\_\_
- e. Number of previous tours of duty at a training activity in any capacity (except as a student) \_\_\_\_\_
- f. What is the highest educational level you have attained? (circle one)
- (1) did not graduate from high school
  - (2) high school diploma or G.E.D.
  - (3) some college or technical training beyond high school, but not bachelor's degree
  - (4) graduated from college (B.A., B.S., or other bachelor's degree)
  - (5) some graduate school but no graduate degree
  - (6) Master's degree
  - (7) Ed.S., Ed.D., Ph.D., or other post master's or professional degree

g. To what extent have the requirements of your job as a training executive changed since you started in your current position?

- |            |                    |                      |                   |                        |
|------------|--------------------|----------------------|-------------------|------------------------|
| (1)        | (2)                | (3)                  | (4)               | (5)                    |
| Not at All | To a Slight Extent | To a Moderate Extent | To a Great Extent | To a Very Great Extent |

h. To what extent have new practices or techniques in the management of a training activity been implemented since you started in your current position?

- |            |                    |                      |                   |                        |
|------------|--------------------|----------------------|-------------------|------------------------|
| (1)        | (2)                | (3)                  | (4)               | (5)                    |
| Not at All | To a Slight Extent | To a Moderate Extent | To a Great Extent | To a Very Great Extent |

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The following questions are for commanding and executive officers only.

i. Have you ever served as a commanding or executive officer at any other shore activity?

(1)	(2)
No	Yes

j. Have you attended the PCO Shore Station Management Course offered by the Personnel Management Institute, NCPC?

(1)	(2)
No	Yes

k. If so, would you recommend it to all prospective commanding or executive officers of training activities?

(1)	(2)
No	Yes

l. Have you attended any other PCO/PXO courses?

(1)	(2)
No	Yes

SECTION II  
TRAINING EXECUTIVE FUNCTIONS

For each function listed down the side, please answer the questions across the top by selecting the most appropriate response.	A. On the average, how often do you perform this function? (1) Daily (2) Weekly (3) Monthly (4) Every three months (5) Every 6 months (6) Yearly (7) Never	B. How difficult is it for you to perform this function? (1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Do not perform function	C. When you first arrived at this activity, how difficult was it for you to perform this function? (1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Did not perform this function
a. Assess subject matter expertise of personnel	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
b. Assess instructional ability of personnel	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
c. Assess personnel ability to design curricula	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
d. Develop internal system of ability for training quality	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
e. Implement internal system of accountability for training quality	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
f. Select criteria to monitor for quality of training	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
g. Determine corrective action if a criterion falls below desirable level	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)



SECTION II  
TRAINING EXECUTIVE FUNCTIONS

	A. On the average, how often do you perform this function?	B. How difficult is it for you to perform this function?	C. When you first arrived at this activity, how difficult was it for you to perform this function?
	(1) Daily (2) Weekly (3) Monthly (4) Every three months (5) Every 6 months (6) Yearly (7) Never	(1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Do not perform this function	(1) Not at all difficult (2) Slightly difficult (3) Somewhat difficult (4) Very difficult (5) Extremely difficult (6) Did not perform this function
h. Manage student pipeline	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
i. Minimize delays in training for students arriving at activity	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
j. Allocate funds internally for efficient achievement of training quality	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
k. Plan for future support needs (e.g., facilities, equipment, manpower)	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
l. Recognize drug/alcohol abuse and take appropriate action	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
m. Counsel students on academic matters	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)
n. Counsel staff and students on personal matters	(1) (2) (3) (4) (5) (6) (7)	(1) (2) (3) (4) (5) (6)	(1) (2) (3) (4) (5) (6)

SECTION II  
TRAINING EXECUTIVE FUNCTIONS

	D. How important is the performance of this function to success at your job? (1) Not at all important (2) Slightly important (3) Somewhat important (4) Very important (5) Extremely important (6) Do not perform this function	E. Did you receive any formal inservice training in how to perform this function when you arrived at this activity? (1) No (2) Yes	F. If not, how useful would inservice training in how to perform this function have been when you first arrived at this activity? (1) Not at all useful (2) Slightly useful (3) Somewhat useful (4) Very useful (5) Extremely useful
a. Assess subject matter expertise of personnel	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
b. Assess instructional ability of personnel	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
c. Assess personnel ability to design curricula	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
d. Develop internal system of accountability for training quality	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
e. Implement internal system of accountability for training quality	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
f. Select criteria to monitor for quality of training	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
g. Determine corrective action if a criterion falls below desirable level	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)

SECTION II

TRAINING EXECUTIVE FUNCTIONS

	D. How important is the performance of this function to success at your job?	E. Did you receive any formal inservice training in how to perform this function when you arrived at this activity?	F. If not, how useful would inservice training in how to perform this function have been when you first arrived at this activity?
	(1) Not at all important (2) Slightly important (3) Somewhat important (4) Very important (5) Extremely important (6) Do not perform this function	(1) No (2) Yes	(1) Not at all useful (2) Slightly useful (3) Somewhat useful (4) Very useful (5) Extremely useful
h. Manage student pipeline	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
i. Minimize delays in training for students arriving at activity	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
j. Allocate funds internally for efficient achievement of training quality	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
k. Plan for future support needs (e.g., facilities, equipment, manpower)	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
l. Recognize drug/alcohol abuse and take appropriate action	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
m. Counsel students on academic matters	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)
n. Counsel staff and students on personal matters	(1) (2) (3) (4) (5) (6)	(1) (2)	(1) (2) (3) (4) (5)

SECTION III  
AREAS OF KNOWLEDGE

For each area of knowledge listed down the side, please answer the questions across the top by selecting the most appropriate response.	A. How familiar are you with this area? (1) Not at all familiar (2) Slightly familiar (3) Somewhat familiar (4) Very familiar (5) Extremely familiar	B. How important is familiarity with this area to success at your job? (1) Not at all important (2) Slightly important (3) Somewhat important (4) Very important (5) Extremely important	C. How familiar were you with this area when you first arrived at this activity? (1) Not at all familiar (2) Slightly familiar (3) Somewhat familiar (4) Very familiar (5) Extremely familiar
a. Principles and Practices of Instructional Systems Design (ISD)	(1) (2) (3) (4) (5)	(1) (2) (3) (4) (5)	(1) (2) (3) (4) (5)
b. Subject matter taught at activity	(1) (2) (3) (4) (5)	(1) (2) (3) (4) (5)	(1) (2) (3) (4) (5)
c. Organization of the Training Command	(1) (2) (3) (4) (5)	(1) (2) (3) (4) (5)	(1) (2) (3) (4) (5)
d. Civil Service rules and regulations, including the merit pay system	(1) (2) (3) (4) (5)	(1) (2) (3) (4) (5)	(1) (2) (3) (4) (5)
e. The UCMJ at shore activities	(1) (2) (3) (4) (5)	(1) (2) (3) (4) (5)	(1) (2) (3) (4) (5)
f. Reporting systems, including MITRAS, MILPERISIS, SHOROCES and SHORSTAMPS	(1) (2) (3) (4) (5)	(1) (2) (3) (4) (5)	(1) (2) (3) (4) (5)
g. Special terminology used in training	(1) (2) (3) (4) (5)	(1) (2) (3) (4) (5)	(1) (2) (3) (4) (5)
h. Manpower planning for training activities	(1) (2) (3) (4) (5)	(1) (2) (3) (4) (5)	(1) (2) (3) (4) (5)

SECTION III  
AREAS OF KNOWLEDGE

	A. How familiar are you with this area? (1) Not at all familiar (2) Slightly familiar (3) Somewhat familiar (4) Very familiar (5) Extremely familiar	B. How important is familiarity with this area to success at your job? (1) Not at all important (2) Slightly important (3) Somewhat important (4) Very important (5) Extremely important	C. How familiar were you with this area when you first arrived at this activity? (1) Not at all familiar (2) Slightly familiar (3) Somewhat familiar (4) Very familiar (5) Extremely familiar
i. Administrative discharge procedures	(1) (2) (3) (4) (5)	(1) (2) (3) (4) (5)	(1) (2) (3) (4) (5)
j. PPGS - the Planning, Programming and Budgeting System	(1) (2) (3) (4) (5)	(1) (2) (3) (4) (5)	(1) (2) (3) (4) (5)
k. How curriculum is approved	(1) (2) (3) (4) (5)	(1) (2) (3) (4) (5)	(1) (2) (3) (4) (5)
l. CNET training equipment support	(1) (2) (3) (4) (5)	(1) (2) (3) (4) (5)	(1) (2) (3) (4) (5)

SECTION III  
AREAS OF KNOWLEDGE

D. Did you receive any formal inservice training in this area when you first arrived at this activity?  
 (1) No (2) Yes

E. If not, how useful would inservice training in this area have been when you first arrived at this activity?  
 (1) Not at all useful  
 (2) Slightly useful  
 (3) Somewhat useful  
 (4) Very useful  
 (5) Extremely useful

	(1)	(2)	(3)	(4)	(5)
a. Principles and Practices of Instructional Systems Design (ISD)	(1)	(2)	(3)	(4)	(5)
b. Subject matter taught at activity	(1)	(2)	(3)	(4)	(5)
c. Organization of the Training Command	(1)	(2)	(3)	(4)	(5)
d. Civil Service rules and regulations, including the merit pay system	(1)	(2)	(3)	(4)	(5)
e. The UCMJ at shore activities	(1)	(2)	(3)	(4)	(5)
f. Reporting systems, including NITRAS, MILPERSIS, SHORCCS and SHORSTAMPS	(1)	(2)	(3)	(4)	(5)
g. Special terminology used in training	(1)	(2)	(3)	(4)	(5)
h. Manpower planning for training activities	(1)	(2)	(3)	(4)	(5)

SECTION III

AREAS OF KNOWLEDGE

D. Did you receive any formal inservice training in this area when you first arrived at this activity?

- (1) No
- (2) Yes

E. If not, how useful would inservice training in this area have been when you first arrived at this activity?

- (1) Not at all useful
- (2) Slightly useful
- (3) Somewhat useful
- (4) Very useful
- (5) Extremely useful

i. Administrative discharge procedures	(1) (2)	(1) (2) (3) (4) (5)
j. PPBS - the Planning, Programming and Budgeting System	(1) (2)	(1) (2) (3) (4) (5)
k. How curriculum is approved	(1) (2)	(1) (2) (3) (4) (5)
l. CNET training equipment support	(1) (2)	(1) (2) (3) (4) (5)

APPENDIX B

FACTOR ANALYSES OF FREQUENCY OF PERFORMANCE  
OF CISO AND TRAINING EXECUTIVE FUNCTIONS



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This appendix presents the results of factor analyses of data concerning the frequency of performance of CISO and training executive functions.

Principal components factor analysis with varimax rotation was performed on the frequency of performance items for CISO and training executive personnel. The resulting factor pattern matrix (or loadings) are shown in table B-1 for CISO personnel and in table B-6 for training executives. An item that loads highly on a factor can be assigned to that factor. All the items loading highly on a factor indicate what that particular factor measures. Thus, for example, the 10 items under preliminary development in table B-1 constitute factor I, since they all load more highly on that factor than on any other factor. Similarly, secondary development items load on factor IV, evaluation items load on factor III and service to activity items load on factor II. Similarly, there are four factors for training executives.

Each set of items that loads on the same factor can be considered as measuring the same dimension or factor. In this case, there are four dimensions, or four major function areas, that are represented by four sets of items each for CISOs and training executives. These sets of items were combined by averaging each respondent's score over all the items in the set to get a score that represents the factor.

For CISO personnel, each set of items that loaded on a factor was then factor analyzed separately using an oblique rotation. An oblique rotation allows for correlation between factors extracted. An orthogonal rotation would necessarily result in only one factor extracted from each set of items. The results of the oblique rotations for CISOs are shown in tables B-2 through B-5.

Table B-2 shows the results of the oblique factor analysis of the preliminary development items. There are two subfactors, as can be determined by examining the loadings. The first five items load on factor II and the next five items load on factor I. Tables B-3 through B-5 can be examined in a similar way. In each case, there are two subfactors, indicating that each of these major function areas has two subordinate components.

For purposes of analysis, the major function areas were used. However, for purposes of designing curricula for inservice training, it could be useful to consider these various subfactors as parts of a course of training designed to address the major function area.

TABLE B-1. VARIMAX ROTATED FACTOR LOADINGS OF FREQUENCY OF PERFORMANCE ITEMS FOR CISO PERSONNEL

Items	Factors			
	I	II	III	IV
<u>PRELIMINARY DEVELOPMENT</u>				
A. Analyze job/new requirements	.73	.13	.40	.05
B. Select tasks to be trained	.77	.26	.27	.25
C. Select job performance measures	.65	.19	.26	.25
D. Analyze existing courses/modules	.76	.16	.32	.05
E. Select instructional setting	.63	.39	.17	.15
F. Develop learning objectives	.80	.17	.00	.25
G. Develop test items to measure objectives	.66	.23	.11	.41
H. Describe entry level behavior	.72	.35	.07	.24
I. Establish sequence of objectives	.83	.22	.13	.31
J. Specify learning events/activities	.80	.30	.10	.30
<u>SECONDARY DEVELOPMENT</u>				
K. Specify instruction management plan and media	.40	.30	.37	.63
L. Select existing materials	.40	.22	.15	.67
M. Develop instruction	.42	.13	.15	.75
N. Validate instruction	.26	.06	.39	.63
O. Assist with student testing	.08	.30	.26	.63
<u>EVALUATION</u>				
P. Study attrition and setbacks	.30	.34	.54	.45
S. Design instruments for internal evaluation	.22	.38	.61	.47
T. Collect data for internal evaluation	.15	.19	.84	.25
U. Analyze data from internal evaluation	.19	.22	.87	.19
V. Make recommendations based on internal evaluation	.13	.54	.65	.06
Q. Assist with preparation of items for external evaluation	.32	.34	.59	.44
R. Assist with interpretation of results of external evaluation	.28	.36	.62	.35
<u>SERVICE TO ACTIVITY</u>				
W. Design interdepartmental inservice programs	.24	.79	.29	.26
X. Conduct interdepartmental inservice programs	.23	.78	.20	.27
Y. Assist with intradepartmental inservice programs	.19	.82	.28	.22

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TABLE B-1. VARIMAX ROTATED FACTOR LOADINGS OF FREQUENCY OF PERFORMANCE ITEMS FOR CISO PERSONNEL (continued)

Items	Factors			
	I	II	III	IV
Z. Coordinate with external activities and agencies concerned with training quality assurance	.36	.61	.17	.08
AA. Coordinate accreditation requirements and review	.41	.67	.24	.26
BB. Advise commanding officer on CISO civilian affairs	.34	.72	.23	.08

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TABLE B-2. OBLIQUE ROTATION OF FACTOR PATTERN MATRIX FOR FREQUENCY OF PERFORMANCE OF CISO PRELIMINARY DEVELOPMENT FUNCTIONS

Items	Factors	
	I	II
<u>PRELIMINARY DEVELOPMENT</u>		
1. Analyze job/new requirements	-.09	.84
Select tasks to be trained	.18	.72
Select job performance measures	-.08	.87
Analyze existing courses/modules	.24	.50
Select instructional setting	.06	.62
2. Develop learning objectives	.92	-.10
Develop test items to measure objectives	.55	.14
Describe entry level behavior	.69	.07
Establish sequence of objectives	.91	.01
Specify learning events/activities	.90	-.01

NOTE: Correlation between factors I and II is .57.

TABLE B-3. OBLIQUE ROTATION OF FACTOR PATTERN MATRIX FOR FREQUENCY OF PERFORMANCE OF CISO SECONDARY DEVELOPMENT FUNCTIONS

Items	Factors	
	I	II
<u>SECONDARY DEVELOPMENT</u>		
1. Specify instruction management plan and media	.73	.11
Select existing materials	.74	-.01
Develop instruction	.87	-.20
Validate instruction	.69	.13
2. Assist with student testing	.03	.98

NOTE: Correlation between factors is .20.

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TABLE B-4. OBLIQUE ROTATION OF FACTOR PATTERN MATRIX FOR FREQUENCY OF PERFORMANCE OF CISO EVALUATION FUNCTIONS

Items	Factors	
	I	II
<u>EVALUATION</u>		
1. Study attrition and setbacks	.57	.06
Design instruments for internal evaluation	.49	.35
Collect data for internal evaluation	.85	.02
Analyze data from internal evaluation	.93	-.03
Make recommendations based on internal evaluation	.93	-.10
2. Assist with preparation of items for external evaluation	.01	.92
Assist with interpretation of results of external evaluation	-.01	.89

NOTE: Correlation between factors is .55.

TABLE B-5. OBLIQUE ROTATION OF FACTOR PATTERN MATRIX FOR FREQUENCY OF PERFORMANCE OF CISO SERVICE TO ACTIVITY FUNCTIONS

Items	Factors	
	I	II
<u>SERVICE TO ACTIVITY</u>		
1. Design interdepartmental inservice programs	.83	.06
Conduct interdepartmental inservice programs	.90	-.03
Assist with intradepartmental inservice programs	.88	-.01
2. Coordinate with external activities and agencies concerned with training quality assurance	.01	.83
Coordinate accreditation requirements and review	-.09	.81
Advise commanding officer on CISO civilian affairs	.09	.46

NOTE: Correlation between factors is .34.

TABLE B-6. VARIMAX ROTATED FACTOR LOADING FOR FREQUENCY OF PERFORMANCE ITEMS FOR TRAINING EXECUTIVES

Items	Factors			
	I	II	III	IV
<u>Quality Assurance</u>				
Implement internal system of accountability for training quality	.69	.38	.24	.18
Select criteria to monitor for training quality	.73	.49	.18	-.06
Determine corrective action if a criterion falls below desirable level	.66	.48	.25	-.08
Allocate funds internally for efficient achievement of training quality	.69	-.00	.23	.06
Plan for future support needs	.67	.06	-.08	.52
<u>Personnel Assessment</u>				
Assess subject matter expertise of personnel	.18	.77	.06	.12
Assess instructional ability of personnel	.12	.89	-.00	.03
Assess personnel ability to design curricula	.24	.78	.20	.07
<u>Management of Student Throughput</u>				
Manage student pipeline	.32	.08	.81	-.00
Minimize delays in training for students arriving at activity	.28	.05	.84	.16
Counsel students on academic matters	-.01	.30	.67	.39
<u>Personal Problems</u>				
Recognize drug/alcohol abuse and take appropriate action	-.01	-.04	.19	.70
Counsel staff and students on personal matters	.13	.18	.08	.83

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