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THESIS

SNAP II:
TRAINING ADMINISTRATIVE ENHANCEMENTS

by

Stanley M. Liss

and

Shawn T. O'Rourke

September 1987

Thesis Advisor:

Barry A. Frew

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SNAP II: Training Administrative Enhancements

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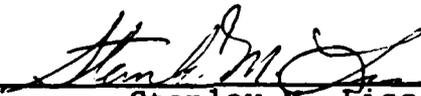
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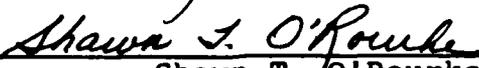
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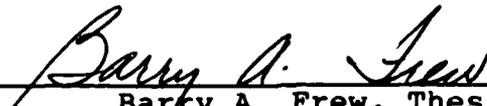


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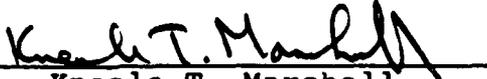
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ABSTRACT

This thesis presents methods for reducing the administrative burden that U.S. Navy personnel experiences, in managing shipboard training programs, through enhancements to the SNAP-II (Shipboard Non-Tactical Automated Data Process) Administrative Subsystem. Major areas addressed are Chief of Naval Operations, Fleet and Type Commanders (Atlantic and Pacific) instructions pertaining to the requirements and conduct of shipboard training programs, fleet personnel and inspecting activities views on training programs effectiveness and support, and SNAP-II capabilities supporting these requirements. A description of proposed system functions and enhancements, in the form of a calendar generator application, training requirements and accomplished documentation, is presented which provides the foundation for automating shipboard training programs throughout the Atlantic and Pacific fleets.

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Supporting Training Administration. ver 5.0

I. INTRODUCTION

NAVY TIMES article, 24 August 1987 . . . Headline:

"KELSO COMMITTED TO 50 PERCENT PERSTEMPO"

- "The Atlantic Fleet expects to maintain its 50-percent-at-home operational tempo for sailors, despite increased demands in the Persian Gulf, says Adm. Frank B. Kelso II, commander in chief of the Atlantic Fleet.
- "He hopes better planned training will reduce at sea training time so personnel tempo goals can be met.
- "The key to holding the line, he said, is better planned training. 'I think we have to be smart about how we train.'"
- "It takes a lot more planning, he acknowledged. But 'personnel have to realize it is important to do it this way. You can't just sit along-side and say, gee, we ought to go to sea more to train. You have got to think about how to train better.'" [Ref. 1]

In today's world of scarce resources, managers attempt to attain objectives through the allocation of resources subject to given constraints. Naval Surface Force managers espouse the need to optimize training as part of a combination of means to achieve and maintain maximum operational readiness. If one considers optimum training as an objective, a myriad of resources come to mind that contribute to that objective. Certainly a key resource, and one that is easily quantified, is time. Time, however, is also a constraint; i.e., there are only so many hours in a day, and several of those hours must be devoted to other things beside training such as meetings, watches, paperwork,

etc. Given that, all other resources remaining constant, increased time for training improves the objective, it becomes apparent that either slack time must be available to justify increased training time or the time constraint must be reduced. The authors contend that slack time does not exist for shipboard managers as a result of the plethora of operational and administrative requirements demanding their attention. Ways must be found, therefore, to reduce the time constraint.

This paper suggests methods to reduce time spent, and increase effectiveness in training administration.

A. THESIS OVERVIEW

1. Chapter II: Shipboard Training Organization

The chapter is divided into two parts. The first part describes the shipboard training organization by position and responsibility. The second part summarizes training directives that impact this paper's objectives directly. Primarily, attention is focused on training administration requirements. (Additionally, Appendix B contains additional training requirements beyond the scope of this paper which has been provided for the reader to get a flavor of the immensity of task facing shipboard managers in training administration.)

2. Chapters III, IV: SNAP II System Summary, and ADM Subsystem Background

These chapters provide a brief description of SNAP II and an overview of the present capabilities of the ADM Subsystem with respect to training administration.

3. Chapter V: Shipboard Training Administrative Functions

This chapter is basically a follow-on to Chapter II in that training administration requirements promulgated by higher authority via the directives outlined in Chapter II are presented in detail. It follows Chapter IV to provide the reader a comparison of what is currently available in SNAP II in the realm of training administration to what are the requirements.

4. Chapters VI, VII, VIII: Proposed SNAP II ADM Training Administration Enhancements, Detailed Characteristics, Design Details

These chapters present suggested enhancements to the ADM Subsystem that support those training administration requirements outlined in Chapter V.

5. Chapters IX, X: Environment, Cost Factors

Chapters IX and X refer directly to their counterpart sections in the SNAP II Integrated Functional Description. [Ref. 2]

6. Chapter XI: Conclusions and Recommendations

In addition to summarizing the proposed enhancements to the ADM Subsystem, recommendations are made for additional research into areas of study related to this thesis.

7. Appendices

Several appendices are provided to support textual material.

II. SHIPBOARD TRAINING ORGANIZATION AND REQUIREMENTS

The Navy Training Strategy calls for the effective conduct of training to sustain operational readiness. [Ref. 3] Juxtaposed with this broad scope objective is a plethora of detailed training requirements levied upon individual units by each successive echelon of command. The management structure having the responsibility for meeting these requirements at the unit level is the shipboard training organization.

A. TRAINING ORGANIZATION

The shipboard training organization, as outlined in OPNAVINST 3120.32B (Standard Organization and Regulations of the U.S. Navy (SORM)), is depicted in Figure 2-1. The following pertains to anyone having impact on unit training. [Refs. 4 and 5]

1. Commanding Officer

As set forth in U.S. Navy Regulations, the Commanding Officer is charged with the responsibility for the safety, well-being, and efficiency of his command. Foremost of his goals is to sustain optimum operational readiness, of which, effective training plays no small part. His ability to convey support and enthusiasm for the training program, like most other programs implemented on board ship, will set the tone in determining its eventual

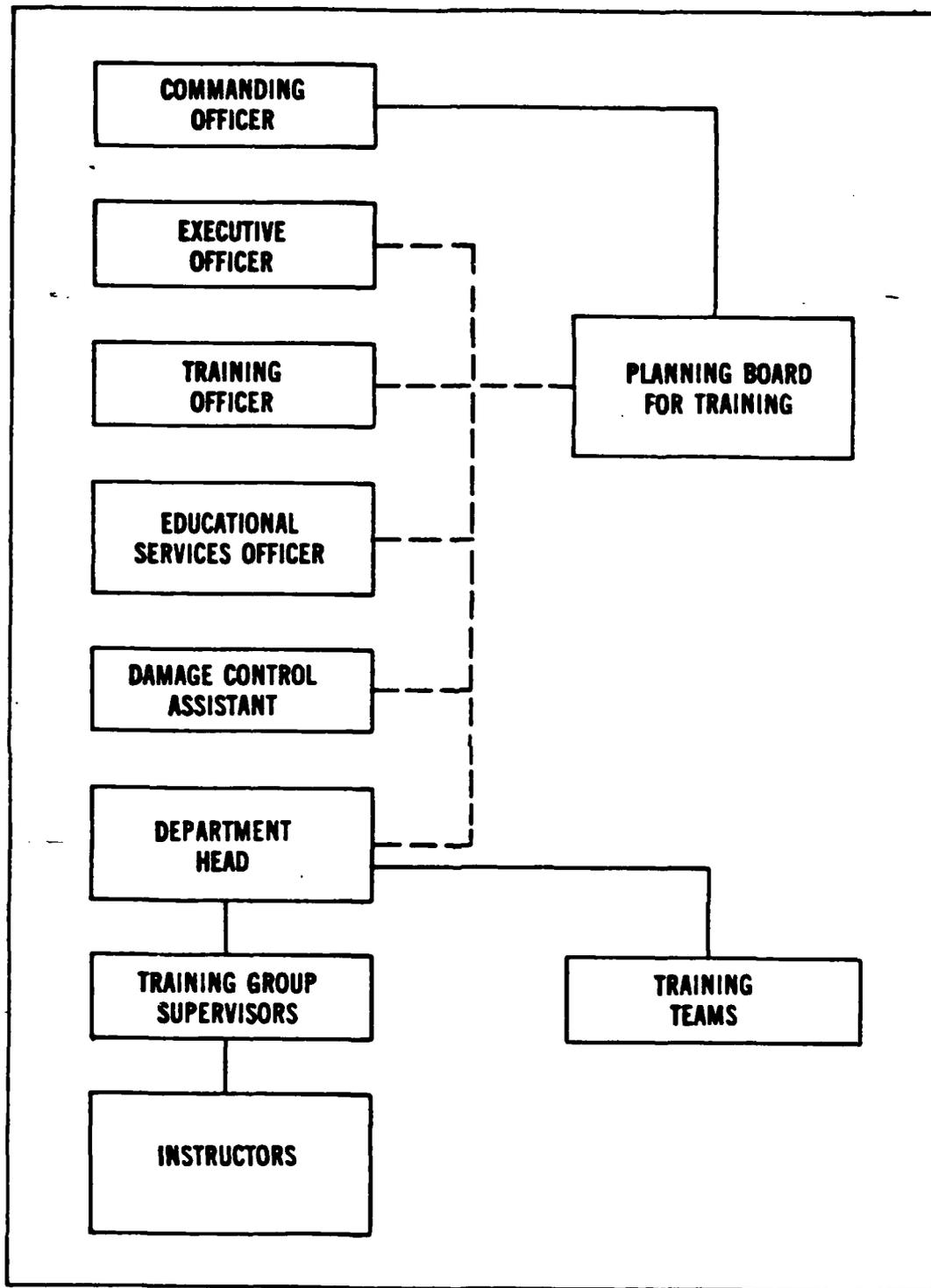


Figure 2-1: Shipboard Training Organization

success or failure. In general, the Commanding Officer establishes training policy for the command based on guidance provided by higher authority, which is then carried out by training organization subordinates. NAVEDTRA 43100-1C (Personnel Qualification Standard Management Guide) further describes his training responsibilities, in terms of the Personnel Qualification Standard (PQS), as follows:

- Establish the command PQS organization.
- Serve as the final qualification authority for the command.
- Determine and issue the method of final qualification.
- Establish an appropriate means of recognizing the achievement of qualification requirements.
- Use the Planning Board for Training (see paragraph 7) to monitor the PQS program.

2. Executive Officer

The Executive Officer is the command's overall training supervisor. As such, he is responsible to the Commanding Officer in carrying out command training policy by maintaining the unit training instruction, and through the management of the Planning Board for Training (PBFT). The Executive Officer monitors training program effectiveness by randomly reviewing training accomplishment documentation, in addition to evaluating quality of training through observation.

3. Training Officer

The Training Officer, normally a collateral duty assignment, is designated by the Commanding Officer to

assist the Executive Officer in planning, coordinating, and controlling the command programs, including, specifically, the training program. The Training Officer serves as a member of the PBFT, and maintains contact with training activities of the shore establishment to advise the Planning Board on availability and use of training facilities. He additionally obtains quotas for service, fleet, or functional schools, coordinates the indoctrination courses for all newly reported personnel, and prepares a training program for midshipmen and reserve personnel embarked for training duty. He evaluates, with the PBFT, the effectiveness of using records, reports, graphs, and other control devices for unit-wide, department, and division training programs. He prepares, issues and maintains training schedules after the PBFT has outlined the requirements. He coordinates with the Operations Officer in scheduling training exercises, and supervises the implementation of the Personnel Qualification Standards (PQS) System and ensures its use as the basis for training objectives within the command training program. The Training Officer also maintains an index of applicable PQS for use in the unit, as well as ensures that an adequate supply of all applicable PQS packages is maintained. He is responsible for coordinating with the ship's Safety Officer to develop a safety training program. The ship's Training

Officer has the overall responsibility of supervising the command's training program.

4. Educational Services Officer (ESO)

The Educational Services Officer assists the Executive Officer in administering educational programs. His basic functions are to coordinate officer and enlisted training and on-duty education programs in conjunction with department heads, division officers and the PBFT. Additionally, the ESO plans for and coordinates active command participation in the NAVY CAMPUS voluntary education program. He works with education specialists supporting the command in assisting and meeting the educational needs of the command.

5. Damage Control Assistant (DCA)

The DCA is responsible for the training of the ship's repair party personnel in damage control, including fire fighting, emergency repairs, and non-medical defense against nuclear, biological, and chemical warfare using PQS as the standard for training.

6. Department Head

The Department Head is responsible for the organization and training of the department for battle readiness, which is supportive of the command's training program. He prepares and maintains the bills and orders for the organization and operation of the department, and

maintains various records, including training records. He is also responsible for the training and professional development of junior officers assigned to his department. The Department Head reviews the eligibility of departmental enlisted personnel for advancement in rating. He implements and supervises the execution of PQS topics as applicable to the department, qualifies personnel for watch stations and for equipment/system operations. The Department Head should:

- Monitor the PQS program.
- Coordinate with Division Officers, cognizant Chief Petty Officers and Leading Petty Officers, the watch station qualifications and advancement goals of department personnel.
- Designate in writing those individuals (officers and petty officers) who serve as qualifiers within the department.
- Establish completion time standards for departmental PQS watchstations.
- Approve division's recommendations for tailoring PQS standards and standard answer books.
- Serve as chairman of the Department Examining Board (as required.)
- Recommend interim qualification of watchstanders.
- Approve and recommend final watch station qualification to the Commanding Officer or approve final qualification if so designated.

The Department Head reports to the Commanding Officer in matters concerning the operational readiness of the department.

7. Planning Board for Training (PBFT)

The PBFT is responsible to the Commanding Officer for the development of the unit's training program. The Board is comprised of the following personnel:

- Executive Officer (chairperson)
- Department Heads
- Damage Control Assistant
- Educational Services Officer (recorder)
- Training Officer
- Medical Representative
- Safety Officer

The Board proposes policies, methods, and procedures for the unit's training program, considers immediate and long range objectives for unit training, coordinates the shipwide use of PQS requirements as a basis for training programs and objectives, coordinates departmental training activities, integrates exercise and drill requirements of the departments into the unit's operating schedule and the plan of the day, makes recommendations concerning training records and reports, continuously evaluates results of the unit's training program, and coordinates the unit's indoctrination program.

8. Training Group Supervisor

Each Training Group shall be assigned a Training Group Supervisor who shall be responsible for the administration of training within the group. Each

individual unit may have several Training Groups such as watch teams for a specific condition, gun crews, etc.

9. Training Teams

Training Teams shall be established when necessary to ensure standardized training and evaluation. Training teams may be formed to cover a functional area (e.g., naval gunfire support, ASW/AAW tracking teams) or they may cover emergent requirements such as ships force overhaul management support teams.

10. Instructors

Instructors are responsible for the execution of the command's training policies through the training and qualification of unit personnel. They must be knowledgeable and possess the practical skills to clearly demonstrate and communicate the subject matter.

11. Senior Watch Officer (SWO)

The SWO, under the direction of the Executive Officer, is responsible to the Commanding Officer for the assignment and general supervision of all underway and inport deck watchstanders. His duties include:

- Maintain a data file of officer underway and in port deck watchstanders, including watchstanding qualifications, assignment to watches, and section assignment.
- Coordinate the training of deck watch officers.
- Prepare the officer underway and in port watch bills subject to the approval of the Commanding Officer.
- Prepare the enlisted underway and in port watch bills subject to the approval of the Executive Officer.

- Schedule rotation of the unit's in port duty sections.
- Arrange for and supervise training of watchstanders required to bear fire arms.

The SWO reports to the Commanding Officer for approval of officer watch bills and to the Executive Officer for the training of deck watch officers. He coordinates training with the security officer as appropriate. Heads of departments recommend qualified enlisted personnel of their departments for departmental watches to the SWO.

12. Department Training Officer

The Department Training Officer assists the Department Head in coordinating the department training program. Specifically, he:

- Assists in developing a department training program in support of unit training objectives.
- Assists in developing a program of individual training based on existing PQS requirements, where applicable, and provides reliefs for personnel on existing PQS watchstations.
- Implements approved training plans and policies within the department.
- Coordinates the administration of division training programs within the department. This responsibility entails supervision of the preparation of training materials and review of curriculum, courses, and lesson plans; assistance in the selection training of instructors; observation of instruction given at drills, on watch, on station, and in the classroom, followed by recommendations to the Department Head; procurement of, through the unit's Educational Services Officer, required training aids and devices including films, projectors, training courses, and books.
- Maintains department training records and reports.
- Disseminates information about fleet and service schools.

- Assists in planning and coordinating the training of junior officers of the department following unit training policy.
- Initiates requisitions for training supplies and materials, subject to the approval of the Department Head.

13. Division Officer (DO)

A Division Officer is assigned by the Commanding Officer to command a division of the unit's organization.

Within the context of training, the Division Officer:

- Keeps informed of the capabilities and needs of each subordinate, and within his authority, takes action to maintain the efficiency of the division and welfare and morale of subordinates.
- Establishes and submits division training plans to the Department Head for approval.
- Monitors division training to ensure proper execution.
- Reviews division training records to ensure proper documentation of accomplished training.
- Instructs subordinates in applicable safety precautions.
- Recommends to the Department Head the PQS entry level of newly assigned personnel.
- Keeps the Department Head informed on the training status of division personnel and adjusts goals accordingly.
- Recommends final qualification to the Department Head.
- Recommends to the Department Head any required tailoring of individual PQS packages.

14. Division Training Assistant

The Training Assistant is responsible in assisting the Division Officer in planning, developing and coordinating the division training program within departmental and unit training objectives. Specifically, he:

- Develops monthly division training schedules, and obtains the training space and material to support these schedules.
- Trains instructors within the division.
- Supervises preparation of training materials, and reviews curricula, courses, and lesson plans prepared within the division.
- Obtains, maintains custody of, and issues training aids and devices.
- Supervises the preparation, administration, and correction of tests in personnel advancement requirements (PARS) within the division and, in conjunction with the unit training officer, arranges for examinations and advancement in rating.
- Observes instructions given at drills, on watch, on station, and in classrooms and makes recommendations as appropriate.
- Maintains training records and prepares required reports.
- Keeps personnel informed of PQS and training progress, using graphs, charts, and similar means.
- Submits requests for scheduling drills and exercises through the division officer.
- Initiates requisitions for division training supplies and materials.
- Supervises the administration of PQS within the division, and provides guidance for PQS accomplishment.
- Informs division personnel of available fleet and service schools, and encourages their use.
- Advises division personnel on Navy and DANTES correspondence courses and aids them in applying for courses.
- Consults with the department training officer and the unit training officer in training matters affecting the division.
- Aids the division officer in all other training functions.

15. Division Leading (Chief) Petty Officer

The Leading (Chief) Petty Officer normally is the senior chief petty officer or petty officer in the division. The leading petty officer assists the division officer in administering, supervising, training and qualifying division personnel.

16. Division Damage Control Petty Officer (DCPO)

The DCPO is responsible, under the division leading petty officer, for damage control functions of the division and related matters. In the context of training, the DCPO assists in the instruction of division personnel in damage control, fire fighting, and Nuclear Biological Chemical (NBC) defense procedures.

17. Work Center Supervisor (WCS)

The WCS is the senior petty officer in charge of a maintenance group and is responsible to the department head, via the division officer, for 3-M system operation within the work center. He must be trained in the 3-M system and must provide instruction for newly assigned personnel within the maintenance group. In this capacity, the WCS indoctrinates the trainee to the 3-M program and recommends and monitors the goals for the individual. He is responsible for the accuracy, updating and tailoring of PQS to fit the unit's needs, as well as for the initiation of appropriate feedback to the PQS Development Group (single site developer of PQS for the Navy). Specifically, the WCS:

- Supervises work center PQS, updates and maintains the PQS progress chart.
- Assists designated qualifiers and trainees as needed.
- Assigns requirements and PQS goals to individual trainees in accordance with departmental guidance.
- Supervises qualifiers.
- Ensures a reference library is maintained.

18. PQS Coordinator

The PQS Coordinator functions is the focal point for all PQS matters that transcend the departmental level and is administratively responsible for ordering all PQS materials. Specifically, the PQS Coordinator:

- Maintains the basic system reference.
- Maintains PQS software (standards, progress charts, etc.)
- Advises the Executive Officer and PBFT on all PQS matters.
- Prepares any external PQS reports for the command if required by higher authority.

19. PQS Trainee

The PQS trainee, both officer and enlisted, is responsible for completing training as required and verifying that the portion of the progress chart depicting his qualification accomplishment is updated.

20. PQS Qualifiers

The qualifier is the acknowledged expert in a specified area of qualification. The individual must be totally current in the technical and safety requirements of their assigned area. Specifically, the qualifier:

- Keeps abreast of revisions/changes to equipment, systems and policies that affect assigned areas of responsibilities.
- Recommends changes to standards, as needed, to the supervisor.
- Is available for sign-off and assists trainees as needed.
- Maintains program integrity.
- Maintains custody of standard answer books.

21. Personnel Officer

The Personnel Officer ensures proper service record entries are made to reflect training accomplished.

22. 3-M Coordinator

The 3-M Coordinator manages all aspects of the 3-M program. His training responsibilities include ensuring that all unit personnel are trained in the mechanics of the 3-M system. Satisfactory completion of training culminates in PQS qualification. The 3-M Coordinator is a member of the PBFT whose sole function on the Board is to incorporate 3-M training into the unit training plan.

B. APPLICABLE TRAINING DIRECTIVES

During the planning stage for this paper, the authors decided to list all specific training requirements, as well as training administration guidelines provided by each echelon commander. It was hoped that this effort would provide the first step toward automation of those requirements, and, therefore, be one step closer to the ultimate goal of eliminating the need for fleet personnel to

research training requirements levied upon them by higher authority.

It became apparent early during research, however, that there was insufficient time to review all training directives applicable to ships in the Atlantic and Pacific Fleets. Given the assumption that any directive that addresses training should be considered a training directive, the majority of directives published by each echelon of command starting at OPNAV and ending at the Commander of Naval Surface Forces Atlantic/Pacific (type commander) fall under that category.

Emphasis, therefore, has been placed primarily on guidance provided by OPNAV, with some attention devoted to requirements outlined by fleet commanders and to a limited extent to type commanders. The authors assert that additional research into those remaining directives that address training would be beneficial as a foundation for future enhancements to the SNAP-II ADM subsystem. To that end, an overview of significant training requirements of cogent directives are included in Appendix B. Although the list of directives is by no means all inclusive, it provides a reasonable starting point for further research. Also, training requirements exclusive to certain classes of ships or that have unique capabilities are ignored in this paper. For example, nuclear weapons training is not addressed.

or that have unique capabilities are ignored in this paper. For example, nuclear weapons training is not addressed.

The overview of training directives researched, germane to this paper, grouped by responsible echelon commander follows.

1. Chief of Naval Operations

a. OPNAVINST 3120.32B (SORM)

Chapter VIII of the SORM directs that ships are to establish their training program so as to consist of a long range training plan, short range training plan, and training accomplishment records. All training plans, schedules, and records may be either typed, handwritten, or maintained on ADP/WP systems such as SNAP-II. Training plans should be retained long enough to assist with planning for the training cycle.

The long range training plan is the basic instrument for informing personnel of training goals and operating schedules. It provides the framework for developing the short range training plan. The long range plan, shown in Appendix C, includes:

- The annual employment schedule.
- A list, including frequency, of all required examinations/inspections/certifications/assist visits.
- A list of all TYCOM required exercises including periodicity and the date they were last conducted.
- A list of off ship school and NEC (Naval Enlisted Classification) requirements including the personnel who hold these qualifications.

The Training Officer and Department Heads are responsible for developing and maintaining the long range plan. The Department Head consolidates the information required for the long range plan for all training groups within the department and forwards the department long range training plan to the Training Officer. The Training Officer consolidates the long range plans received from each department, adds all unit level training requirements and presents it to the Executive Officer for review and the Commanding Officer for approval. Once approved by the Commanding Officer, this consolidated package becomes the unit long range training plan and a copy of applicable portions should be provided to each training group. The Training Officer is responsible for maintaining the unit's long range training plan up to date and should be provided with updated information periodically at the PBFT.

The short range training plan, shown in Appendix D, is the mechanism for planning and scheduling training. It includes:

- The quarterly employment schedule.
- The quarterly training plan.
- The monthly training plan.
- The weekly training plan.

The quarterly employment schedule is used as a guide to develop broad unit training plans for the upcoming

quarter. The quarterly training plan indicates to the training groups unit plans that may impact the training groups intended training schedule. The PBFT develops the quarterly training plan, and the department heads add to it any broad departmental plans. Training planning and scheduling for periods shorter than the quarter are kept exclusively at the departmental level.

Using the quarterly training plan as a guide, each training group submits a proposed monthly training plan to the cognizant Department Head for review and approval. The Department Head uses copies of the monthly training plans as his primary tool for scheduling training at the PBFT.

Each week after the PBFT, the Department Head provides each training group within his department a copy of a single department weekly training schedule. The weekly schedule includes all training applicable to the department. No changes to this weekly schedule should be made without approval of the cognizant Department Head. This schedule indicates the time and location training will be conducted.

Training records must be kept to an absolute minimum and need only be maintained to show what training has been accomplished and what remains to be done. The true measurement of training effectiveness is performance, and the basic objective of the record is to assist in

accomplishing this in the simplest way possible. All training may be recorded on a General Record Type II (Appendix E) This record form will also serve as an attendance sheet. Each training group supervisor shall maintain records for personnel assigned to his group. Training records are retained for an individual for as long as he is assigned to the unit. PQS documentation is maintained in accordance with NAVEDTRA 43100-1C (PQS Management Guide).

Chapter 8 of the SORM also requires that Record for Personnel Advancement Requirements (PARS), (Appendix F), be maintained for each enlisted member of the command. On ships not having SNAP-II, PARS are kept with the Division Officer's Notebook and the individual training/qualification records. Ships having SNAP-II must maintain PARS separately because while the Division Officer's Notebook has been automated, PARS has not.

Although the SORM does not address specific professional training topics, it does provide guidance on training in general terms. Each unit must provide newly reporting officer and enlisted personnel with Indoctrination Training which should include:

- History and mission of the command.
- Unit's routine and regulations.
- Personnel procedures.

- Educational services.
- Career benefits.
- Legal services.
- Morale and religious services.
- Equal Opportunity/Human Resources Management.
- Drug and alcohol abuse.
- Medical and dental services.
- Safety.
- Security.
- Vehicle regulations.
- Energy awareness.
- Standards of conduct.
- Ombudsman program.

General Military Training is required in accordance with OPNAVINST 1500.22C (GENERAL MILITARY TRAINING). Specific training topics and some lesson plans are outlined in this instruction. Training accomplishment is recorded in the same manner as described above. [Ref. 4]

b. NAVEDRA 43100-1C (PQS Management Guide)

The SORM and OPNAVINST 3500.34C direct that the PQS Management Guide will be the primary guidance for the implementation of PQS. OPNAVINST 3500.34C describes the PQS program as a qualification system for officer and enlisted personnel to perform assigned duties. A PQS is a compilation of the minimum knowledge and skills required to

qualify for a specific watchstation, maintain specific equipment or perform as a team member within a unit. The PQS program is not a training program, but it does provide an objective for training. Therefore, PQS is most effective when utilized as a key element of a well-structured and dynamic unit training program.

Three records are required to be maintained for the PQS system.

- Individual PQS Qualification Sheets document the trainee's progress through a particular standard and is maintained by the trainee.
- Service record entries reflecting completion of a particular PQS watch station.
- PQS Progress Record (Appendix G): Ships and squadrons have the option of maintaining either handwritten records using the PQS Progress Chart or utilizing automated data processing. SNAP-II or any other suitable ADP equipment can be used for this purpose. Specifically, the record must show the command by name, number and division/work center; trainees by name and rank/rate; date the trainee completed command indoctrination; watchstation qualification by name and number; date the trainee commenced training in that particular qualification; anticipated completion date; trainee's progress.

Commands opting for the handwritten PQS Progress Chart must adhere to the following guidelines. Listed across the top of the chart are all of the qualifications to be completed by each individual in the division or work center. The remaining columns may be used to record and coordinate additional training data to meet the specific needs of the individual units; i.e., competitive exercises, divisional GMT lectures, required schools, etc. Vertical

columns at the left side of the chart list names of each person in the division and/or those who will be included in the training program. The next column is designated to record the last time the chart was updated for each individual. The indoctrination column indicates the date on which the trainee received PQS pre-instruction. This record is included to ensure each trainee is aware of how to use PQS. Point totals for qualification are recorded under each qualification title. Applicable only as a management tool to monitor individual progress, the point tallies do not measure the complexity of watch station duties. The watch station and progress columns are designed for multiple use. The progress column contains the points earned each week according to the goals assigned by the Division Officer. The watch station columns are halved diagonally to record both the dates on which the subject qualification was assigned and the projected completion date. The right-hand section is used to indicate the total points accumulated. Using this method, the individual will know which qualification must be worked on and when it is to be completed. By comparing points earned with total point value, and elapsed work time with planned completion date, the Division Officer and Leading Petty Officer can monitor each individual's progress at a glance. Completed qualification is made noticeable by blacking out the progress block. Interim qualification is indicated by a

crosshatch in the upper half of the progress block and total points accumulated thus far in the lower half. [Ref. 5]

III. SNAP II SYSTEM SUMMARY

A. BACKGROUND

The Shipboard Non-tactical ADP Program (SNAP) II is intended to provide fleet units and selected shore activities with third generation automated data processing equipment, to facilitate the automation of non tactical functions, in the areas of supply, financial accounting, administration, maintenance and personnel.

Feasibility studies were conducted in the late 1970's under the sponsorship of various organizations, to determine the suitability of automating shipboard administrative functions. As a result of these studies, prototype systems were developed which concentrated on automating specific shipboard functions. Each prototype system evaluation indicated that significant benefits could be realized in reducing manhours expended, improving accuracy of records, and providing monetary savings by automating certain functions. In 1981, an Integrated Functional Description (IFD) was approved which addressed functional areas where automation efforts were to be concentrated. The IFD is expected to provide guidance for the SNAP II program's developmental efforts during it's anticipated twenty year life cycle. [Ref. 2:p. 2]

An underlying concept supported by SNAP II is "a standard automated information system will be utilized by all fleet operational and direct support units, afloat and ashore." [Ref. 2:p. 3] This concept provides the foundation upon which the benefits of automation traverses the Navy establishment.

All SNAP systems are designed and developed from the same functional specifications. These specifications ensure the transportability of hardware, software and information between SNAP supported activities. This transportability requirement should enable activities to fully utilize the capabilities automation provides to process and transfer information within the Navy establishment.

B. OBJECTIVES

The SNAP II program was originally conceived to support the CNO's OBJECTIVE 5 (1980) which was: "to reduce the administrative burden of the fleet." [Ref. 2:p. 3] This objective was fostered on the research conducted during the 1970's, whereby the benefits of automating shipboard functions reduced the administrative workload of fleet personnel.

Research indicated a significant reduction on the fleet's administrative burden could be achieved by automating appropriate maintenance, supply, pay, disbursing, administration, medical, and dental functions. The SNAP II program was designed to initially automate these areas and

later through system upgrades provide enhancements to these functions.

SNAP II program objectives have been further refined as:

- Increase Fleet Readiness
- Provide Standard ADP Hardware
- Provide Centralized Development and Maintenance for Standard Application Software
- Provide Comprehensive Integrated Logistics Support¹

The SNAP II program, additionally meets the overall objective, required for fleet non-tactical ADP support as outlined in OPNAVINST 5230.16, which is "to enhance the readiness of fleet operational and direct support units through the efficient management of ADP resources." [Ref. 6:p. 1] The SNAP program should strive to continue to achieve this objective, through future system upgrades.

C. FLEET'S PERCEPTION OF SNAP II

In 1986, the functional responsibility for the SNAP II Administrative subsystem was co-assigned to the Fleet Commanders Atlantic and Pacific Fleets. The Fleet Commanders upon assuming responsibility for the ADM subsystem, surveyed SNAP commands for recommendations concerning changes/improvements to the existing ADM subsystem.

¹ Steve Hudock, Cdr., USN, briefing held at Naval Postgraduate School, Monterey, California, October 24, 1985.

This fleet survey was the first inquiry directed toward actual users of the ADM subsystem. It is significant to note from the survey, that the subsystem is used by almost every work group onboard a command. Support is provided in some mode from the commanding officer reviewing maintenance reports to the seaman updating his PQS status.

The survey responses concentrated on addressing improvements in the present ADM subsystem functions, with few recommendations for new subsystem capabilities or functions. The responses also suggested the subsystem was assisting divisional personnel in reducing their administrative workload, but provided no indication of how well the system supported the command's upper management, i.e., CO, XO, and department heads. This observation is significant as a great deal of administrative tasks are generated, reviewed, and approved by upper management in support of external requirements. The ship's training report, unit report (UNITREP), and the Navy energy usage reporting system (NEURS) report are examples of monthly generated external reports. These reports all require extensive manual or semi-automated data gathering for each report.

The survey provided an indication that fleet personnel were unaware of the potential administrative support the subsystem could provide in automating shipboard functions, e.g., shipboard training administration, tracking

preparation for overseas movement, and numerous reoccurring reports. This indication was supported by upper management concentrating their recommendations for training improvements toward the subsystem PQS functions, instead of training as a whole. A synopsis of the fleet responses directed toward training are contained in Appendix H.

IV. SNAP II ADMINISTRATIVE DATA MANAGEMENT (ADM) SUBSYSTEM

The Administrative Data Management (ADM) Subsystem is one of many subsystems comprising SNAP-II which was designed to automate specific shipboard procedures. As stated in the introduction to this paper, the focus of our attention will be directed at proposed enhancements to administrative procedures that are peculiar to shipboard training administration. Before delving into the proposed enhancements, however, a brief discussion of the existing ADM Subsystem in terms of its purpose, background, performance requirements, and subsystem programs is offered.

A. PURPOSE

The ADM Subsystem is designed to provide administrative support to shipboard personnel in the following procedural areas in an automated, interactive manner:

- Subsystem management.
- Manpower management.
- Query.
- Visitor control.
- Display print report. [Ref. 7:p. 3]

B. BACKGROUND

A number of studies were conducted as a precursor to development of what is today known as SNAP-II. Initial

studies were undertaken to determine the feasibility and potential benefits of automating shipboard administrative procedures. Early studies, such as that conducted on board USS Dahlgren (DLG-12) by The Navy Personnel Research and Development Center (NPRDC) in 1975, concluded that a minicomputer-based system for use on combatant ships could be successfully developed to "facilitate the management of data pertinent to individual training status and Personnel Qualification Standards." [Ref. 8:p. viii] Indeed, training management prototypes demonstrated an ability to save users time and labor over existing manual training administration procedures, thus earning favorable comments from shipboard supervisors [Ref. 9:p. vii]. Further development of prototypes by shipboard personnel on selected test platforms generated training administration applications that showed tangible benefits in: -

- Facilitating accessibility of information for better planning and decision making.
- Reducing the manual administrative workload, providing shipboard managers greater opportunities to manage. [Ref. 10:p. 11]

Continued research by NPRDC in developing more sophisticated administrative applications resulted in a subsystem specification designed to provide users the to manipulate training records in terms of training requirements formal school requirements [Ref. 11:pp. B43-B45]. Shipboard managers, once provided a glimpse of the power of automation, saw the need for more

advanced applications of automated management systems to support shipboard planning, management, and training [Ref. 12:p. 89].

C. PERFORMANCE REQUIREMENTS

The ADM subsystem is designed to meet internal recordkeeping and reporting requirements associated with shipboard administrative functions. There are two types of shipboard ADM subsystem functions: service, and user. The service function can only be accessed by the ADM subsystem manager, and, as a control function, has no impact on shipboard training administration. The service function will not, therefore, be discussed further. Available ADM user functions/subfunctions, as of the latest software revision (release 5.0), are comprised of the following²:

- Manpower management.
 - Berthing.
 - Career counselor.
 - Department/division.
 - Lifeboat.
 - Medical.
 - Personnel office.
 - Watch bill.
 - Security force.
 - Schools.

² Further breakdown of ADM user subfunctions can be seen in Appendix I,

- Validation table.
- Query.
- Visitor control.
- Display print report. [Ref. 7:pp. 13-15]

D. SUBSYSTEM PROGRAMS

An overview follows discussing the key features of each user function (program).³

1. Manpower Management

This function essentially acts as a menu program which, when selected, displays the subfunctions for which the user has access. When a selection has been made, the program calls the selected subfunction program. [Ref. 7:p. 25] An overview of the Manpower Management subfunctions follow.

a. Berthing

The Berthing subfunction has no impact on training administration, and therefore will not be discussed further.

b. Career counselor

The Career Counselor subfunction has no impact on training administration, and therefore will not be discussed further.

c. Department/Division

The Department/Division program allows the user to select among several additional programs. They are:

³ ADM user function structure charts are depicted in Appendix J.

- Department/Division Review Update.
- Department/Division Reports: Menu #1.
- Department/Division Reports: Menu #2.

(1) Department/Division Review Update. All the subfunctions that comprise Department/Division Review Update, with the following exception, have no impact on training administration and, therefore, will not be discussed further.

(a) Personnel Qualification Standards Review/Update. This subfunction allows the addition/modification to PQS data. (See Appendix G, pp. 168-171) The displays generated by the subfunction satisfy all but two requirements outlined in the SORM, and the PQS Manager's Guide for a unit's proper maintenance of the PQS Progress Record. The requirements not satisfied are fields representing the date PQS trainees are indoctrinated to the PQS system, and their projected completion date for each assigned watch station. Also, no provision is made for interim qualification. Chapters VI through VIII address these shortcomings and recommend modifications for improvement.

(2) Department/Division Reports Menu #1/#2. Although the Division Officer's Notebook (subfunction of Department/Division Reports Menu #1) can be considered part of the individual training record, information pertaining to training in the report is, with one exception, compiled from other subfunctions; specifically, those subfunctions dealing

with PQS and schools. [Ref. 13:p. 3-3-1] (See Appendix K) The one exception is the field representing the highest PARS level attained. The SORM requires that PARS be maintained for each assigned crewmember. The authors believe more can be done to automate PARS to relieve shipboard managers from the need of maintaining a separate paper form.⁴ The other subfunctions comprising Department/Division Reports Menu #1 have no impact on training administration, and therefore will not be discussed further.

Additionally, all but four subfunctions accessed from Department/Division Reports Menu #2 do not impact on training administration and will not be considered further in this paper. The subfunctions that do impact training administration are depicted in Appendix L, and are self-explanatory. [Ref. 7:pp. 56-57]

d. Lifeboat

The Lifeboat subfunction has no impact on training administration, and therefore, will not be discussed further.

e. Medical

The Medical subfunction has no impact on training administration, and therefore, will not be discussed further.

⁴ Chapters VI through VII provide recommendations for PARS automation.

f. Personnel Office

This subfunction allows the user to select from among several other subfunctions, only one of which impacts training administration; i.e., Personnel Office Reports: Menu #3. This subfunction allows users to print the Personnel Training History Report, and the PQS Ship's Summary Report (Appendix L:pp. 211-212) [Ref. 7:p. 5].

g. Watch Bill

The Watch Bill subfunction has no impact on training administration, and therefore, will not be discussed further. [Ref. 7:p. 6]

h. Security Force

The Security Force subfunction has no impact on training administration, and therefore, will not be discussed further. [Ref. 7:p. 6]

i. Schools

Selection of this subfunction allows the user to select from among the following subfunctions:

- Schools Review/Update.
- Print Schools Projected Loss/Gain Report.
- Print Course Convening Report.
- Print Schools Status Report.
- Print Course Requal/Refresh Required Report.
- Print PQS History Report by Watch Station.
- Print PQS In-Progress Report by Individual.
- Print PQS Ship's Summary Report.

- Print PQS Requal/Refresh Required Report.
- Print Personnel with NECs Report.

(1) Schools Review/Update. This subfunction allows the user to add, modify, or delete school information for individual crew members. Included as schools information is course title, the Catalog of Navy Training Courses (CANTRAC) number, the Navy Enlisted Classification (NEC) code associated with satisfactory completion of the course, and the status of the course; i.e., assigned, in progress, or completed. (See Appendix M) [Ref. 7:pp. 91-93]

(2) Schools Printed Reports. The various print subfunctions listed above produce reports in the formats shown in Appendix N. [Ref. 7:pp. 94-97] The examples depicted in the appendix are self explanatory.

j. Validation Tables

Two subfunctions are allowed to be accessed by the user:

- Validation Tables Review/Update.
- Print Validation Tables.

Additional subfunctions can be selected after either of these two subfunctions are selected, only two of which have impact on training administration.

(1) Schools Table (List). Selection of this subfunction allows the user to modify/list previously user-entered school information. School information takes the form of formal school requirements promulgated by higher authority, and information about the school such as that found in CANTRAC. (See Appendix O) [Ref. 7:pp. A-134- A-135]

(2) PQS Table (List). Selection of this subfunction allows the user to modify/list previously user-entered PQS information. (See Appendix P) [Ref. 7:pp. A-138- A-141]

2. Query

The Query subfunction allows the user to build custom reports through the use of prompt/response screens, making it ideal for ad hoc situations that require an answer for specific one time questions. The function as presently implemented has no impact on training administration and, therefore, will not be discussed further in this chapter.

3. Visitor Control

The Visitor Control subfunction has no impact on training administration, and therefore will not be discussed further.

4. Display Print Report

This subfunction displays for the user all user generated print reports that are currently in the print queue. It has no direct impact on training administration.

E. ADM SUBSYSTEM DEFICIENCIES

In addition to the minor shortfall of the PQS Review/Update subfunction described above, the ADM subsystem fails to fully support the training administration requirements outlined in the SORM. Specifically, long range and short range training schedules, as well as training accomplishment in the form of training attendance records

are not addressed. Additionally, as stated earlier in the chapter, PARS are not fully supported by the ADM subsystem. These issues are addressed in Chapters VI through VIII.

V. SHIPBOARD TRAINING ADMINISTRATION EFFECTIVENESS

Fleet units have been inundated with programs and requirements which recommend that supporting training be incorporated into the command training program. A wide variety of programs have been established to ensure personnel are aware of policies, procedures, and requirements associated with shipboard functions. In most cases, the requirements have applicability throughout the command, and range from rate specific, to shipwide damage control training. As training program applicability increases, so does the associated complexity of managing the program. The personnel requirements, tools, and procedures required to properly manage these programs are outlined in OPNAVINST 3120.32B (SORM). This chapter reviews the manpower effort required to maintain one of these tools; the training record, and addresses how inspecting activities view tool effectiveness.

A. TRAINING ADMINISTRATION MANPOWER REQUIREMENTS

The SORM states "The true measurement of training effectiveness is performance, and the basic objective of the record (training) is to assist this in the simplest way possible." [Ref. 4:p. 8-18] Fleet units are required to maintain a training record for each crew member. This training record is intended to provide command personnel and

inspecting activities, an indication of the various general shipboard and specific rate related training an individual has received.

A division can be composed of an individual, or more than a hundred, depending on the command size and division's functional responsibility. Either the division officer, leading petty officer, or divisional training petty officer, is assigned to initiate and maintain each training record. The Division Officer is ultimately responsible for maintaining divisional training records. Individual effort to properly maintain divisional training records can be immense and time consuming, depending on the division's size and function.

The Ship's Manning Document (SMD) is developed by the Navy Manpower Engineering Center (NAVMEC), located in Norfolk, Virginia, NAVMEC is responsible for conducting onboard surveys of Atlantic and Pacific fleet units to determine the required manning levels of various ratings. NAVMEC personnel conduct surveys by interviewing the senior or command designated individual responsible for each work center or rating (both later referred to as a group).

During the survey, each group is questioned concerning the manpower effort required to perform certain administrative tasks, one of which is "maintain training records". NAVMEC for survey purposes considers "maintain training record" to mean, strictly the effort required to

draw a record from the file, enter the training conducted and return the record to the file. This effort does not include the preparatory time required in gathering information to be recorded, or developing reports.⁵ Appendix Q is an example of the survey forms used by NAVMEC personnel.

The authors selectively reviewed 12 NAVMEC surveys among 6 different ship types (FF, FFG, DDG, LSD, LPH, AOE) in each fleet, to determine the amount of time fleet personnel were credited toward maintaining training records. A total of 400 groups composed of 4,289 crew members were reviewed among the 12 ships, of which 314 groups contained valid data. Data was considered invalid when a supervisor reported it required one hour per week to maintain an individual training record. Survey sheets containing inaccurate calculations or N/A entries were also considered invalid data.

An analysis of the 314 valid groups provided insight to the manpower effort required for these groups to maintain 3,384 divisional training records. This data provides no indication of how complete these records were maintained or the time required to schedule, monitor, update, and report preparation required to fulfill the requirements.

⁵ M. Wald, interview held during visit to Navy Manpower Engineering Center Detachment Pacific, San Diego, California, June 22, 1987.

- Training records were maintained on the average of less than once per week, with a median of once/week.
- Average number of training records maintained was 11, with a median of 8 records.
- Average time required to maintain a training record was 5.75 minutes with a median of 5 minutes.
- Average time expended per week maintaining training records was 56.34 minutes, with a median of 32.50 minutes.

Statistical data analysis is contained in Appendix R.

B. FLEET'S EFFECTIVENESS IN MANAGING TRAINING PROGRAMS

Various activities are responsible for evaluating fleet units in their mission area capabilities. One of the methods utilized in measuring a command mission area readiness is how well the command manages their administrative programs, particularly their training programs. Every activity which inspects, examines, certifies, or assists commands usually review some facet of the command training programs. Training programs are regarded by many activities as a critical success factor for increasing mission area readiness. This section will provide an overview of three of these activities and their perceptions of how well training is administered in the fleet.

1. Fleet Training Command Atlantic (TRALANT)

The Commander, Fleet Training Command Atlantic (COMTRALANT) is tasked to conduct training and evaluation of fleet units in their assigned mission areas. This evaluation

process occurs through various forms of inspections, one of which is the Training Readiness Evaluation (TRE). The TRE is given prior to the departure of fleet units for training at Guantánamo Bay, Cuba and/or Little Creek, Virginia. The TRE inspectors utilize standardized check off sheets, which are developed from OPNAV, TYCOM instructions and other activities imposing requirements on fleet units. In addition to the check off sheets, a notice which lists recurring discrepancies commonly found during TREs and arrival inspections at the training sites is promulgated. This notice states that correcting these recurring discrepancies ". . . will result in a higher level of ship readiness." [Ref. 14:p. 1] Appendix S provides a summary of these recurring discrepancies as applicable to shipboard training administration.

2. Propulsion Examining Board (PEB)

The Propulsion Engineering Board assists fleet commanders in verifying that conventional powered ships are safe to operate. The PEB "may also be utilized by fleet commanders to promote improved engineering training and readiness capabilities within the fleet." [Ref 15:p. 1] These objectives are achieved through various examinations including Light-off examinations (LOE) and Operational Propulsion Plant Examinations (OPPE).

There are five conditions for which a fleet unit could be evaluated unsatisfactory during a PEB examination.

One of those conditions is the "absence of a capability for self-training." [Ref. 15: p.6] This ability to self-train directly reflects on the command's capability to train personnel to handle normal and casualty control engineering watch standing situations. The ability to self-train is directly reflective of how well the command's training program is structured and managed to accomplish this goal. As part of the LOE and OPPE, the PEB inspectors carefully review the engineering department training program in all areas outlined in the SORM, Fleet, and TYCOM directives which directly impact on engineering operational and material readiness. Appendix T provides a general synopsis of the depth to which the CINCPAC PEB examines training administration.

A review of PEB (Pacific) examination reports covering fifty commands, indicated twenty-three ships had training program deficiencies and five ship's program were ineffective or unsatisfactory.⁶

The TYCOMs have promulgated various instructions which amplify the policies and guidelines established for successfully passing a PEB examination. These instructions provide additional directions and procedures for managing engineering training programs. The COMNAVSURFPAC Engineering Department Management Manual (CNSP 3540.12C)

⁶ CDR Padgett, interview held during visit to Commander Naval Surface Force Pacific, (Code N66), San Diego, California, June 17, 1987.

provides a summary of how PEB members have evaluated training programs during PEB examinations:

- "The "long range" training program ends with the PEB exam.
- Regardless of the program's paperwork, if trained personnel are not evident, the program is suspect.
- PQS progress charts are not updated and monitored by supervisors.
- The watchbill and PQS charts do not have the same names listed. Service records do not track with the PQS qualifications.
- There is no system to monitor quality of training conducted. To be effective, training must be conducted by or directly monitored by senior personnel, including department head and division officers."
[Ref. 16: p. 6-5]

The instruction further points out the Engineering Department Training Plan must be in accordance with OPNAVINST 3120.32A and COMNAVSURFPACINST 1500.3C. The Engineering Department Training Plan must be integrated with the ship's long range training plan. Together, these plans must address all major evolutions and exercises and the training requirement to successfully complete them.
[Ref. 16: p. 1]

Although a similarly published PEB (Atlantic) summary is not in evidence, present and past senior PEB board members have provided the following comments concerning training programs they had observed among Atlantic Fleet units.

- "Training does not receive high enough attention in the Chain of Command.

- No standardization of training documentation is maintained among fleet units. Each unit maintains OPNAVINST 3120.32 requirements differently.
- PQS is not incorporated into training plans.
- Failure to reschedule uncompleted training. No tracking to reschedule training which is overcome by events.
- No means established to identify personnel missing scheduled training."⁷
- "No method of tracking scheduled training from the long range schedule to an individual on a weekly or daily basis.
- No clear cut guidelines on how a training program should be maintained so that there is commonality between fleet units."⁸
- "The methods within a command for maintaining training administration requirements is not uniform from department to department or division to division within a department.
- The methods available are lacking in supporting the scheduling of training, documenting those who attended, rescheduling training, and determining when certain training is to be conducted.
- No tracking of training conducted which crosses divisional or department boundaries."⁹

3. Engineering Mobile Training Teams (EMTT)

The Engineering Mobile Training Teams is a subordinate command supporting the TYCOM. The teams have

⁷ Phone conversation with Captain R. Roahde, chief examiner, Atlantic Fleet Propulsion Examining Board, Norfolk, Virginia, 16 January 1987.

⁸ Phone conversation with Captain N. Scott, former chief examiner, Atlantic Fleet Propulsion Examining Board, Norfolk, Virginia, 2 March 1987.

⁹ Phone conversation with Captain R. Jones, former chief examiner with Atlantic Fleet Propulsion Examining Board, Norfolk, Virginia, 2 March 1987.

been structured such that each team supports one particular type of engineering plant i.e., gas turbine, steam turbine or diesel. The teams assist ships in developing and maintaining engineering standards in accordance with promulgated instructions and technical procedures. Teams also conduct specific training as requested in preparation for a fleet unit's PEB examinations.

EMTT (Atlantic) provides a quarterly summary report of the training conducted aboard Atlantic fleet units. The report addresses all areas under the responsibility of the engineering department, subject to PEB examination. They highlight deficiencies which could have adverse impact on overall engineering readiness. Quarterly summaries, over the past year, indicate several fleet units are having difficulty administering and evaluating their training programs. The number of units considered to be in (complete/general/non) compliance with established standards for training programs were 47/31/24. The summaries provided no indication of how those training programs which were in complete compliance were managed, nor the number of manhours required to achieve this result. A recurring comment addressed inadequacies in scheduling and documenting training conducted. A synopsis of these reports addressing training is contained in Appendix U.

The EMTT (Pacific) functions in a similar manner except for providing quarterly summaries. EMTT in the past

year, has observed basically the same types of problems which have been commented upon for the Atlantic Fleet.

C. TRAINING ADMINISTRATION IMPROVEMENT

Unit readiness is comprised of personnel and material readiness. Material readiness consists of equipment and supplies on hand evaluated together with the equipment condition. A measure of personnel readiness is comprised of assigned personnel and their level of training.

The instructions identified in Chapter II, contain specific programs which were developed to ensure command personnel are adequately trained to support a command's wartime mission. Through examinations, inspections, and assist visits, some of which have been discussed, feedback is provided to the unit's Commanding Officer and superiors on how well the command is meeting a particular program's requirements. Deficiencies identified in some programs, indicate that personnel are not fully achieving the accepted level of training required, thus impacting negatively, on the unit's readiness.

The effectiveness of a training program starts with the management and supervision of the program. Personnel who are responsible for a program must take an active interest in the program to be successful. Likewise, the program must be manageable. Numerous training requirements have been identified which fleet units must be able to manage, achieve, and maintain. These programs and associated

requirements can impact shipwide even if the requirements are directed at one division or functional area (e.g., LOE/OPPE requirements, electrical safety program). The coordination and scheduling problems which develop as the command attempts to fulfill these requirements may be due to the ineffective scheduling and management techniques.

The burden associated with identifying requirements, designating and tracking personnel required to achieve these requirements, and integrating these requirements among the numerous daily events occurring on a fleet unit is a monumental management task. These coordination and scheduling problems seem to be increasing with each new instruction containing a supporting training requirement. There is no known activity which consolidates these requirements. No one instruction contains all the requirements. The MASTER TRAINING PLAN (MTP)[Ref. 17] and TOTAL FORCE SHIP TRAINING AND READINESS MANUAL (TFSTAR) [Ref. 18], consolidates each TYCOM's requirements, but these instructions do not consolidate the requirements of other commands (e.g., Naval Safety Center, Environmental Medical Prevention Unit). The responsibility to identify and incorporate requirements into their training programs rests with individual fleet units.

The SORM states "Unit training is the responsibility of the command." which is understandable. It further states "he/she (unit commander) does have control over training

accomplished in the unit." [Ref. 4:p. 8-1] The controls that are available to the commanding officer, still require extensive manpower to properly manage the programs. Command personnel are manually scheduling, monitoring, updating, preparing reports and reviewing progress. These functions can be improved to release personnel from the administrative burden which seems to be detrimental in their overseeing of actual training conducted. Establishing improved methods of scheduling, tracking, and monitoring of training programs, should reduce the shipboard training programs' deficiencies addressed by inspecting activities. Automation of these areas should increase the effectiveness of shipboard training programs while reducing the overall administrative effort required to improve these programs. An indirect result of automating these areas, is expected to be an increase in unit readiness as more personnel are being effectively trained. The SNAP system is a fleet wide program designed to support functions which have commonality among both fleets. The utilization of SNAP should provide standardization of training programs around a management information system capable of responding in a timely manner to the information requirements of fleet personnel as they properly manage their programs. Fleet personnel provided with more efficient and effective methods and tools can be expected to better manage their programs.

The impact of unit training on unit (operational) readiness has been addressed in every major instruction issued by the CNO and his subordinate commanders. The importance of ensuring the accomplishment of training objectives is directly related to better preparedness of fleet units in accomplishing their wartime functions. These objectives can only be accomplished if the requirements or the methods presently utilized to administer training programs are changed or improved.

VI. ADM SUBSYSTEM TRAINING ADMINISTRATION FUNCTIONS AND ENHANCEMENTS

A. OBJECTIVES OF TRAINING ADMINISTRATION FUNCTIONS

In 1985, the Secretary of the Navy (SECNAV) commissioned a Blue Ribbon Panel, to study the effects of administrative workloads and collateral duties on Navy and Marine aviation squadrons' training and morale. This panel's study concluded a need to reduce the administrative burden placed on aviation squadrons.

The Secretary of the Navy in November 1985, initiated the Administrative Workload Reduction Program which directed that "immediate steps be taken by all aviation units to reverse the ratio of time spent on non-mission related administrative duties to time spent on operational planning, flying, and training. Similar actions will be taken throughout the department" (DON). [Ref. 19] The Secretary decreed "a 50% reduction in all administrative related reports and duties imposed by SECNAV directives The test for retaining any directive will be its tangible and important correlation to real combat readiness." [Ref. 19] The Secretary further expected the Chief of Naval Operations (CNO) and the Commandant of the Marine Corps to reduce their reporting requirements. The SNAP II ADM training administration functions will support the policy.

SNAP II ADM proposed training administration functions (Figure 6-1), are intended to support fleet units in meeting their administrative requirements. These functions, at the same time, eliminate the time consuming aspect associated with manual maintenance of schedules and records. This allows fleet personnel the opportunity to devote greater attention to those areas directly affecting combat readiness. These functions, therefore, are not only a means to make training administration more efficient, but also contribute indirectly toward improving operational readiness. Today's complex and sophisticated weapon platforms and support systems require dedicated maintenance from extensively trained personnel to achieve the highest degree of readiness. In this regard, the proposed ADM training enhancements are directed toward improving fleet readiness both operationally and administratively.

1. Primary Objectives

The rationale applied to proposing these functions are based on the following key points.

- Primarily, develop functions supporting Secretary of the Navy and the Chief of Naval Operations' fleet wide instructions and directives.
- Incorporate, where commonalties exist, functions supportive of both Commanders in Chiefs, Atlantic and Pacific Fleets, and Commanders, Surface Force, Atlantic and Pacific instructions and directives.
- Provide functions which support the planning, execution, monitoring and documenting required for shipboard training.

- Provide an interactive capability for administrative support in planning, recording, and documenting shipboard training requirements.
 - Provide querying capability of subsystem data bases in response to command inquiries.
-

* SUPPORTING DEVELOPMENT AND MAINTENANCE OF LONG RANGE TRAINING PLAN (to include)

- data base of required examinations, inspections, certifications, and assist visits
- data base of all TYCOM required exercises
- data base of off ship schools and NEC requirements
- data base of required lectures and seminars

* SUPPORTING DEVELOPMENT AND MAINTENANCE OF SHORT RANGE TRAINING PLANS (to include)

- generating, updating, and retrieving the
 - quarterly training plans
 - monthly training plans
 - weekly training plans

* MAINTAINING TRAINING ACCOMPLISHED RECORDS

* UPGRADING PERSONNEL QUALIFICATION STANDARDS PROGRAM

* MAINTAINING PERSONNEL ADVANCEMENT REQUIREMENTS SHEETS (PARS)

* SCHEDULING GENERAL MILITARY TRAINING

* UPGRADING DIVISION OFFICER NOTEBOOK

Figure 6-1: Proposed Training Administration Functions

2. Secondary Objectives

A fleet unit's mission area readiness is frequently evaluated by numerous afloat and shore commands. These commands evaluate the unit's mission capabilities by how well the unit performs operationally and administratively. Each evaluating activity operates under a particular set of guidelines and requirements. Furthermore, every fleet unit is expected to excel in these requirements, both operationally and administratively. Each fleet unit, as a result, could be maintaining different sets of administrative records for each inspecting activity. The ADM training administration functions are directed secondarily to provide fleet unit support in meeting the administrative requirements of inspecting commands. Therefore, the proposed ADM functions will support the following concerns:

- Establishment of a common baseline from which any fleet unit could be evaluated in comparison to established administrative standards.
- Provide a mechanism for fleet units to respond to administrative reporting requirements.

3. Benefits

The incorporation of these functions into the SNAP ADM subsystem will provide positive benefits to fleet units and senior commands. In particular, the administration of training programs will be uniform throughout the command, thus ensuring a standard methodology for implementing, scheduling, executing and monitoring.

Inspecting and evaluating activities are provided a common focal point for evaluation and comparison. This provides an opportunity for senior commands, to both operationally and administratively evaluate a unit's mission readiness along a common baseline.

These functions should increase fleet readiness by improving the command's productivity in two ways. First, the amount of time required to maintain a program's requirements should be shortened, or it allows more requirements to be completed in the same amount of time, thus improving personnel efficiency. Second, personnel are able to concentrate their efforts more on the operational aspects and less on administrative requirements, thus improving the effectiveness of command personnel. This shift of personnel efforts toward the operational requirements should be the most significant factor in improved productivity and toward contributing to increased fleet readiness.

It is anticipated that by 1991, a full transition to SNAP will have occurred in the fleet, if present budgetary support continues. As this transition occurs, shore activities may well be taking greater advantage of the benefits that automation provides by requiring various reoccurring reports to be submitted via automation. Commands are required to manually generate reports for radio transmission to shore activities in an ADP format e.g.,

UNITREP, NEURS, and training reports. Many of these reports can and should be automated to reduce the cumulative manhours required in composing, typing, and proofreading these reports. The automation of reports directed to and from shore activities should reduce labor costs and improve data accuracy both ashore and afloat.

B. EXISTING METHODS AND PROCEDURES

The fleet units which have not received SNAP II (referred as NON-SNAP II units) are still conducting their daily administrative requirements using manual means with the possibility of limited microcomputer support. The degree of automation for SNAP II units is dependent upon the command's leadership and willingness to integrate their daily administrative requirements between manual and automated methods.¹⁰ Particularly in the training administration area, the present system provides limited automated support in maintaining all required training documentation.

1. Training Administration Functions

The proposed training administration functions will center around supporting the requirements outlined in the following instructions:

¹⁰ For further detailed discussions on the fleet's implementation of SNAP II refer to C. E. Wheeler, P. J. Mallon, and H. L. Shotwell. "Snap II: A Post Implementation Review of User Concerns on Selected Ships" (Master's Thesis, Naval Postgraduate School, March 1986).

- OPNAVINST 3120.32C Subj: Standard Organization and Regulations Manual of the United States Navy
- OPNAVINST 3541.1C Subj: Shipboard Damage Control Readiness
- OPNAVINST 3540.4D Subj: Propulsion Examining Board For Conventionally Powered Ships
- OPNAVINST 3500.4D Subj: Personnel Qualifications Standards (PQS) Program
- OPNAVINST 1500.22C Subj: General Military Training

2. Implementation

These areas alone, require a great deal of manpower and constant command attention to be effectively managed. The process involves a great deal of manual processing and reproduction for information to be properly disseminated throughout the command.

Training Plans are constructed based on historical records of the ship's requirements and those currently promulgated by higher authority. Based on this fundamental information, the ship training officer constructs a rough quarterly training plan meeting the ship's training requirements. Concurrently, departments heads construct their training plans for meeting their departmental requirements. Presenting their plans to the Planning Board For Training (PBFT), the ship's training officer and department heads attempt to incorporate these requirements into a cohesive command training plan. The plan is reviewed and potentially conflicting events are prioritized to ensure

training fully supports upcoming operational and administrative evolutions.

Figure 6-2 is intended to provide the reader with an overview of the present SNAP II ADM subsystem module's contribution towards automating this process. The present system, as configured, provides limited support for these proposed enhancements within the areas of personnel qualification standards (PQS) and off-ship schools. These areas will require upgrading to baseline requirements established in applicable instructions.

C. SUMMARY OF PROPOSED ADM SUBSYSTEM ENHANCEMENTS

The proposed enhancements are based on developing new applications and expanding present SNAP II capabilities. Particularly applications dealing with access, input/output routines, menus, queries, and data base maintenance functions (additions, deletions, modifications) should evolve from the present system. Significant cost savings can be expected through re-use of present modules and applications.

1. Developing Effective and Efficient Enhancements

Administrative training requirements are initiated by the Chief of Naval Operations and are amplified by subordinate commanders. Each administrative or operational program established by higher authority usually has associated training requirements supporting the program. Fleet units are expected to incorporate these requirements

Department/Division

Division Officer Notebook
PQS History Report by Watch Station
PQS In-Progress Report by Watch Station
PQS Progress Report by Individual
Personnel Training History Report

Personnel Office

Personnel Training Report
PQS Ship's Summary Report

Schools

Schools Projected Loss/Gain Report
Course Convening Report
Schools Status Report
Course Requal/Refresh Required Report
PQS History Report by Watch Station
PQS In-Progress Report by Watch Station
PQS Progress Report by Individual
PQS Ship's Summary Report
PQS Requal/Refresh Required Report
Personnel with NECs Report

Figure 6-2: SNAP II Administrative Subsystem Reports Supporting Training Administration. ver 5.0

into their command training program. Each proposed enhancement is designed to provide flexibility in meeting changing requirements.

The authors, realizing the complexity associated with this subject area's automation, have purposely restricted all enhancements to Chief of Naval Operations' directives and instructions. A review was conducted of CNO subordinate commanders' directives, and in cases where commonality existed in both operational fleets, these

requirements were identified and have been included in the proposed enhancements.

Instructions imposing training requirements which are under the cognizance of a SNAP II functional sponsor other than the ADM co-sponsors were not reviewed. This action was necessary to reduce the scope of this report.

The initial enhancements concentrate on meeting the requirements specified in the SORM (Chapter 8). Further revisions will be required to fully incorporate fleet and type commander requirements into the system.

2. Initial Enhancements

The initial SNAP ADM subsystem enhancements concentrate on supporting the functions contained in Figure 6-1.

a. Applications

(1) Calendar Generator. A calendar generator application for the user to properly plan, monitor, conduct, and follow up on requirements (events) contained in the designated data bases supporting the long range training planning.¹¹ Complementing these data bases will be one additional data base per work center, (called the ship's unique data base), which the user will be able to enter unique shipboard events. These data bases should allow the user to enter both unique and recurring events, including events without regular dates, which commonly occur when

¹¹ Databases are discussed in Section 2.b

scheduling shipboard events, e.g., the third Thursday of every month.

The calendar creator application will permit the user to designate one or more data bases from which the application accesses events for printing or displaying in a weekly, monthly, quarterly schedule. Additional features which the application should provide are:

- Print designated data base events apart from the calendar
- User designates start and end dates for schedule output
- Use of standard or wide paper
- Allow for dates containing overflow events to be printed on additional page
- Provide for data base updates of completed, cancelled or rescheduled events.
- Provide for overlaying departmental, divisional, or work center calendars to create the next organizational layer calendar, e.g., combine all engineering department work center calendars to create the engineering department calendar.

(2) Training Records. The maintenance of training records will be accomplished from data generated from scheduled training and by entries made by designated personnel. The application will permit designated user(s) to indicate the training requirement being conducted from the calendar display or by individual entry. Once the requirement has been identified, the application will determine, from the applicable data bases, the training group(s) or individuals required to participate. The application will then query the user to determine the need

to add additional personnel to the list other than those contained in the data base(s). The system will output, on request, a muster list of participants by training group(s), work center, division, or department. Upon completing an event, a designated individual will re-display the muster list being held in a file, and indicate each person's attendance. The application will provide one key entry to indicate various attendance options, e.g., attended, sick call, leave, school, etc. When the attendance status has been entered and reviewed, those personnel's training records will be updated to reflect their attendance or reason absent.

The application will retain the muster sheets until purged by the system coordinator. The application will permit designated users to query the system to determine personnel training attendance status. The information generated under this application is expected to support the division officer notebook functions and document training accomplished to higher authority.

(3) Personnel Qualifications Standards (PQS).

The present system applications pertaining to PQS shall be upgraded to fulfill the requirements contained in OPNAVINST 3500.34C [Ref. 20] which refers to NAVEDTRA 43100-1C [Ref. 5]. This upgrade will completely automate the PQS management functions.

(4) Division Officer Notebook. The Division Officer Notebook application is presently under assessment by Software Configuration Control Committee (SCCC). NAVMASSO has been tasked to provide a recommended methodology for D.O. Notebook to be utilized in SNAP.

The data element requirements for the D.O. Notebook is promulgated by OPNAVINST 3120.32B, and as such, the SNAP system version must meet, at a minimum, these requirements. If the SNAP system can not support these requirements then a requirements change should be requested from the cognizant OPNAV office.

b. Data bases

The data base files for the ADM training administration function are identified following each function requiring data base file support. Detailed data base descriptions will be contained in Chapters VII and VIII.

(1) Long Range Training Plan. The long range training plan with the exception of the annual employment schedule is supported by data bases. The annual employment schedule is a confidential document, and therefore, can not be supported until SNAP is TEMPEST certified.

The following new data bases will be required:

- Ship Examination/Inspections/Certifications File (SEICF). The SEICF all required ship examinations, inspections, and certifications requirements.

- Ship Assist Visit File (SAF). The SAF will contain required and optional assist visits provided to afloat commands.
- Ship Exercise File (SEXF). The SEXF will contain exercises required by ship type.
- Ship Lecture File (SLF). The SLF will contain requirements for lectures and seminars appropriate to each training group. This file will also contain the requirements listed under the General Military Training Program.
- Ship Unique Requirement File (SURF). The SURF will contain requirements, events, or miscellaneous information which is unique to an individual command.

The School Validation File (SCVF) as currently configured combined with present applications will require minor modifications.

(2) Short Range Training Plan. The short range training plan, with the exception of the quarterly employment schedule, is supported by using the calendar generator application and the data bases created for the long range training plan. The quarterly employment schedule, also a confidential document, will not be supported by SNAP.

(3) Personnel Advancement Requirements (PARS) Sheet. Each enlisted individual is required to demonstrate his proficiency in various rate related areas prior to each rate advancement examination. This proficiency is indicated on a Navy wide standard rating PARS sheet. This sheet, usually maintained by the divisional leading petty officer, contains performance line items which are required to be completed and dated. A PARS sheet has been promulgated for

completed and dated. A PARS sheet has been promulgated for each shipboard rating.

The following data base will be required to the support the PARS sheets.

- Personnel Advancement Requirements Sheet File (PARS). The PARS will contain rating performance and advancement requirements. This file would contain only those PARS applicable to the command.

This function provides support toward automating all D.O. notebook areas.

3. Future Enhancements

Future enhancements should expand upon the initial enhancements. As the initial enhancements support CNO instructions, any further enhancements should continue to support this effort and incorporate Fleet and Type commander requirements. Those instructions identified in Chapter II are considered an excellent source reference for determining additional enhancements. Each of those identified instructions contain requirements which, if automated, would continue to reduce the fleet's administrative burden. Automation of these requirements will require a concerted effort by all activities to develop more commonalities in the ways in which training is conducted and monitored among fleets. Without this commonality, the potential cost savings will not be realized in either subsystem development or fleet utilization. Areas where future enhancements could be concentrated are: a) Source Data System Afloat (SDSA),

Reporting Requirements, and d) Engineering Maintenance and Casualty Control Training.

a. Source Data System Afloat (SDSA)

As the SDSA subsystem is incorporated into SNAP II, it will provide additional on-line interactive support in personnel administration. Required personnel data utilized by the ADM subsystem is expected to be supplied from the SDSA subsystem, using twenty-six common data elements. SDSA supplied data from personnel gain/loss transactions and personnel transaction reports should be automatically incorporated into applicable data bases.

Integration of these two subsystems will further reduce the user's involvement in establishing personnel records in the ADM subsystem. By using these systems interactively, the user no longer is required to input/delete data when establishing/deleting personnel records, as personnel report or transfer from the command. This capability provides a common information baseline for the automated construction of the division officer notebook. This same concept applies to data bases listing recent school completions and NECs held by individuals.

b. Catalog of Navy Training Courses (CANTRAC)

The Chief of Naval Education and Training is responsible for providing the CANTRAC. The CANTRAC reflects the effort of consolidating thirteen previously published

catalogs. "The function of the CANTRAC is to provide a consolidated centrally produced and computerized catalog presenting courses in standardized form." [Ref. 21] This catalog lists all formal Navy training courses and is produced and distributed quarterly on microfiche. This listing is also customized per customer data specifications and distributed on tape format to various shore commands e.g., CNO OP-135E, NMPC-470, COMTRAPAC, and NAVDAC Norfolk, Virginia.¹²

The Fleet Commanders and Type commanders have promulgated instructions on identifying specific schools for which fleet units must have qualified graduates onboard.¹³ These instructions identify the schools required by ship type, applicable mission area(s), and required graduates.

The present school data base file initialization method requires contractor personnel to manually identify the applicable schools from the catalog and then manually modify the basic information to be incorporated into the Schools Validation File (SCVF).

The school verification file will remain useful, as long as the present contracted support personnel are retained supporting the NAVMASSO organization. There exists

¹² Per conversation and correspondence received from Naval Education and Training Program Management Support Activity (NETPMSA) Code -07, Ms Joann Rice on 11 July 1986.

¹³ Requirements are specified in CNSPINST C3501.6D (TFSTAR) and CNSLINST C3500.2D (MTP).

potential savings in manpower and distribution costs for shore based activities and a reduction of the fleet administrative burden if a fleet tailored CANTRAC is supplied to ships.

A fleet tailored CANTRAC could be developed from those schools required by each Type commanders from the CANTRAC data base. It is acknowledged, some mutual modifications to files will be required by both NETPMSA and NAVMASSO. The major modification is to ensure all data element fields contain the proper information as called for by the data element descriptions. Some data fields in the NETPMSA data base are not consistent with data description. All required information to construct a fleet tailored CANTRAC is already contained within the NETPSMA data bases. Fleet personnel provided a computerized CANTRAC, will be able to search and retrieve the CANTRAC file data on course number, course title, key words in a title, or a range of class convening dates.

A fleet tailored CANTRAC can be further improved by modifying the CANTRAC to include the Plain Language Address (PLA) of each course's quota control activity. The addition of the PLA should reduce the effort to generate school quota message requests. This enhancement will contribute additional manhour savings over present manual, as well as proposed automated, methods.

The information required to initialize data bases and provide quarterly updates directly from NETPMSA is possible, provided all activities strive for standardization and quality control of the information. [Ref. 22]

c. Training Reporting Requirements

The standardization of training conducted and training reported by fleet units has been achieved through the promulgation of a joint CNSL/CNSP instruction. [Ref. 23]

The Ship Exercise File in addition to meeting the requirements outlined in the SORM, also provides the foundation for fleet units to report training readiness to their respective TYCOM¹⁴ and to OPNAV in the UNITREP¹⁵. Minor modifications in data bases and applications supporting schools and exercises in particular, will permit the generation of data required for inclusion in the report. This enhancement will definitely reduce the manpower requirements expended by personnel to generate these reoccurring ADP formatted reports.

d. Engineering Maintenance and Casualty Control Training

These two areas¹⁶ are considered manpower intensive to properly manage. The programs outlined in these

¹⁴ Reporting requirements contained in CNSPINST C3501.6D (TFSTAR) and CNSLINST C3500.2D (MTP)

¹⁵ Reporting requirements contained in OPNAVINST C3501.66B Subj: Unit Status and Identify Report - UNITREP

¹⁶ References are: CNSPINST 3540.12C and CNSLINST 3540.5

instructions can have a far reaching effect on the fleet unit if improperly managed. Engineering department personnel are responsible for managing programs, which directly impact the unit's operational readiness, e.g., damage control equipment maintenance, value maintenance, electrical safety tag out procedures, electrical tools safety program, fuel and lube oil management. The TYCOMs have seen these programs in various states of management, from unsatisfactory to well maintained. The SNAP system can potentially contribute to the improvement of these programs, which should reflect increased fleet operational and administrative readiness, while at the same time reducing the fleet's administrative burden.

D. SUMMARY OF IMPACTS

As SNAP II capabilities expand, the methods that fleet units utilize to provide information will also change. The automation of currently manual functions will require both fleet and shore activities to re-evaluate their information needs. The evaluation of fleet units is also expected to change, as inspecting activities will have more readily accessible information to determine a unit's readiness. The SNAP II enhancements will directly impact on how fleet units respond to administrative taskings and how shore activities as a result evaluate fleet units.

1. Organizational Impact

The expected result is an overall improvement in productivity. Personnel using these enhancements can be

more effective and efficient in their job performance. As administrative tasks are more rapidly completed in comparison to manual methods, personnel should be more available to concentrate on other shipboard duties. No anticipated unit manning reduction is expected as a result of these improvements, only better trained personnel performing their assigned responsibilities.

2. Operational Impact

As fleet unit utilization of SNAP II increases, overall unit readiness should increase. This increased readiness is directly reflective of the manpower reduction achieved in meeting administrative requirements and redirected toward improving operational readiness. The fleet's increased efficiencies should extend to shore activities, as more accurate and timely information is provided from the fleet.

More information will be generated, examined and retained by fleet units in a computerized format. As information becomes more available on SNAP, there should be a corresponding reduction in the number of meetings and telephone call interruptions required for collecting, examining, and exchanging of information. The associated savings and benefits to be realized are: reduced labor costs in generating the required information; easier accessibility to information; and reduced reproduction costs.

No further modifications are required to the SNAP II operating procedures during increased conditions of readiness. The beneficial impact grows as the readiness condition increases because information is more readily available.

As fleet units further automate their daily administrative activities, the quantity of information which could potentially be transmitted to and from shore activities increases. Until telecommunications capabilities are improved, activities will have to continue to rely on the United States Postal Service and radio communications for sending data. When the capability is implemented, a desirable feature would be for data bases to be automatically updated from shore activities. The frequency of data updates would be as often as necessary to provide fleet and shore activities reliable and accurate information.

3. User Development Impacts

Training administration complexity has been documented throughout this thesis. As training administration requirements change, so too must the automated applications and the data bases that the applications change. Put another way, the proposed enhancements outlined in this thesis cannot be regarded as "chiseled in stone". Fleet personnel must be solicited for

information which will aid in improving and enhancing the initial and revisions to data bases and applications.

It is expected that the initial data bases will be loaded by the central design activity (CDA). Except for periodic restructuring of data bases by the CDA, data base will be maintained by fleet personnel.

It is essential that during initial implementation, fleet personnel are properly trained to use the system. Training tools (i.e., manuals and desktop guides) must be made available by the CDA and must be well structured and clearly written. Documentation must show actual screens and procedures to move from application to application. The user should be able to follow the directions and procedures within each application. On-line help screens should clearly present information and refer users to the actual reference manual pages for further explanation, if needed. This feature is intended to ensure supporting documentation actually reflects the application installed. All manuals and desktop guides must be updated to reflect the latest system version. This documentation must be available and usable to the user after the implementation team have left the command.

The implementation of these enhancements in the fleet is intended to be done in parallel with the existing manual system. The user should understand the system and it's capabilities before plunging into total automation. A

successful implementation will be dependent upon how well the implementation team trains and explains the new applications and data bases to the user, and how well the user understands the system.

4. Assumptions and Constraints

The basic assumptions and constraints contained in the original integrated functional description written for SNAP II continue for these enhancements. The enhancements also contain additional assumptions and constraints which affect the administrative workload of fleet personnel.

a. Assumptions

The prime assumption associated with these enhancements is the desire by all activities both afloat and ashore to reduce the fleet administrative burden. This requires fleet units to advise shore commands of their specific limitations and suggest methods for improving productivity and readiness. Shore activities, on the other hand, must solicit from fleet units, their impression of proposed procedures or information requirements. Jointly, the groups should be able to apply present technology to reducing the administrative burden.

SNAP II operating environment and personnel requirements are not expected to change. The same procedures utilized for daily operation, backups, updating, and trouble shooting will be maintained.

The procedures established for requesting modified or new applications will continue as outlined in existing instructions.¹⁷

b. Constraints

The impact of budget reductions in the Department of Defense will require management to spend every dollar wisely. Personnel manning levels, equipment procurements and services support contracts are expected to be reduced in order to remain within budgetary limitations. Therefore, management will have to ensure the proper tools are provided to improve personnel productivity and increase readiness.

The operating system and applications must be user friendly, so the primary non-ADP user "fleet personnel" will not become a system non-user.

Future computerization of training administrative procedures must be achieved if the overall potential of the system benefits are to be attained. Whether directly or indirectly supporting the fleet unit, the development effort should concentrate on increasing personnel productivity, which in turns, improves mission readiness.

¹⁷ Directions are contained in CNSLINST 5233.1 and CNSPINST 5230.2

VII. DETAILED CHARACTERISTICS

Section 3 of the IFD provides detailed characteristics of SNAP-II in terms of specific performance requirements, system functions, inputs and outputs, data characteristics, and failure contingencies. The purpose of this chapter is to provide an explanation of the proposed initial functions summarized in Chapter VI. The proposed initial functions to SNAP-II involve the following :

- Long Range Training Plan.
- Short Range Training Plan.
- Individual Training Accomplishment Records.
- PQS Program Modification.
- Personnel Advancement Requirements Sheets (PARS).
- Division Officer Notebook modifications.

The authors do not intend to modify any performance requirements specified in the IFD, although implementation of these functions may impact on the system's timing performance because of merging and sorting information contained in the various data bases.

It should be noted that the current version of the IFD was published in 1981 and, indeed, does not reflect functional updates since Release 1.0. An adequate explanation exists in the form of narrative, screen depictions, and report formats, as part of the Release 5.0

ADM Subsystem Specification to allow readers further study of existing ADM applications [Ref. 7].

A. ADM FUNCTIONAL AREA SYSTEMS FUNCTIONS (INITIAL FUNCTIONS)

An application such as the Calendar Generator is imperative if any serious consideration is to be given to the issue of significantly reducing the existing administrative burden to shipboard personnel. Maintenance of long range and short range training plans, in conjunction with documentation of training accomplishment is extremely tedious and time consuming. It cannot escape one's attention that failure of some commands to maintain an effective training program, referenced in Chapter V, may have some correlation to the sheer drudgery of the manual procedures.

1. Long Range Training Plan

This function utilizes the following data base files to automate the requirements set forth in the SORM for establishment and maintenance of the command Long Range Training Plan.¹⁸

- Ship Examination/Inspection/Certification File (SEICF).
- Ship Assist Visit File (SAF).
- Ship Exercise File (SEXF).
- Ship Lecture File (SLF).
- Ship Unique Requirement File (SURF).
- School Validation File (SCVF).

¹⁸ A more detailed explanation of these files can be found in Chapter VIII.

The function should allow for the following:

- Provide the ability to create records from user selected files.
- Provide the ability to delete or modify selected file records.
- Provide the ability to review/print selected data bases (combined, or singly) within parameters set by the user.
- Provide the ability to query the data base files.

2. Short Range Training Plan

This function involves the use of the Calendar Generator application, to provide the user a means to update the data base files listed in paragraph 1, to support creation of a calendar formatted Short Range Training Plan. The Short Range Training Plan function will allow the user to select either a weekly, monthly, or quarterly calendar format to display user scheduled training/events (record names or codes associated with the data base files listed in paragraph 1.) The function should allow for the following:

- User view defined by access. What the user will see displayed on the calendar formatted Short Range Training Plan will depend on his access. For example, the Engineering Department Head will only see events that are applicable to his department.
- Provide the ability to add/delete/modify elements in user accessible fields to applicable data base files.
- Provide the ability to review/print selected data base files (combined or single files) within the parameters set by the user.
- Generate the Training Plan (quarterly, monthly, or weekly.)

- Provide the ability to review/print the Training Plan using either an individual or combined data base file, by command, department, division, workcenter or a combination of these.
 - Provide the ability to create/modify/review/print muster lists of those personnel required to attend/participate in an event. This will include adding/deleting personnel from the muster list associated with the group to participate in the event, as well as indicating the status of those personnel on the muster list with respect to the event; i.e., whether present or absent.
 - Provide the ability to mark an event as completed, incomplete, or rescheduled. This should include an update of the associated data base file in addition to an indication on the calendar display reflecting completion, incompleteness, or rescheduling actions.
 - Provide the ability to update muster lists calendar formats.
 - Provide the ability to automatically update individual training records from the muster list display.
 - Provide the ability to track individuals who have not completed specified events.
 - Provide the ability to display/print a list of those personnel who have attended a specified event.
- Provide the ability to query data base files.

3. Individual Training Accomplishment Records

These records will reflect individual documentation of completed events on the Short Range Training Plan for those crewmembers listed as present on the event's associated muster list.¹⁹ The function will allow for the following:

¹⁹ A more detailed explanation of the content of the Individual Training Accomplishment Records is presented in Chapter VIII.

- Provide the ability to display/print training records by individual, division, or department. The ability to list the training records for the above groups keyed by lecture or date.
- Provide the ability to display/print the training records as part of the Division Officer's Notebook.
- Provide the ability to add/delete/modify individual training records. Deletion should include the option to automatically provide the Personnel Office with a copy of the individual's training record in the event of duty station transfer. This would allow Personnel Office to include the training record as part of a turnover file for the individual's next command.
- Provide the ability to query files.

4. PQS

Existing function capabilities should be augmented with the following:

- Provide the ability to list those personnel having been granted interim qualifications by individual, work center, division, department, command, watch station.
- Provide the ability to list those personnel that are past due in PQS watch station qualification.
- Provide the ability to list by date those personnel coming due to assigned watch station qualification completion deadline dates.
- Provide the ability to generate the PQS Interim Qualification Letter (Appendix V), allow the Commanding Officer to approve the letter, and the ability to maintain each letter.
- Provide the ability to query files.

5. Personnel Advancement Requirements (PARS) Sheets

The application will provide for the automation of PARS (NAVPERS 1414/4, Appendix F) for each enlisted member of the command.²⁰ The function will allow the following:

²⁰ A more detailed explanation of the content of the PARS files can be found in Chapter VIII.

- Provide the ability to add/delete/modify personnel to/from PARS.
- Provide the ability to display/print individual PARS.
- Provide the ability to display/print by individual those PARS items that are incomplete.
- Provide the ability to display an individual's progress in PARS as part of the Division Officer's Notebook.
- Provide the ability to delete an individual's PARS. The option should also exist to provide the Personnel Office with a copy of the PARS in the event of duty station transfer.
- Provide the ability to query files.

6. Division Officer Notebook

In addition to the capabilities already installed, the function should also incorporate the following:

- Provide the ability to append individual training records and PARS to the Division Officer Notebook.
- Provide the ability to query files keyed on Division Officer Notebook data elements.

VIII. DESIGN DETAILS

The functions outlined in Chapter VII are supported through the utilization of CRT and tape inputs, CRT displays and printed outputs, which in turn are supported by system data bases and applications. The effectiveness and efficiencies associated with these functions in meeting the fleet's administrative training requirements are totally dependent on supporting data bases and applications meeting the requirements outlined in applicable instructions.

This chapter addresses data requirements necessary for inputs, outputs, and data bases. These requirements are addressed in general terms as fleet instructions are often revised and should be reviewed prior to the actual design and implementation. The descriptions which follow are based on instructions cited in references.

A. INPUTS

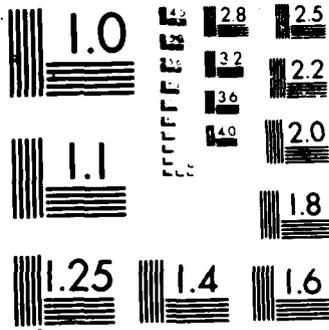
Data inputs can be received from a variety of sources, e.g., CRT input by the user, paper tape input containing electronically transmitted information received from the unit's communication control room, or magnetic tape received through the U.S. Postal Service. When telecommunications capabilities are incorporated into the SNAP system, this should become an additional input source.

It is accepted for certain data base files that the initial data inputs should be provided by the CDA. The files for which the CDA should initially load, will be identified as each file is described. Certain data elements contained in these files have been identified as being non-accessible to the user, to prevent inadvertent deletion or modification of data. These data elements have been identified as non-accessible to permit either the CDA or some other designated activity to update files without negatively impacting command's manpower or data integrity.

All shipboard personnel are potential users of the sub-system. Each user should be granted a level of sub-system access conforming to the extent which data manipulation and report generation is allowed. Parameters for data manipulation and error checking should be specified in each application.

The input/output of data within a function should be accomplished within normal routine processing and should not require the initiation of other functions. The data elements contain no security classification and therefore, this issue will not be addressed further. The system's responsiveness should be within the normal expected time frame established for ANA.

The expected volume and frequency of utilization is dependent on the application and expected users. An



indication of the typical interactions between users and applications follow.

1. Long Range Training Plan

The plan consist of data bases of administrative and operational requirements. As these data bases are initially loaded by the CDA by ship type, the user should be able to indicate which requirements are not applicable to the command, e.g., a particular equipment type is not installed, or a certain function is not performed by the command. These data bases otherwise, should be only accessed through applications. The Ship Unique Requirements File(s) (SURF) should be loaded and modifiable by designated command personnel, e.g., a unique file is assigned to each department onboard, then the department heads should be allowed to manipulate the data contained therein as often as the department head wishes within the limitation specified by the data base structure. These data bases replace the manually maintained requirements lists held by various individuals throughout the command, and therefore, provides one central location for users to determine applicable requirements.

2. Short Range Training Plans

The plans consist of quarterly, monthly, and weekly schedules generated by the calendar generator application. These plans are the key documents used for the planning, executing and monitoring of training requirements identified

in the long range training plan. It can be expected that these plans would be used by the Executive Officer, Department Heads, Division Officers, and Work Center Supervisors for the purposes specified above as well as for tracking other items of interest contained in the SURF. The frequency of usage will be dependent on each user's desire to maintain updated schedules. It is expected that certain users will be accessing the schedules twice per day and others on a weekly basis.

3. Training Accomplished Records

These records are generated from the calendar generator application when a user updates a muster list and requests that records be updated. It is anticipated that the majority of users utilizing this function will be Division Officers and Work Center Supervisors maintaining their division training records. The Executive Officer and Senior Watch Officer are expected to maintain officer training records using this function. The frequency of usage should be dependent on how often the user updates respective training records.

4. Personnel Qualification Standards (PQS)

This function has been updated to reflect the requirements as outlined in the NAVEDTRA 4300-1C [Ref. 5]. It is anticipated that the frequency of usage should increase as this function fully supports the command's PQS program. As a result, command personnel should no longer

be required to maintain both automated and manual PQS records. The number of users accessing PQS information may rise as more relative information is now available to the command for review. As querying capabilities are added to this function in the future, it should be expected that an increase in user interaction will occur.

5. Personnel Advancement Requirements Sheets (PARS)

This function automates a previously manual method of recording an individual's advancement progress by the Work Center Supervisor and Division Officer. The automation of the PARS in conjunction with other personnel data will permit these personnel to access all personnel information from one source, namely SNAP. The frequency of usage should be as often as a Division Officer Notebook is printed or as often as the Division Officer, Work Center Supervisor or the individual for whom the PARS is maintained, wants to update an individual's PARS.

6. General Military Training (GMT)

This requirement has been fulfilled by incorporating required GMT lectures in the Ship Lecture File (SLF). The frequency of usage, accessibility, and anticipated users are the same as outlined for the long range training plan.

7. Division Officer Notebook

This revised function has incorporated the required data elements previously maintained on the Division Officer Personnel Record Form (NAVPERS 1070/5 (REV. 12-86)). The

incorporation of a memo area equivalent to a page 13 service record entry, will permit Division Officers to document counseling, awards, outstanding performance and other noteworthy characteristics of individuals for latter reference in writing evaluations. This revised function should not increase significantly the frequency of usage, degree of accessibility, or anticipated users than that experienced on the present system.

B. OUTPUTS

The functions outlined in Chapter VII, have, in general terms, identified reports which should be beneficial to command personnel in meeting requirements outlined in applicable instructions. These reports should be made available to the user either on CRT display or as printed copy (8 1/2 x 11 and 11 x 14 size paper). Any further reference to reports will be understood to mean either CRT display or printed copy. These reports should contain in sufficient detail, that information specified as required by applicable instructions. This specific format requirement is to ensure that command personnel are provided with structured information which fulfills the instruction's requirements and is acceptable to inspecting activities. There is no requirement for the command to maintain pre-printed forms to produce these reports.

The reports generated should be accomplished within normal routine processing and should not require

prioritization over other functions. All reports required to support these functions are unclassified. The potential does exist although, in future enhancements for classified reports. Information contained within the Division Officer's Notebook function contains personal information and as with other ADM sub-system functions must be maintained and controlled in accordance with the Privacy Act requirements. Reports for which a considerable computation time is expected, should provide an opportunity for the user to log off the system. The user, upon logging back on the system, should receive an indication that a previously requested report is available for review or it has been printed as requested.

The expected volume and frequency of utilization is dependent on the application and expected users. An indication of the typical interaction between users and applications follow.

1. Long Range Training Plan

It is anticipated that the user will review the data bases. The user should be allowed to query the data bases and have a report or display containing the queried information. Users who are expected to access this information range from the Commanding Officer to the Work Center Supervisor. Some of these individuals will access all the data bases while others need access only one.

2. Short Range Training Plan

It is anticipated that schedules (quarterly, monthly, weekly), will be generated to provide support from the Executive Officer to the Work Center Supervisor. The users should construct these schedules as often as they deem necessary to properly monitor and update divisional, departmental or shipwide requirements. The frequency of usage is expected to be higher at the work center level than upper management, as work center personnel generate muster lists, indicate completed training requirements and update training records. The complexity of these schedules will be higher at the upper management level of the command than the work center level because command/departmental schedules should incorporate more requirements than those at the divisional level.

3. Training Accomplished Records

It is anticipated that the reports required from this section will deal with listing individual training accomplishment records specified within a certain time frame. Additionally, the user should be able to request a report, listing those personnel who have received a particular type of training or completed a certain requirement contained in any of the data bases. The user should have the option to append an individual's training record when printing the Division Officer Notebook Report.

4. Personnel Qualification Standards (PQS)

It is anticipated that no additional users should be accessing the reports presently contained within the ADM subsystem. The expected frequency of usage will increase slightly above present levels since the PQS function meets all program requirements. This increased utilization can be attributed to the users no longer manually maintaining information which was previously omitted from the function.

The interim qualification letter will be utilized by Division Officers via their respective Department Head, in recommending to the Commanding Officer, those personnel who should be interim qualified to stand certain command designated watch stations. The Commanding Officer will either approve or disapprove this recommendation. This letter will then be retained for future recall as necessary.

Additionally, a querying capability should also increase the usage level as particular watchstations and individuals are more closely tracked to prevent lapses in qualifications or qualified watchstanders.

5. Personnel Advancement Requirements Sheets (PARS)

It is anticipated that the user of reports from this function will include the individual whom the report concerns, his Work Center Supervisor, Division Officer, Department Head and Personnel Office personnel. The frequency of usage will increase from occasional monitoring and tracking of individual advancement requirements to very

close monitoring as the individuals approach their advancement exam. The degree of accessibility should increase above the normal monitoring of requirements as each individual approaches his rating advancement examination date.

Additionally, a query function should permit designated personnel to quantify and distinguish areas where advancement deficiencies exist among an individual rating or group of ratings. This capability should permit command personnel to identify and schedule training for personnel failing to achieve their advancement requirements.

6. General Military Training

There are no unique outputs for GMT lectures. All reports should have the same output usage and accessibility requirements as outlined for the long range training plan and short range training plans.

7. Division Officer Notebook

This revised function will continue to support the present users with an expected increase in accessibility as the notebook now contains all data elements required for the Division Officer's Personnel Record Form. This function should allow the Division Officer to append the training accomplished record and PARS sheet when the report is created.

A querying capability should be included to permit Division Officers to query particular information concerning divisional personnel.

C. DATA BASES

The data bases identified in Chapter VI should be structured to contain sufficient information for the user to determine and identify the requirements applicable to the command. These data bases are structured to fulfill the OPNAV long range training plan requirement and also provide the necessary data to manually generate the Training Readiness Report (TRNGREP).²¹ The TRNGREP is used to reflect the command's training status to the TYCOM. The information contained in the TRNGREP, directly supports the data requirements for the Type Commander Headquarters Automated Information System (THAIS). The THAIS system is implemented at COMNAVSURFLANT and is scheduled for implementation in the near future at COMNAVSURFPAC. [Refs. 24 and 25]

The information contained in these data bases should be controlled by the level of access granted to individuals. Some data items are not required by all individuals who access the data bases, and therefore should be provided limited access to those elements. The information contained in these data bases does not have to be retained any longer than the amount of time the information physically resides in the data base.

²¹ The TRNGREP has not been suggested for automation due to the security classification of the report. The data required for a TRNGREP is unclassified, although, once drafted in the required format for transmission it is considered confidential.

This section will address in general terms, the data elements required in each data base.

1. Ship Examinations/Inspections/Certifications File (SEICF)

This data base will contain all examinations, inspections, and certifications required of fleet units. This data base will interface with the calendar generator application for scheduling, executing and monitoring requirements and providing for status reports.

The anticipated number of records to be maintained in this database are expected to be between 98 - 125, which includes requirements addressed in References 26 and 27, and those requirements added by the command. This data base should be structured to contain at least the following data elements:

- Requirement Number: A unique number which identifies a particular requirement. The number should be able to identify requirements which are a subset of an overall requirement. It is supplied by the CDA and be non-accessible to the user.
- Requirement Name or Title: The requirement's long version name, as listed in the reference. It is supplied by the CDA and is non-accessible to the user.
- Requirement Code: A unique code which identifies the requirement's short version code name, as listed in the references. It is supplied by the CDA and is non-accessible to the user.
- Reference Documents: The source instruction(s) specifying the requirement. It is supplied by the CDA and is non-accessible to the user.
- Required Periodicity: A unique code which indicates the periodicity (in months) between an event's occurrence. This code will be used in calculating the next required occurrence. It is supplied by the CDA and is non-accessible to the user.

- Applicability: An indicator which is inputted by the user to signify if a requirement is applicable. Once the requirement is indicated as non-applicable, the system should not display this requirement unless a request is made to display requirements previously designated as non-applicable.
- Last Completion Date: A date indicating when the requirement was last completed. This date and the required periodicity code is used to compute when the next occurrence is due. This date is initially entered by the user and automatically updated by the calendar generator application upon requirement's completion.
- Reported: A number indicating the Training Readiness Report Sequence Number²² used to report the requirement completion in the TRNGREP. The number is entered by the user. It is anticipated that this element will be automatically updated when the TRNGREP is incorporated into the ADM subsystem.
- Next Scheduled Date: A date indicating when the user has scheduled the requirement. It is entered by the user through the calendar generator application. The application from any schedule should void this date upon a requirement completion. The date is automatically updated when the user reschedules a requirement from any of the calendars.
- Applicable Training Group: Indicates which training groups are required to participate in a requirement. This data element should indicate either single or multiple training groups or any combination of training groups established onboard. It is used in conjunction with the calendar generator application to construct a muster list of those individuals participating in the requirement. The training groups are supplied by the user when the data base is loaded, and modifiable by the user.
- Responsible Department: The department assigned the requirement. It is supplied by the user when the data base is loaded and is updatable as responsibilities are changed by command personnel.
- Responsible Individual: The individual assigned responsibility for the requirement's completion. It is supplied by the user when the data base is loaded, and is updatable by the user.

²² Refer to References 24 and 25 for a detailed description.

- Remarks: A section provided for the user to add any specific comments about the requirement.

2. Ship Assist Visit File (SAF)

This data base contains all recommended assist visits available to a fleet unit. This data base interfaces with the calendar generator application for scheduling, executing and monitoring assist visits, and for providing status reports. This data base should be identical in structured as SEICF.

The anticipated number of records to be maintained in this data base are expected to be between 50 - 75, which include assist visits addressed in References 26 and 27, and those assist visits added by the command personnel.

3. Ship Exercise File (SEXF)

This data base will contain all exercises required of fleet units. The data base will interface with the calendar generator application for exercise scheduling, executing and monitoring and providing exercises status reports.

A similar data base is maintained for each fleet unit at TYCOM headquarters. This data base should be used for the initial loading of the SEXF. The user should be able to validate the information contained in this file monthly against the TYCOM's UNIT TRAINING READINESS STATUS REPORT.²³

²³ For a detailed description of this report refer to References 23 and 24.

The anticipated number of records to be maintained in this data base is dependent on the ship type and associated mission areas. The number of records for a FFG class ship should be in the range of 250 to 500, dependent on how the data base is designed. Required exercises by ship type are addressed in References 17 and 18. This data base contains the same SEICF data elements with the following modifications:

- Exercise Code: A unique code number established by the TYCOM in the EXERCISE CRITERIA CATALOG [Ref. 24:Encl. 2], for all exercises required by the TYCOM. It is supplied by the CDA and is non-accessible by the user.
- Exercise Name: The exercise name as provided in the Exercise Criteria Catalog. It is supplied by the CDA and is non-accessible by the user.
- Periodicity: A code which indicates the number of months required for a fleet unit to complete a particular exercise before the current M-rating expires. It is supplied by the CDA and is non-accessible by the user.
- Last Completion Date: The date the exercise was last completed. This date and the required periodicity code are used to calculate when an exercise must be completed and to indicate when present M-rating will expire. It is initially entered by the user and is automatically updated by the calendar generator application upon each exercise completion.
- Score (additional data element): The grade assigned to the exercise as reported in the Training Readiness Report, e.g., none, 0955 representing 95.5. It is inputted by the user.
- Evaluation Method (additional data element): The method which an exercise is graded, i.e self-observed or observed. It is updated by the user.

4. Ship Lecture File (SLF)

This data base will contain all lectures required to be conducted by a fleet unit. The information contained in

this data base will be initially loaded by the CDA. The lectures which are to be loaded are those indicated for the GMT program and all theory and system topics supporting the commands PQS watchstations. The command should be able to add additional lectures in support of particular programs as necessary, e.g., medical lectures, small arms training.

A CG 47 - CG 65 class ship utilizes sixty four different PQS books covering 477 watchstations. There is an average of 7.75 theory and 13.65 system topics per PQS book, which projects a SLF size of 1370 records supporting just PQS. The potential does exist for the number of records to increase to 2,500 PQS records, due to the greater complexity associated with engineering and combat systems topics. This complexity, in some cases, will require more than one lecture to cover a given topic. The file size could reach between 3,500 and 4,500 records, after the command adds lecture and seminar topics from other areas.

This data base will interface with the calendar generator application for scheduling, executing and monitoring lectures and providing lecture status reports. This data base is structured identical to SEICF. Data elements are accessible, for lectures inputted by the user.

5. Ship Unique Requirement File (SURF)

This data base contains requirements, events, or miscellaneous information which the user will input based on review of directives. This data base is used by command personnel for those items which can not be classified into

one of the aforementioned user accessible files. Items which could conceivably be inputted are special interest items which the Commanding Officer, ISIC, or Group Commanders have expressed an interest in having reported. The data base could also be used to list various committees and council meetings, PBFT meetings, and award boards. It also could contain information required for tracking Preparations for Overseas Movement (POM) or constructing a Plan of Action and Milestones (POAM) for the Engineering Department. It is anticipated that a file will be needed for Executive Officer, Department Heads, Division Officers, and Work Center Supervisors. The data base should be structured in the same format as the SEICF. Assigning generic titles to the data elements will allow the user to input information within constraints established for each data element.

The anticipated number of records to be maintained in this data base is dependent on the number of files established for a command. Each file could contain from 50 - 200 records per file.

6. Personnel Advancement Requirements Sheet File (PARS)

This data base will contain a copy of the standard Personnel Advancement Requirements Sheet for each rating attached to a particular unit. This data base will interface with the Division Officer Notebook and reports generating individual and group advancement progress status.

The actual indication of a person's advancement progress should be maintained in each individual's MMF record.

A PARS sheet is usually six type written pages in length. The number of PARS to be maintained in this file is dependent on the number of ratings onboard the command.

7. Training Accomplished Record

This record contains the status of the training received by an individual. The information contained in a record can be maintained in each individual's MMF record or a data base file. The information required for this training accomplished record is supplied from the muster list which was generated as part of a scheduled event.

The actual construction of this data base should be dependent on the normalization applied in each data base structure. The data elements listed with the exception of the event code, are considered the minimum amount of information that should be available in each record. The data elements required for this record follow:

- Date: The date the individual participated in the scheduled event.
- Event Code: The code which corresponds to the event.
- Event Name: The scheduled event name.
- Instructor: The individual who conducted the event.
- Attendance Status: The individual's attendance status.

8. Schools Validation File (SCVF)

The data presently supplied in this file has been selectively chosen and modified from the information contained in the CANTRAC. This information does not

duplicate the information e.g., course name. It omits information e.g., course convening dates, contained in the CANTRAC, and as such, still requires an individual to refer to a CANTRAC for school information.

The SCVF presently contains 674 and 657 school records for PACFLT and LANTFLT commands, respectively. The system tracks any crewmember who has or is scheduled to graduate from one of these schools. Unless the command selectively tailors the file size to only those schools applicable to the command, many of these schools will never have an entry.

The TYCOM training manual lists by ship type, those schools for which commands must maintain graduates onboard. The SCVF does not provide an indication for schools required by the TYCOM. The "quota required by" data field in the present file structure, reflects the activity responsible for granting a school quota request, rather, the activity requiring the quota.²⁴ As a result, there is no means for a command to rapidly and efficiently determine the status of onboard graduates of TYCOM required schools. In order to provide this capability to a command, the following requirements should be met:

- Load the SCVF using each TYCOM required schools listing by ship type, resulting in a potential savings in file storage requirements. The amount of file storage saved is dependent on size of the schools listing per ship type.

²⁴ R. Shrives, interview held during visit to NAVMASSO, Norfolk, Virginia, Aug 3, 1987.

- Allow commands the capability to add schools not required by the TYCOM. There are unique school requirements and technical schooling provided by shipyards and private contractors which are not contained in the TYCOM training manual.
- Change the "quota required by" field to actually reflect TYCOM required schools and permit a command to indicate requirements for those schools the commands adds to the file.

9. Qualification Personnel File (QPF)

The present file structure does not contain all data elements required for a PQS Progress Record as outlined in Chapter II. The following data elements are required for SNAP PQS functions, to meet the administrative requirements outlined in Reference 5.

- Indoctrination Date: A date when the individual was indoctrinated in the command's PQS program. The date is entered by the user.
- Interim Qualified: A indicator which signifies an individual is interim qualified in the listed watch station.
- Completion Date: The actual date that the individual is required to complete the assigned watch station.

The interim qualification letter contained Reference 5, is not required to be utilized, but is provided as a management aid. The TYCOM although, has included this letter as a required part of a unit's PQS program and is subject to review during inspections. The letter and data contained therein, should be contained in the individual's MMF file. Normal users of the PQS function will require accessibility to the letter.

IX. COSTS

Although an estimate of the costs for the development of the initial functions and enhancements described in Chapters VII and VIII are beyond the scope of this paper, a brief description of the approval process follows.

Enhancements, such as those described in this paper, are initially brought to the attention of the applicable Functional Sponsor of the subsystem to be enhanced in the form of a change proposal. In the case of the ADM Subsystem, the Functional Sponsors are CINCLANTFLT and CINCPACFLT. The Functional Sponsors have the responsibility to present those proposed changes that they believe have merit to the Software Configuration Control Committee (SCCC) as committee meeting agenda items. The SCCC, which has the Commanding Officer NAVMASSO as its chairman, tasks NAVMASSO to further study those proposed changes of interest. NAVMASSO reports its findings in the form of a SNAP-II Change Proposal Impact Statement (Appendix X). Costs of development are described in terms of time; i.e., manweeks. The Impact Analysis Statement is brought before the SNAP II Software Configuration Control Committee who approve/disapprove change development if the change will have no impact on existing hardware. Changes that will have an impact on hardware must be brought before the Joint Configuration

Control Board (JCCB) for final disposition [Ref. 28]. The chairman of the JCCB is Space and Naval Warfare Systems Command (SPAWAR Code 10-K), the SNAP configuration manager. Funding for approved changes may come from the Function Sponsors, or other sources such as OPNAV, or SPAWAR depending on the interest generated in the change.

X. ENVIRONMENT

The changes proposed in this paper will require the following alterations to the environment specified in the IFD [Ref. 2:pp. 46-50].

- Locking of data will be at the field level vice the record level.
- A Data Base Management System is required for implementation of the proposed changes.
- Data sharing must be determined by the CDA during function development.

XI. CONCLUSIONS AND RECOMMENDATIONS

As the Navy's operational areas of concern expand further into the surface, sub-surface and air arenas, it is imperative that naval forces are sufficiently trained to respond. Operational and administrative commanders have promulgated a wealth of instructions which are intended to guide unit commanders in attaining the required expertise level in these areas. The operational and administrative requirements specified by these instructions, must be effectively and efficiently managed on a daily basis to achieve this expertise. These requirements pose a challenge to fleet and unit commanders, for they must balance the right requirements at the right time, in achieving an overall goal of operational readiness. Commanding Officers are provided the most advanced missiles, torpedoes, electronics, and tactical support aids to perform the command's mission, but they have not been provided the management aids to assist in ensuring their personnel are being properly trained to utilize these systems.

The requirements are clearly stated and full compliance by Commanding Officers is the expected norm. No excuses are accepted for overlooking requirements. No explanations are acceptable for not completing or complying with requirements, due to insufficient time or overriding

priorities. Commands that do achieve a high degree of readiness establish priorities among a vast number of requirements, but do so with an understanding that the possibility exists for certain requirements to be overtaken by events. No fully automated means for assisting fleet unit toward achieving these requirements exists.

Many issues which directly impact on how fleet units conduct training have been raised over the years, (fuel consumption, ammunition expenditures, reduced TAD/TDY funding), and most recently, personnel operational tempo. The methods and times allocated for training are always being revised to compensate for reductions in other areas, thus requiring senior personnel to better plan, schedule, execute and manage shipboard training programs.

The proposed enhancements and functions which have been identified provide the method and means for command personnel to achieve the requirements set forth in the instructions discussed. The overall objective is to provide Commanding Officers, the management tools necessary to properly administer training programs, leading to increased operational proficiency and readiness. Neither the Commanding Officer nor his senior personnel can efficiently train and observe personnel performance in a peace time scenario, if the administrative requirements are so burdensome, that they prevent the command from attaining their overall training goals.

In the case of automating training programs, no direct correlation can be provided which quantifies the benefits derived. What is provided, though, is a method aiding senior personnel to train the personnel who ultimately contribute to a command's operational readiness.

The costs of these enhancements can be quantified in terms of software and hardware. The monetary costs can be identified and calculated by the CDA. The expected benefits, though, cannot be as easily identified or calculated in monetary terms. Therefore, in deciding whether or not to implement these proposed enhancements, a fair and objective determination must be made of the relative worth of the cost and non-quantifiable benefits on increasing operational readiness.

The benefits which should be realized through these enhancements are:

- Uniform command training program which provides a standard methodology for implementing, scheduling, executing and monitoring training programs and requirements.
- Increased awareness of possible deficiencies in individual, divisional, departmental, and shipwide training.
- Increased manpower available to focus on operational requirements.
- Increased operational readiness as unit training increases.
- Uniformity among fleet units being evaluated as all commands will use a standardized system for achieving their administrative requirements.

- Standard system to support inspection requirements of higher echelon commands which will reduce the effort that shore activities expend in evaluating fleet units.
- Potential for improved data accuracy of information transmitted to shore activities which will become more significant as more information is electronically transmitted. Presently, commands generate MOVREPs, CASREPs, TRNGREPs, UNITREPs, ATRs and various other documents manually, which are electronically transmitted to shore base computer activities.
- Increased accuracy and capability to respond to higher echelon commands taskings with various automated generation of data and reports.
- Provide a baseline foundation for future requirements and provide for standardization of Navy administrative procedures.
- Support the "PAPERLESS NAVY" concept by converting and maintaining administrative training requirements in a computerized format.
- Reduction of the administrative burden imposed on fleet personnel by automating manual functions thus reducing the effort expended on maintaining administrative programs.

The manpower and time expenditures required for each administrative requirement may, when evaluated individually, seem small, but when taken collectively, they can become manpower intensive and overtask the limited available manpower.

The following recommendations are intended to capitalize on the benefits gained from automating the initial enhancements recommended in this thesis:

- Increase the overall system design to provide for the handling of special security requirements. The minimum level should be confidential, with the highest level being secret.

- Provide a function which facilitates requesting formal school course quotas from an automated CANTRAC.
- Provide an application which will automatically generate the TYCOM's Training Readiness Report.
- Provide a function which will assist in the monitoring the following weapons handling programs:
 - Small Arms Training and Qualification
 - Non-Nuclear Ordnance/Explosive Handling Qualification and Certification Programs.
- Provide a capability to support the tracking, monitoring, reclassification, and reporting under the Ammunition Transaction Reporting (ATR) system.
- Incorporate the TYCOM Ship Medical Training Requirements into the ADM sub-system.
- Provide a function to support Casualty Control Training requirements in Engineering and Combat System Departments.
- Provide an application to support the NAVAL SAFETY CENTER Accident Reporting requirements.
- Provide a function to support the Electrical Safety Program requirements.
- Provide an application which automatically generates and monitors those reports required by Casualty Reporting System (CASREP). The MDS sub-system as configured contains data which directly contributes toward automating this function.
- Provide an application which automatically generates and monitors those reports required for the Unit Report (UNITREP). Information presently contained in and proposed for the ADM sub-system combined with MDS sub-system data bases needs only to be supplemented with the addition of UNITREP reference codes to automate these reports.

The automation of functions performed in the fleet require those fleet personnel who are the experts in these areas to identify and conduct the research necessary to

properly identify and describe the procedures which should be performed to automate these functions.

The following areas have been identified as potential research areas where contributions from fleet personnel experience could be beneficial in expanding the scope of automation in the fleet.

- Research TYCOM instructions requirements to further identify requirements which could be incorporated into SNAP.
- Investigate the feasibility of maintaining and accessing the Catalog of Naval Training Courses (CANTRAC) on laser storage media.
- Investigate the feasibility of incorporating the following on laser storage media:
 - Command Inspection Guide
 - Training Readiness Evaluation Sheets
 - Propulsion Examining Board OPPE Examination Questions.
- Investigate the feasibility of installing a local area network consisting of various configurations of personal computers.
- Conduct a cost benefit analysis of the impact that further delays would have in implementing SNAP in the fleet. First, address the cost of shore activities maintaining the capability to monitor, correct, and update reports generated from both automated and non-automated commands under the present implementation strategy, realizing fiscal constraints could be imposed, as compared to a more rapid implementation policy. Secondly, address the impact on non-automated fleet units which are unable to take advantage of the capabilities SNAP has to offer in comparison to automated commands.
- SNAP is rapidly approaching its upper limit in hardware capacity in terms of memory, terminals, and disk storage²⁵. Investigate the technology available to enhance SNAP capabilities without increasing the system physical size or weight.

²⁵ Interview with Dave Haar, NAVMASSO (code 321), Norfolk, Virginia, 3 Aug 1987.

The U.S. Navy relies on personnel to perform its mission. The mission is supported by using the expertise possessed by these personnel in managing and operating the platforms and weapon systems provided. Therefore, it is imperative that we concentrate in identifying those areas where automation will permit personnel to perform to their maximum potential and increase the operational readiness of the fleet.

APPENDIX A: GLOSSARY OF TERMS

AAW	Anti-Air Warfare
ADM	Administrative Data Management (subsystem)
ADMIN	Administrative
ADP	Automated Data Processing
AOE	Auxiliary - Ammunition/Oiler
AOR	Auxiliary - Oiler/Replenishment
ASW	Anti-Submarine Warfare
CANTRAC	Catalog of Navy Training Courses
CASREP	Casualty Report
CDA	Central Design Activity
CG	Cruiser
CH	Change
CINCLANTFLT	Commander in Chief, U.S. Atlantic Fleet
CINCLANTFLTPEB	Commander in Chief, U.S. Atlantic Fleet Propulsion Examining Board
CINCPACFLT	Commander in Chief, U.S. Pacific Fleet
CINCPACFLTPEB	Commander in Chief, U.S. Pacific Fleet Propulsion Examining Board
CMD	Command
CNO	Chief of Naval Operations
CNSL	Commander, Naval Surface Force, U.S. Atlantic Fleet
CNSP	Commander, Naval Surface Force, U.S. Pacific Fleet

COMNAVSURFLANT	Commander, Naval Surface Force, U.S. Atlantic Fleet
COMNAVSURFPAC	Commander, Naval Surface Force, U.S. Pacific Fleet
COMSEC	Communications Security
COMTRALANT	Commander, Training Command Atlantic
COMTRAPAC	Commander, Training Command Pacific
CRT	Cathode Ray Tube
DD	Destroyer
DDG	Guided Missile Destroyer
DIV	Division
DLG	Guided Missile Frigate (old designation)
EAOS	Expiration of Active Obligated Service
EDVR	Enlisted Distribution and Verification Report
EMTT	Engineering Mobile Training Team
FFG	Guided Missile Frigate
GMT	General Military Training
IFD	Integrated Functional Description
ISIC	Immediate Superior in Command
JCCB	Joint Configuration Control Board
LANT	Atlantic
LANTFLT	Atlantic Fleet
LANTFLTPEB	Atlantic Fleet Propulsion Examining Board
LOE	Light-off Examination

MDS	Maintenance Data Subsystem
MMF	Manpower Management File
MOVREPS	Movement Reports
MTP	Master Training Plan
NAVDAC	Naval Data Center
NAVEDTRA	Naval Education and Training
NAVMASSO	Navy Management Systems Support Office
NAVMASSO DETPAC	Navy Management Systems Support Office Detachment Pacific
NAVMEC	Navy Manpower Engineering Center
NEC	Navy Enlisted Classification (Code)
NETPSMA	Naval Education and Training Program Management Support Activity
NEURS	Navy Energy Usage Reporting System
NMPC	Naval Military Personnel Command
NPRDC	Naval Personnel Research Development Center
OPNAV	Office of the Chief of Naval Operations
OPORD	Operations Order
OPPE	Operational Propulsion Plant Examination
OPPRE	Operational Propulsion Plant Re-examination
PAC	Pacific
PACFLT	Pacific Fleet
PAR	Personnel Advancement Requirement
PARS	Personnel Advancement Requirement Sheet

PBFT	Planning Board for Training
PEB	Propulsion Examining Board
PERSTEMPO	Personnel Tempo
PF	Program Function (Key)
PFKEY	Program Function Key
PLA	Plain Language Address
PMS	Planned Maintenance System
POAM	Plan of Action and Milestones
POM	Pre Overseas Movement
PQS	Personnel Qualification Standards
PRD	Projected Rotation Date
PRP	Personnel Reliability Program
QA	Quality Assurance
QPF	Qualification Personnel File
QVF	Qualification Validation File
SAF	Ship's Assist File
SCCC	Software Configuration Control Committee
SCVF	Schools Validation File
SDSA	Source Data Systems Afloat
SECNAV	Secretary of the Navy
SEICF	Ship's Examination, Inspection, Certification File
SEMEAN	Standard Error Of the Mean
SER	Serial
SEXF	Ship's Exercise File
SIGSEC	Signal Security

SLF	Ship's Lecture File
SMD	Ship Manning Document
SNAP	Shipboard Non-Tactical ADP Program
SORM	Ship Organization and Regulations Manual
SPAWAR	Naval Space and Warfare Systems Command
STDEV	Standard Deviation
SUBJ	Subject
SYS	System
TFSTAR	Total Force Training and Readiness Manual
TRE	Training Readiness Evaluation
TRNGREP	Training Report
TYCOM	Type Commander
UNITREP	Unit Report
VER	Version
W/C	Work Center

APPENDIX B: ADDITIONAL TRAINING DIRECTIVES

The description of the following training directives do not directly support the thesis and, therefore, have been purposely left out of the main body of the paper. They are included as an appendix in the hope that it may prove some benefit in future research for further enhancement to the ADM Subsystem.

1. Secretary of the Navy

a. NAVY REGULATIONS, 1973

This directive states that the Commanding Officer shall endeavor to increase the specialized and general and professional knowledge of the personnel under his command by the frequent conduct of drills, classes, and instructions, and by the utilization of appropriate fleet and service schools.

[Ref. 29]

b. SECNAVINST 5510.13B (Security Education and Training)

The purpose of this instruction is to set forth the policy of the Secretary of the Navy with respect to security education and training, by establishing centralized supervision and coordination, and assigning specific responsibilities.

Commands having classified material are required to provide security education and training to all personnel with access to classified information. The training, as a minimum, should include:

- Indoctrination briefings for persons being assigned to duties requiring access to classified information.
- Refresher briefings to provide periodic security education and training for personnel having continued access to classified information.
- Foreign travel briefings as a defensive measure for persons with access to classified information, and who will be traveling in communist controlled countries or attending meetings where communist country representatives are expected to participate.
- Special briefings to emphasize specific security areas as they apply to a command or to a group within a command, e.g., visitor control.
- Debriefings for personnel on termination of their access to classified information. [Ref. 30]

2. Chief of Naval Operations

a. OPNAVINST 3541.1C (Shipboard Damage Control Training Requirements)

This instruction provides the minimum damage control proficiency requirements to be maintained by fleet units through the maintenance of training level standards.

These are:

- Level I: Level I is considered basic damage control training. The requirements are to train all graduates of officer and enlisted accession programs in basic damage control and fire fighting. Additionally, all personnel, upon reporting to afloat commands for duty, shall receive instruction in damage control as it applies to the individual command. This training shall include completion of applicable damage control PQS. Live fire fighting training is to be accomplished within six months of reporting aboard ship if no live fire fighting training had

been previously completed and every six years thereafter. General Damage Control PQS is also to be completed within six months of reporting on board ship. Embarked personnel are to receive damage control instruction immediately upon their arrival.

- Level II: Level II training is considered advanced damage control training, and is designed for personnel who, because of their duties, require additional damage control training, primarily in the area of fire fighting techniques; damage containment; system employment; equipment operation and maintenance; hull maintenance; CBR defense; emergency procedures and the supervision of preventive measures. Level II training is to include training in fire fighting techniques, emergency procedures, DC equipment employment, hull integrity maintenance and casualty drills on an individual basis. Damage Control Petty Officer training is included in this level. This training shall include the completion of applicable damage control PQS. Personnel receiving level II training include, but are not limited to engineering department personnel, flight deck duty personnel, petroleum/oils/lubricants (POL) and ordnance personnel, surface warfare/submarine qualified enlisted personnel, and division/department Damage Control Petty Officers. Training is to be completed prior to or within six months of assignment to shipboard duties requiring level II training.

- Level III: This is damage control team training designed for personnel who, because of their duties, require additional damage control training as members of a team or repair party. Level III training is to be conducted both ashore and on board ship. Exercises shall include fire fighting damage containment and CBR defense. Personnel receiving level III training include, but are not limited to repair party team members, in port emergency teams, rescue and assistance teams. Training frequency is as specified by the applicable fleet commander.
- Level IV: Damage control management training is for personnel, who because of the duties, require additional damage control training primarily in the areas of emergency preparation; damage containment; damage control systems capabilities and employment. Level IV training includes instruction in the operation, management and administration of the damage control organization. This level of training will also include instruction in inspection procedures to be employed on shipboard damage control systems and in procedures to properly conduct damage control drills/training on board ship. Personnel receiving this training include the Engineering Department Head, the Air Department Head, the Damage Control Assistant, Repair Party Leader, and the Gas Free Engineer. Training is to be accomplished prior to or within six months of assignment of shipboard duties requiring level IV training. [Ref. 31]

- b. OPNAVINST 3540.4D (Propulsion Examining Board for Conventionally Powered Ships)

Although this directive does not outline training requirements, it does point out the critical nature of a properly planned and implemented training program. Those commands exhibiting an inability to self-train during Operational Propulsion Plant Examinations or Light Off Examinations will be awarded a grade of unsatisfactory. Failure of either of these examinations has a severe negative impact on a ship's operational readiness. [Ref. 32]

- c. OPNAVINST 4790.4A (Issue of Ships' Maintenance and Material Management (3-M) Manual)

Personnel must be trained in the mechanics of the 3-M systems, and the training must be incorporated into unit training plan. Training emphasis should be placed on the motivation to comply with PMS, the need for accurate documentation on work accomplished or deferred, the use of the management tools inherent to the 3-M systems; i.e., PMS schedules, maintenance requirement cards, PMS Feed Back Reports, Current Ships Maintenance Project, Material History Reports, and Automated Work Requests. [Ref. 33]

- d. OPNAVINST 3500.34C (Personnel Qualification Standards (PQS) Program)

The Navy's overall policy, procedures, and responsibilities for the PQS program are outlined in this instruction. It states that the PQS program is a qualification system for officer and enlisted personnel to perform certain duties. A PQS is a list of the minimum knowledge and skills

required to qualify for a specific watchstation, maintain specific equipment or perform as a team member within a unit. The PQS program is not a training program, but it does provide an objective for training. Therefore, PQS is most effective when utilized as a key element of a well-structured and dynamic unit training program. [Ref. 20]

e. OPNAVINST 3591.1B (Small Arms Training)

The Navy's overall policy for small arms training comprises the content of the instruction. It directs that a training program shall be conducted to ensure all personnel whose primary assignment or collateral duties require them to be armed shall maintain sufficient proficiency to safely handle and effectively use the weapon assigned. Commanding Officers are to ensure that adequate numbers of service personnel are trained in the proper use of small arms and that applicable training records are maintained. (The applicable training records, for the purposes of this paper, are found in the SORM, since no discussion will be made regarding the nuclear weapons program.) [Ref. 34]

3. Fleet Commander (Atlantic)

a. CINCLANTFLTINST 5400.2L (U.S. Atlantic Fleet Regulations)

The purpose of the instruction, as the title implies, is to impose various regulations upon commands under the cognizance of CINCLANTFLT.

The instruction directs that fleet, type, group, and unit commanders shall conduct continuous training in the

preparation for combat operations. Type commanders shall maintain appropriate instructions for the conduct of training by units under their command. In addition to the training otherwise prescribed, the following functional training will be emphasized:

- Training stressing the use of other than primary means of controlling the ship, including machinery and armament.
- Boat crew training.
- Chemical, biological, radiological defense.
- Recognition training.
- Medical training.
- Damage control training.
- Oil spill containment/prevention.
- Energy conservation awareness.
- Safety training.
- Physical security drills.

Type commanders are to ensure that shipboard personnel have both General Damage Control PQS and 3-M Maintenance Personnel PQS completed within six months of reporting on board ship.

[Ref. 35]

- b. CINCLANTFLTINST 3540.2F (Propulsion Plant Examinations of Atlantic Fleet Conventionally Powered Ships)

OPPE's and LOE's are administered to determine administrative as well as operational proficiency in ship's propulsion. An overall finding of satisfactory will be assigned in the category of training unless there exists an ineffective

watch qualification program or and absence of an ability to self-train. [Ref. 36]

c. LANTFLTPEBINST 3540.2B (Propulsion Examining Procedures)

Propulsion Examining Boards evaluate the following unit training issues during OPPE's and LOE's:

- Effective electrical safety training program, in accordance with the SORM and COMNAVSURFLANTINST 3540.5 (Engineering Management Manual.) Training is to be conducted for personnel initially reporting on board and annually thereafter.
- Heat stress training, specifically in the use of the WBGT.
- Hearing conservation program. GMT type training is to be given during indoctrination training and annually thereafter.
- Emergency Escape Breathing Device (EEBD) and emergency egress training, is to be conducted every six months.
- Training documentation is reviewed for accuracy and completeness, as required by the SORM, type commander directives, and ship instructions. The long range/quarterly and monthly training plans are evaluated based on the SORM. The weekly training plan, record of type commander required training exercises, trials and inspections, and division training schedules are compared against the requirements outlined in COMNAVSURFLANTINST C3500.2C (Master Training Plan.) Evidence of completed training being properly documented on training schedules, and the use of attendance records is also determined. Casualty control training records; i.e., drill plans, drill schedules, drill sheets, critique sheets, and record of drills conducted are reviewed to determine compliance with the Engineering Management Manual. [Ref. 37]

d. CINCLANTFLTINST 3541.1C (Shipboard Damage Control Training Program)

Amplification to OPNAV damage control training guidance is contained in this instruction. It specifies that officers and enlisted personnel must qualify in "all hands" Damage Control PQS within six months of reporting on board ship, or must requalify in those line items that are type ship

specific if already qualified in General Damage Control PQS at a previous command. The instruction also specifies the need for operational Oxygen Breathing Apparatus training to be conducted every six months as well as training in the Survival Support Device or Emergency Escape Breathing Device. Repair Party personnel that are assigned as NBC detection, sampling, and decontamination team members are to complete the applicable NBC training prior to their assignment to the team. Personnel having the rate of Hull Technician and in pay grade E-6 or above must be qualified as Repair Party Leader or Unit Leader. The qualification will be by PQS or satisfactory completion of the Repair Party Leader course. Personnel assigned to Repair Parties or Import Emergency Damage Control Teams will have completed the applicable damage control emergency party PQS. All shipboard personnel must have received live fire fighting training within the past six years. Formal school requirements are listed for shipboard assignments such as Repair Locker team members, personnel assigned to aircraft carriers, etc. [Ref. 38]

- e. CINCLANTFLTINST 3591.1A (Small Arms Training and Qualification)

The purpose of the instruction is to establish policy for small arms training and qualification, assignment of responsibilities, and procedures for the management of assets in support of small arms training in the U.S. Atlantic Fleet.

The instruction directs that all personnel attached to LANTFLT, whose primary assignment or collateral duty

requires them to be armed, shall be properly trained and shall maintain proficiency in the safe handling and effective use of assigned weapons. Commanding Officers are to ensure that all personnel assigned to their command that are required to carry small arms meet minimum watchstander qualifications set forth in the instruction, and are requalified annually. (Qualifications alluded to above concern target scores for various types of small arms, and therefore will not be reproduced in this paper.) [Ref. 39]

4. Fleet Commander (Pacific)

- a. CINCPACFLTINST 3500.16B (Personnel Qualification Standards (PQS) Program)

PQS is established as the primary system for the training and qualification of PACFLT personnel, and is to be implemented in accordance with OPNAVINST 3500.34C and the PQS Managers Guide, under the immediate cognizance of the type commander. Training not covered by PQS will be conducted in accordance with applicable existing directives. [Ref. 40]

- b. CINCPACFLTINST 3540.2E (Policy and Procedures for Propulsion Plant Examinations and Readiness Improvement of Pacific Fleet Conventionally Powered Ships)

LOE's and OPPE's will include an assessment of engineering department administration in training and PQS effectiveness based on watchstander's performance on tests, checks, evolutions, and drills. The unit's Immediate Superior in Command (ISIC) is responsible to the PACFLT Propulsion Examining Board for certification of a unit's compliance with

type commander, fleet commander, and OPNAV training administration requirements. An LOE or OPPE will not be conducted if the ISIC determines that the unit's training program does not meet these requirements. The Propulsion Examining Board will issue a grade of unsatisfactory for units found to have an ineffective watch qualification program or demonstrates an inability to self-train. [Ref. 41]

- c. CINCPACFLTPEBINST 3540.2A (Propulsion Plant Examining Procedures for Light-off Examinations (LOE) and CINCPACFLTPEBINST 3540.3 (Propulsion Plant Examination Procedures for Operational Propulsion Plant Examinations (OPPE) and Operational Propulsion Plant Recertification Reexaminations (OPPRE)

Criteria are provided in this instruction for evaluating ships during propulsion plant examinations. In the realm of training, grounds for a grade of unsatisfactory is the inability to man at least a two section watch or the absence of the capability to self-train. Examination procedures include the review of the following.

- Existence of a training program that conforms with requirements outlined in the SORM, and type commander directives. Training records are inspected to ascertain whether schedules include drills and exercises, inspections and assist visits, General Military Training, required schools, safety training, indoctrination training, electrical safety training, PQS fundamentals and systems listed as training topics, and casualty control training.
- Existence of a feedback loop to ensure that incomplete training is rescheduled, and that there is a method of tracking individual completion of training.
- Existence of individual training records that include the Division Officer Personnel Record, PQS Progress Chart, Qualification and Advancement Plan for each individual, list of graduates of required off-ship schools, and

individual listing of training accomplished (type II record form suggested.) [Refs. 42 and 43]

4. Type Commanders (Combined Instructions)

- a. CNSLINST 3540.14/ CNSPINST 3540.13 (Naval Surface Forces Engineering Department Organization Manual)

This instruction specifies that the DCA is responsible for the training of ship's personnel in damage control including fire fighting, emergency repairs, and non-medical defensive measures against gas and similar weapons. It also directs that the DCA supervise the qualification of personnel who will qualify others in Damage Control PQS, as well as provide the training and supervise the qualification of Damage Control Petty Officers, and members of the at-sea and inport duty repair parties. [Ref. 44]

- b. CNSLINST 8023.4D/ CNSPINST 8023.5 (Non-nuclear Ordnance/Explosives Handling Qualification and Certification Program)

Lookouts and other underway watches that are required to handle, prepare, and launch marine markers or fire signalling devices must receive indoctrination on the marine markers, pyrotechnic pistol, and projector signals.

Non-certified workers that will handle ordnance shall be given a safety brief prior to any ordnance handling evolution.

Training in support of the certification program shall be incorporated into the command's training program, and shall consist of training/qualification of a command appointed certification board that will review the qualification, observe

the skills, and finally certify individuals to perform work tasks with explosive devices. [Ref. 45]

5. Type Commander (Atlantic)

a. CNSLINST 5400.1B (Naval Surface Force, U.S. Atlantic Fleet Regulations)

Although this directive sets forth administrative guidance for units under its cognizance, some specific training requirements are also listed as follows.

- Each command is required to establish a plan for leadership training within the General Military Training concept. Training will consist of military rights and responsibilities, and cultural expressions in the Navy.
- Commands are to provide training in the career information management program (career counselor training.)
- Commands having small boats are to provide indoctrination in boat etiquette, and should be trained and qualified in accordance with CINCLANTFLT Regulations, the SORM, and CNSLINST C3500.2C.
- All non-medical personnel shall receive instruction in health, sanitation, hygiene, venereal disease, first and self aid, and in medical aspects of chemical and radiological hazard.
- Personnel assigned to paramedical duties shall be instructed and exercised in these responsibilities to ensure proper performance.
- Officers and Chief Petty Officers shall be trained in the use of the portable respiration device, in emergency aid for poisonings, psychiatric first aid, and in such other situations requiring mature judgement.
- Commanders shall concentrate in overall security orientation, education and training to involve command development of a comprehensive security indoctrination program which emphasizes all aspects of personal security. Particular emphasis will be given to drug/narcotic possession and use. All personnel must have a basic understanding of the serious consequences that security violations can have on themselves and the command.

- Firearm training in accordance with CINCLANTFLTINST 3591.1 is required.
- All personnel must be trained to detect actual or potential acts of deliberate damage.
- Operational Security briefs are required for all recently assigned personnel within ninety days of their assignment.
- Security forces are to be trained in procedures to seal off entry and exit points in preparation of future threats to physical security. [Ref. 46]

b. CNSLINST 3500.9D (Personnel Qualification Standards (PQS) Program)

The purpose of the instruction is to provide the policy for establishing and maintaining PQS programs among commands under the cognizance of COMNAVSURFLANT. It states that Commanding Officers are to implement local directives establishing PQS as an integral element of the command's training and qualification program.

The instruction directs that General Damage Control PQS, and the Maintenance Person section of 3-M PQS is to be completed by all personnel within six months of their assignment on board ship. Also, all personnel are required to complete line items 2301.17, 2301.111, and 2301.120 of General Damage Control PQS every six months. The Executive Officer is responsible for monitoring the PQS program, and is required to maintain a record of PQS qualifiers for a minimum of two years. [Ref. 47]

c. CNSLINST 5233.1 (Shipboard Non-tactical ADP Program (SNAP-II) System Management)

User training will be incorporated into the command's training program. Initial training will focus on user

needs based on the user's access level. Follow on training shall stress data security and fallback procedures. [Ref. 48]

d. CNSLINST 3540.5 (Engineering Management Manual)

The Engineering Management Manual provides guidance for all management issues concerning the Engineering Department chain of command. Training related issues follow.

- A long range casualty control training schedule is required.
- Drill schedules and drill sheets are to be prepared, as well as drill critique sheets. The schedules and sheets are to be retained for one year.
- The command should have established a valve maintenance team, which should be trained in procedures to completely overhaul valves with the exception of lathe operations which should be performed by a qualified Machinery Repairman.
- Personnel shall be trained in gland packing procedures.
- A comprehensive training program for all hands regarding the hazards and safety precautions pertaining to shipboard electricity shall be conducted as part of indoctrination training for new personnel, and every year thereafter. Specific training topics are:
 - Reason for electrical safety.
 - Resuscitation for electrical shock and closed chest cardiac massage.
 - Types of permissible personal electrical/electronic equipment.
 - Electric shock, its causes and prevention.
 - Proper use of portable electric tools.
 - Recognition of unsafe electrical equipment.
- A separate record of training accomplishment is to be used to document the completion of electrical safety training. (The record form shown in the instruction is not reproduced in this paper because the authors do not intend to propose this form as an ADM enhancement.)

- All personnel performing welding and brazing, and associated duties, such as fire watch, shall be indoctrinated on all safety precautions pertinent to welding.
- Pollution prevention training, fueling team training, and oil spill containment team training will be conducted. [Ref. 49]

e. CNSLINST 5040.2B (Command Inspection Guide for Ships)

The Command Inspection Guide is used for Immediate Superiors in Command (ISIC) to perform administrative inspections on their commands based on a standard provided by the type commander. In addition to an evaluation as to whether the inspected command is conforming to training documentation requirements outlined in the SORM, PQS Managers Guide, and CNSLINST C3500.2D (Master Training Plan), a determination is made as to whether training is being performed in the following:

- Safety training.
- Substance abuse training.
- Information security.
- Lookout recognition training.
- Surface weather observation training.
- Hand grenade training.
- Physical security training for engineering personnel.
- Arms, ammunition and explosives inventory and accountability training.
- Physical security guard training.
- Small arms training.

- Anti terrorism awareness training.
- Medical training.
- Medical aspects of the Navy Occupational Safety and Health Program. [Ref. 50]

f. CNSLINST C3500.2D (Master Training Plan)

The Master Training Plan provides guidance to individual commands to assist their implementation of unit training programs. It's intent is to provide an integrated and sequenced program of individual, team, and unit training in all applicable mission areas to most effectively maximize unit training readiness. The instruction outlines training responsibilities, describes the operating and training cycle, outlines various phases of training, specifies required training reports to be sent to COMNAVSURFLANT to document mission area readiness stemming from training accomplishment, and lists required formal schools and exercises. In the interest of brevity, and maintaining the security classification of this paper, training requirements are not presented here. [Ref. 17]

6. Type Commander (Pacific)

- a. CNSPINST 5400.1F (Naval Surface Forces, U.S. Pacific Fleet Regulations)

The objective of this directive is similar to that of its Atlantic Fleet counterpart, although detailed guidance in several areas, vary. The instruction stipulates that guidance for the preparation and execution of the shipboard training program is contained in CNSPINST 1500.3C (Shipboard

Training Manual) and CNSPINST C3501.6D (Total Force Training and Readiness Manual.) The instruction requires commands to indoctrinate newly reporting personnel in the following.

- Orientation tour of the ship or unit.
- Instruction in command regulations and routine.
- Drug/alcohol education.
- Instruction on educational opportunities and requirements for advancement in rating.
- Career counseling.
- Instruction in basic damage control including initial reaction to fire, wearing of gas masks, and setting and maintaining material closures, and electrical safety measures.
- An indoctrination period, including watchstanding as feasible, in each of the following departments: weapons/deck, operations, and engineering.
- Prohibition against hazing.
- Review of local drunk driving laws.
- Use of class "E" messages.
- Notification of families in the event of emergencies.
- Assistance available to the member/spouse in the form of Navy Relief, Family Service Center, etc.
- Instruction on military rights and responsibilities.
- Instruction in Navy policy concerning sexual harassment, and equal opportunity.
- Information security.

Leadership training is called for to be conducted as General Military Training. A recommended source document is The Leadership Support Manual (NAVPERS 15934A.) The instruction also lays out the requirement for shore patrol unit training,

motor vehicle safety training, and physical security indoctrination/training. [Ref. 51]

b. CNSPINST 1500.3C (Shipboard Training Manual)

The Shipboard Training Manual specifies that each command's training program should include:

- PQS.
- 3-M system.
- Indoctrination Division.
- Individual study for advancement in rating.
- Shore based schools.
- Division instruction.
- Team training.
- Naval correspondence courses.
- Extra professional training.
- On the job training.
- Use of the apprentice system for new personnel.
- Drills and exercises.
- Battle problems.
- Engineering Operational Sequencing System.
- Paygrade E-4 petty officer training.
- General Military Training.
- Chief Petty Officer training.
- Safety training.

Training responsibilities are listed in the Shipboard Training Manual that amplify what has been outlined in this paper as the training organization. These amplified

training responsibilities will not be included in this paper in the interest of brevity.

The Manual also amplifies the SORM in its requirements for training documentation. Either OPNAV form 3120/1A (Long Range/Quarterly Training Plan) or OPNAV form 4790/14 revision 6-73 (Quarterly PMS Schedule) can be used as documentation for the long range training schedule. The quarterly training plan is actually one sheet of the long range training plan, and outlines in significant detail the training intentions for the current quarter.

The monthly training plan, as described in the SORM, is optional for COMNAVSURFPAC ships.

The weekly training plan produced by the PBFT is required and is as described in the SORM.

Training records are to be retained on board until 1 January following the fiscal year in which the competitive training cycle ends. [Ref. 52]

c. CNSPINST 1410.1 (Personnel Qualification Standards)

The Commander Naval Surface Forces U.S. Pacific Fleet (COMNAVSURFPAC) uses this instruction to outline amplifying information to the instructions provided by higher authority regarding PQS. Specific requirements follow.

- Personnel shall complete General Damage Control PQS within six months of reporting to their command.
- Personnel shall complete 3-M PQS within twelve months of reporting to their command.
- Ships' PQS programs should support minimum watchstation requirements projected six months into the future.

- A qualification and advancement plan(a sample is provided in the instruction but not reproduced in this paper) is to be maintained for each individual assigned.
- Completion of a PQS watchstation is to be documented in the crewmember's service record.
- Records used to document and monitor individual PQS progress may be maintained in any one of the following formats:
 - PQS charts.
 - PQS Qualification and Advancement Plan.
 - Division Officer's Notebook.
 - Automated means. [Ref. 53]

d. CNSPINST C3501.6D (Total Force Ship Training and Readiness Manual)

The purpose of this instruction is to provide individual units with guidance to supplement training requirements outlined in other directives, specifically, the SORM, and Shipboard Training Manual. The Total Force Ship Training and Readiness Manual(also known as TFSTAR) addresses the training and readiness cycle, training and readiness objectives, prerequisite training requirements to exercises, and the exercises.The list of prerequisite training and the exercises have been omitted from this paper, in the interest of brevity. [Ref. 18]

e. CNSPINST 5510.2D (Security Forces Afloat)

COMNAVSURFPAC outlines requirements to be met by all commands under his cognizance regarding general physical security in this directive. Training requirements are as follows.

- Security forces will be initially qualified on weapons assigned, and will be required to requalify annually.
- Indoctrination through formal training lectures will be conducted to address the following:
 - Weapon safety precautions.
 - Weapon characteristics and nomenclature.
 - Weapon disassembly and assembly.
 - Weapon malfunctions.
 - Weapon cleaning procedures.
 - Basic aiming and firing procedures.
 - The rules for the use of deadly force.
 - Range instruction to include instruction in range operating rules and safety precautions, review of basic aiming, loading and firing positions, firing under close supervision, and firing for record.
 - Quarterly security briefings to include potential targets and their relative priorities, required response to different but probable threat situations, rules of engagement/application of deadly force. [Ref. 54]

f. CNSPINST 5233.1 (Shipboard Non-tactical ADP Program II (SNAP-II) System Management)

This instruction provides general guidance for management responsibility of SNAP-II. Specifically in the realm of training, commands are tasked to incorporate SNAP-II user training in the command training program. Initial training shall be tailored to the user's access. Follow on training will stress data security and fall back procedures. [Ref. 55]

g. CNSPINST 5040.1C (Naval Surface Force Pacific Fleet Command Inspection Program)

This instruction implements command inspections for commands under COMNAVSURFPAC cognizance. Inspection guides

prepared by ISIC's, and approved by COMNAVSURFPAC, are administered to units under the ISIC's immediate command. A sample inspection guide outlines the following training requirements to be evaluated.

- Standards of conduct training.
- Race relations training.
- Freedom of Information Act, Privacy Act training.
- Information security training.
- Operational report training.
- Lookout and recognition training.
- Emergency egress training.
- All hands environmental quality training.
- Damage control training is to include helicopter fire at sea training, material conditions of readiness, damage control preventative measures, damage control systems and equipments, decontamination and personnel protection, fire fighting, nuclear/biological/chemical weapons effects, hazards and their detection, communication of casualty and damage information, casualty power rigging, collision, rescue and assistance, and gas free engineering utilization. [Ref. 56]

ENGINEERING DEPARTMENT
TYCOM REQUIRED EXERCISES

EXERCISE NUMBER AND TITLE	PERIODICITY	DATE(S) CONDUCTED
MOB-E-1-R LOSS OF MAIN FEED CONTROL	TRX - QUARTERLY SELEX - ONCE / CYCLE	TRX - 1/19/86 SELEX - 7/3/85
MOB-E-2-R HIGH WATER IN BOILER	TRX - QUARTERLY SELEX - ONCE / CYCLE	TRX - 1/19/86 SELEX - 12/20/85
MOB-E-3-R LOW WATER IN BOILER	TRX - QUARTERLY SELEX - ONCE / CYCLE	TRX - 2/10/86 SELEX - 7/3/85
MOB-E-5-R LOSS OF BOILER FIRES	TRX - QUARTERLY SELEX - ONCE / CYCLE	TRX - 2/10/86 SELEX - 12/20/85
MOB-E-7-R BOILER EXPLOSION / FLAREBACK	TRX - QUARTERLY SELEX - ONCE / CYCLE	TRX - 2/10/86 SELEX - 12/20/85
MOB-E-8-R HATOR FUEL OIL LEAK	TRX - QUARTERLY SELEX - ONCE / CYCLE	TRX - 2/11/86 SELEX - 12/19/85
MOB-E-9-R FIRE IN BOILER AIR CASING	TRX - QUARTERLY SELEX - ONCE / CYCLE	TRX - 2/11/86 SELEX - 7/3/85
MOB-E-10-R LOSS OF CONTROL AIR	TRX - QUARTERLY SELEX - ONCE / CYCLE	TRX - 1/19/86 SELEX - 12/20/85
MOB-E-11-R WHITE SMOKE	TRX - QUARTERLY SELEX - ONCE / CYCLE	TRX - 2/12/86 SELEX - 7/17/85
MOB-E-12-R LOSS OF VACUUM / HOT CONDENSER	TRX - QUARTERLY SELEX - ONCE / CYCLE	TRX - 2/11/86 SELEX - 12/20/85
MOB-E-13-R UNUSUAL NOISE / VIBRATION IN MAIN ENGINE	TRX - QUARTERLY SELEX - ONCE / CYCLE	TRX - 1/19/86 SELEX - 7/3/85
MOB-E-14-R JAMMED THROTTLE	TRX - QUARTERLY SELEX - ONCE / CYCLE	TRX - 2/12/86 SELEX - 12/20/85
MOB-E-15-R HOT BEARING	TRX - QUARTERLY SELEX - ONCE / CYCLE	TRX - 2/11/86 SELEX - 12/19/85
MOB-E-16-R LOSS OF LUBE OIL PRESSURE	TRX - QUARTERLY SELEX - ONCE / CYCLE	TRX - 2/12/86 SELEX - 7/17/85
MOB-E-17-R HATOR LUBE OIL LEAK	TRX - QUARTERLY SELEX - ONCE / CYCLE	TRX - 1/19/86 SELEX - 12/20/85
MOB-E-18-R LOSS OF VACUUM - AUX CONDENSER	TRX - QUARTERLY SELEX - ONCE / CYCLE	TRX - 2/10/86 SELEX - 12/20/85
MOB-E-19-R HOT BEARING - SSTG	TRX - QUARTERLY SELEX - ONCE / CYCLE	TRX - 2/12/86 SELEX - 12/20/85
MOB-E-20-R LOSS OF L.O. PRESSURE - SSTG	TRX - QUARTERLY SELEX - ONCE / CYCLE	TRX - 1/19/86 SELEX - 7/17/85
MOB-E-21-R L.O. LEAK - SSTG	TRX - QUARTERLY SELEX - ONCE / CYCLE	TRX - 1/19/86 SELEX - 7/3/85
MOB-E-22-R CLASS 'C' FIRE IN SWBO	TRX - QUARTERLY SELEX - ONCE / CYCLE	TRX - 2/10/86 SELEX - 7/3/85
MOB-E-23-R CLASS 'C' FIRE IN GENERATOR	TRX - QUARTERLY SELEX - ONCE / CYCLE	TRX - 2/12/86 SELEX - 7/17/85
MOB-E-70-R FULL POWER TRIAL	TRX - ANNUAL SELEX - ONCE / CYCLE	TRX - 10/10/85 SELEX - 10/10/85
MOB-E-71-R ECONOMY TRIAL	TRX - SEMI-ANNUAL SELEX - ONCE / CYCLE	TRX - 12/20/86 SELEX - 10/07/85

Figure C-3: Sample TYCOM Required Exercises List

ENGINEERING DEPARTMENT
OFF SHIPS SCHOOLS AND NEC REQUIREMENTS

SCHOOL/NEC REQUIRED	NO. REQ.	WHO ATTENDED	EAOS/PRD
P4305 STM PROP MAINT SUP (SCHOOL: A-653-0083)	2	BTCS A.A. ALFA	4/90
		BT1 C.C. CHARLIE	9/88
S4512 HAGAII MAINTENANCE (SCHOOL: A-651-0041)	2	BTC B.B. BRAVO	3/87
		BT1 D.D. DELTA	1/89
S4532 ABC CONSOLE OPERATOR (SCHOOL: A-651-0049)	6	BT1 E.E. ECHO	2/89
		BT1 C.C. CHARLIE	9/88
		BT1 D.D. DELTA	1/89
		BT2 F.F. FOXTROT	3/90
		BT2 G.G. GOLF	4/87
		BT2 H.H. HOTEL	7/88
P4801 REEFER I AC (CENTRIFUGAL) (SCHOOL: A-710-0025)	2	HMI R.R. ROMEO	9/91
		MM2 S.S. SIERRA	12/89
S4954 GEN MAINT WELDER (SCHOOL: A-701-0026)	2	HTZ T.T. TANGO	1/88
		HT3 W.W. WHISKY	5/90
P4714 STROMBERG/CARLSON PHONE (SCHOOL: A-623-0043)	1	IC2 M.M. MIKE	11/91
P4714 GYROCOMPASS TECH (SCHOOL: A-670-0021)	1	IC3 P.P. PAPA	10/87
P4746 CCTV (SCHOOL: A-198-0020)	1	IC2 M.M. MIKE	11/91
P4772 NCI SYSTEM PLOTTER TECH (SCHOOL: A-623-0020)	1	IC3 O.O. OSCAR	7/87
P4715 DRT/DRAI SYSTEMS TECH (SCHOOL: A-623-0028)	1	IC3 P.P. PAPA	10/87
A-46-0010 DCA	1	LTJG C. WILLIAM	12/88
A-495-0051 (NNSY) GAS FREE MONITOR	DCA + 3	LTJG C. WILLIAM	12/88
		HTC N.N. NOVEMBER	6/89
		HT1 W.W. WILLIAMS	3/90

Figure C-4: Sample Required Schools/NEC List

TRAINING GROUP LECTURE TOPICS
FOR B DIVISION

<u>D: MECHANICAL THEORY</u>	<u>B27 SHORE SERVICE STEAM</u>
<u>B2 BOILER THEORY</u>	<u>B28 FLASH TYPE DISTILLING PLANT</u>
<u>B3 ENGINEERING SAFETY</u>	<u>B29 MAIN SHAFTING, BRGS, PROPS</u>
<u>B4 BASIC STEAM CYCLE</u>	<u>B30 MAIN DRAIN SYSTEM</u>
<u>B5 BOILER SYSTEMS</u>	<u>B31 FIREMAIN SYSTEM</u>
<u>B6 FUEL OIL SERVICE SYSTEM</u>	<u>B32 POTABLE WATER SYSTEM</u>
<u>B7 COMBUSTION AIR</u>	<u>B33 BALLAST, DEBALLAST STRIPPING</u>
<u>B8 MAIN STEAM SYSTEM</u>	<u>B34 RESERVE FEED</u>
<u>B9 1200 PSI AUX STEAM SYSTEM</u>	<u>B35 F.O. STORAGE & TRANSFER</u>
<u>B10 600 PSI AUX STEAM SYSTEM</u>	<u>B36 HP AIR SYSTEM</u>
<u>B11 REDUCED PRESSURE STEAM</u>	<u>B37 BROMINE FEED</u>
<u>B12 PROPULSION TURBINES / RED GEAR</u>	<u>B38 ABC SYSTEM</u>
<u>B13 MAIN CONDENSERS</u>	<u>B39 TECH MANUAL USE</u>
<u>B14 SW CIRC SYSTEMS</u>	<u>B40 VALVE MAINTENANCE</u>
<u>B15 MAIN CONDENSATE SYSTEM</u>	<u>B41 PAINTING & PRESERVATION</u>
<u>B16 MAIN AIR EJECTORS</u>	<u>B42 EOSS USE</u>
<u>B17 MAIN & AUX GLAND STEAM</u>	<u>B43 LAGGING</u>
<u>B18 LP/FW DRAIN COLLECTING</u>	<u>B44 DIAL INDICATOR USE</u>
<u>B19 MAIN LUBE OIL SYSTEM</u>	<u>B45 HLOC PROCEDURES</u>
<u>B20 AUX CONDENSERS / SW CIRC</u>	<u>B46 HOT / COLD CHECKS</u>
<u>B21 AUX CONDENSATE SYSTEM</u>	<u>B47 TWIN AGENT SYSTEM</u>
<u>B22 AUX AIR EJECTORS</u>	<u>B48 EEBD</u>
<u>B23 AUX GLAND EXHAUST</u>	<u>B49 HEARING CONSERVATION</u>
<u>B24 AUX MACH COOLING WATER</u>	<u>B50 HEAT STRESS</u>
<u>B25 L.O. XFER & PURIFICATION</u>	<u>B51 LUBE OIL MANAGEMENT</u>
<u>B26 L.P. AIR SYSTEM</u>	<u>B52 BOILER LAY-UP METHODS</u>

Figure C-5: Sample Training Group Lecture Topic List

MONTHLY TRAINING PLAN

MONTH OF MARCH 1986 TRAINING GROUP B-DIVISION

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
2	3 B3-1200H AUX STEAM SYSTEM BT2 HOTEL	4 EMOW ORAL BOARDS	5 B35-F.O.XFER AND STORAGE BT2 GOLF	6 BT L/L ORAL BOARDS	7 B38-ABC SYSTEM BT1 DELTA	8
9	10 B4A EOSS USE LT WILCOX	11 HHOW ORAL BOARDS	12 B46-COLD/HOT CHECKS BTCS ALFA	13 BTOW ORAL BOARDS	14 B45 MLOC PROCEDURES LT WILCOX	15 LIGHT-OFF UNDERWAY AM 3/17 FOR MTT
16	17 B50-HEAT STRESS BT1 FOXTRIT	18 UNPERWAY ENGINEERING MOBILE TRAINING TEAM VISIT PGS EVOLUTIONS & CASUALTY CONTROL DRILLS	19	20	21	22
13	24 B51 BOMER LAMP BT2 GOLF BT1	25 EOWW ORAL BOARDS	26 B48-BEBD BT1 ECHO	27 HM MESS ORAL BOARDS	28 B40-VALVE MAINTENANCE BTCS ALFA	29
30	31					

SUBMITTED BY: W. W. Wilcox, LT, USN APPROVED BY: J. P. Jones, LCDR, USN
 B-DIVISION OFFICER CHIEF ENGINEER

Figure D-3: Sample Monthly Training Plan

WEEKLY TRAINING SCHEDULE

WEEK OF: 9-15 MARCH 1986

DEPARTMENT: ENGINEERING

SUNDAY 3/9	MONDAY 3/10	TUESDAY 3/11	WEDNESDAY 3/12	THURSDAY 3/13	FRIDAY 3/14	SATURDAY 3/15
<p>DUTY SECTION I</p> <p>DUTY ENGINEER EXERCISE BOTH FIRE PARTY AND RFA TEAM</p>	<p>0815 FIRST AID LECTURE B-DIV MESS DECKS - HMI PULL</p> <p>1230- DIV TRNG A- A13 AC/R BOAT SHOP HMI ROME B- 042 EASY/BOC LT WILCOX BEATING CAMP M- 042 EASY/BOC LT WILCOX BEATING CAMP E- 072 SP PALMER IC SHOP IC2 MING R- 014 P-250 MT SHOP MYS TAMBO</p>	<p>1000- ALL HANDS EUBEL JAMES ON CCTV</p> <p>1300- CAPTAIN'S MST</p> <p>1600- HMDW ORAL BOARDS IN CHIEFS MESS</p>	<p>1230- DIV TRNG A- ALL RIFTERS BOAT SHOP HMI SIERLA B- 046 COLD/HOT CHECKS BTCS ALCO BEATING CAMP M- 046 COLD/HOT CHECKS HMCN TATH PUB B.B. E- 031 GREGG IC SHOP IC3 DAPA R- 05 HRY GASKER MT SHOP MTRJ OSCAR</p>	<p>0815 FIRST AID LECTURE B-DIV MESS DECKS - HMI PULL</p> <p>1500- DUTY ENG CHIEFS MESS PROCEDURES FOR SATURDAY LIGHT OFF</p> <p>1600- 070W ORAL BOARDS IN CHIEFS MESS</p>	<p>1230- DIV TRNG A- 037 HAW DRAIN BOAT SHOP EML PETERS 045 MUC BEATING CAMP LT WILCOX M- 045 MUC BEATING CAMP LT WILCOX E- 071 STEPS IC SHOP EML OOLAW R- 040 TALL MT SHOP STTG WILLIAMS</p>	<p>DUTY SECTION III</p> <p>DUTY ENGINEER EXERCISE BOTH FIRE PARTY AND RFA TEAM</p> <p>1500 LIGHT PALS IN TA BOILER - ----- MTT VISIT NEXT WEEK - ALL DIV OFFS EXERCISE DECKBOARD ARE OUT/LO ON SCHEDULE</p>

PROMULGATED BY: J. P. Jones, USN
CHIEF ENGINEER

Figure D-4: Sample Weekly Training Schedule

APPENDIX E: GENERAL RECORD (TYPE II) FORM

GENERAL RECORD (Type II)
 OPNAV FORM 1500-21 (10-60)
 S/N 0107-L.P. 701-0000

PERIOD COVERED FROM 3/10/86 TO

B-DIVISION TRAINING RECORD

	3/10/86 ECS/ECC/EC LT WILCOX	3/11/86 ELECT CCTV	3/12/86 MOT/CAD/CONTACT BTCS ALFA	3/13/86 ELECT LINE BUREAU	3/14/86 BTJ/ABAL BOARD	3/15/86 MLOC LT WILCOX			
BTCS A.A. ALFA	X	X	INST.	X	BOARD MEMBER	X			
BTC B.B. BRAVO	X	X	X	X	BOARD MEMBER	X			
BT1 C.C. CHARLIE	X	X	X	X	X	X			
BT1 D.D. DELTA	X	X	X	X	X	X			
BT1 E.E. ECHO	X	X	X	X	X	X			
BT2 F.F. FOXTROT	X	X	X	X	X	X			
BT2 G.G. GOLF	X	X	X	X	X	X			
BT2 H.H. HOTEL	LV	LV	LV	LV	X	X			
BT3 I.I. INDIA	X	X	X	X	NA	X			
BT3 J.J. JULLIET	X	X	X	X	NA	X			
BT3 K.K. KILO	X	X	X	X	NA	X			
BT3 L.L. LIMA	X	X	X	X	NA	X			
BT3 M.M. MIKE	LIB	X	X	X	NA	X			
BT3 N.N. NOVEMBER	X	X	X	X	NA	X			
BT3 O.O. OSCAR	X	X	X	X	NA	X			
BT3 P.P. PAPA	X	X	X	X	NA	X			
BT3 R.R. ROMEO	X	X	X	LIB	NA	X			
BT3 S.S. SIERRA	X	X	X	X	NA	X			
BTEN T.T. TANGO	LIB	X	X	X	NA	X			
BTFA U.U. UNIFORM	X	X	X	X	NA	X			
BTFA V.V. VICTOR	X	W.P.	X	X	NA	X			
FA W.W. WILLIAM	X	X	X	X	NA	X			
FA X.X. XRAY	X	U.A.	U.A.	U.A.	NA	U.A.			
FA Z.Z. ZEBRA	X	X	X	X	NA	X			

Figure E-1: Sample Training Record

APPENDIX F: RECORD FOR PERSONNEL ADVANCEMENT REQUIREMENT

NAVPERS 1414/4 (BM) (REV 4-86)
0106-LF-141-4370

PERSONNEL ADVANCEMENT REQUIREMENT (PAR) BOATSWAIN'S MATE (BM)		
<u>INFORMATION</u>		
<p>1. The PAR is a checklist of Occupational Standards (OCCSTDs) for sailors to use in preparing for advancement in rate or change in rating. These OCCSTDs are published in the Manual of Navy Enlisted Manpower and Personnel Classifications and Occupational Standards, Section I, NAVPERS 18968.</p> <p>2. Commands use the PAR to evaluate a sailor's occupational readiness for advancement in rate or change in rating. Since sailors may not be able to demonstrate all OCCSTDs, the evaluations may be based on demonstration of performance or observation of ability in related areas or training. As requirements are satisfied entries will be made in the DATE and INITIALS columns of the PAR. Upon transfer, the PAR will be inserted in the sailor's enlisted service record.</p>		
<u>RATE</u>	<u>FORMAL SCHOOL/TRAINING REQUIREMENTS</u>	
BM3	NAVY TRAINING COURSE "MILITARY REQUIREMENTS FOR PETTY OFFICER THIRD CLASS" NAVY TRAINING COURSE "BOATSWAIN'S MATE 3&2"	
BM2	NAVY TRAINING COURSE "MILITARY REQUIREMENTS FOR PETTY OFFICER SECOND CLASS" NAVY TRAINING COURSE "BOATSWAIN'S MATE 3&2"	
BM1	NAVY TRAINING COURSE "MILITARY REQUIREMENTS FOR PETTY OFFICER FIRST CLASS" NAVY TRAINING COURSE "BOATSWAIN'S MATE 1&C"	
BMC	NAVY TRAINING COURSE "MILITARY REQUIREMENTS FOR CHIEF PETTY OFFICER" NAVY TRAINING COURSE "BOATSWAIN'S MATE 1&C"	
<u>SUPERVISING OFFICER</u>		
<u>Name and Title</u>	<u>Command</u>	<u>Date</u>
NAMESSN		

(REVERSE IS BLANK)

Occupational Requirements for advancement to: BOATSWAIN'S MATE THIRD CLASS (RM3)	Date	Initials
1. DIRECT HELICOPTER OPERATIONS AS LANDING SIGNALMAN ENLISTED (LSE).....		
2. PERFORM HELICOPTER OPERATIONS AND HANDLING.....		
3. SERVE AS GUN CAPTAIN.....		
4. USE INTERNATIONAL AND INLAND RULES OF THE ROAD.....		
5. USE NAVIGATION CHARTS TO DETERMINE COMPASS COURSE.....		
6. IDENTIFY AND APPLY NAVIGATIONAL AIDS AND SIGNALS.....		
7. USE PORTABLE AND MOUNTED VOICE RADIOS.....		
8. OPERATE AND ADJUST SEWING MACHINES.....		
9. PERFORM PREVENTIVE MAINTENANCE ON SHIP'S DECK EQUIPMENT.....		
10. PERFORM PREVENTIVE AND CORRECTIVE MAINTENANCE ON BLOCKS AND TACKLES.....		
11. PERFORM PREVENTIVE AND CORRECTIVE MAINTENANCE ON STANDING AND RUNNING RIGGING.....		
12. SHARPEN SCRAPERS AND CHIPPING HAMMERS.....		
13. CLEAN, ADJUST AND STOW PAINT SPRAYING AND SURFACE PREPARATION TOOLS AND EQUIPMENT.....		
14. PATCH CANVAS AND SYNTHETIC FABRICS AND SEW SMALL CANVAS AND SYNTHETIC FABRIC ARTICLES.....		
15. SEW ROPES AND METAL FITTINGS TO CANVAS AND SYNTHETIC FABRICS.....		
16. CONSTRUCT ITEMS FROM CANVAS/SYNTHETIC FABRIC AND LINE.....		
17. PREPARE AND APPLY PAINTS AND PRIMERS.....		
18. SERVE AS A MEMBER OF A DAMAGE CONTROL REPAIR PARTY.....		
19. LOCATE DAMAGE CONTROL FITTINGS AND EQUIPMENT.....		
20. MAINTAIN DAMAGE CONTROL EQUIPMENT.....		
21. SERVE AS A MEMBER OF A HELO FIRE FIGHTING TEAM.....		
22. INSPECT AND CONDUCT MINOR MAINTENANCE ON BOATS INCLUDING INFLATABLE LIFE-RAFTS AND EQUIPMENT.....		
23. STAND WATCH AS BOATSWAIN'S MATE OF THE WATCH UNDERWAY AND IN PORT.....		
24. READ SIGNAL FLAGS AND PENNANTS.....		
25. RECOGNIZE DISTRESS SIGNALS.....		
26. RECOGNIZE VISUAL STORM WARNING SIGNALS.....		
27. PREPARE AND USE STENCILS FOR PAINTING LETTERS AND NUMERALS.....		
28. BEACH AND RETRACT LANDING CRAFT.....		
29. LOWER AND HOIST SMALL CRAFT.....		
30. READ AND CARE FOR SMALL BOAT COMPASS.....		
31. PREPARE FOR HEAVY SEA CONDITIONS.....		
32. DETERMINE SIZE OF LINE OR WIRE TO HOIST A GIVEN LOAD.....		
33. RIG FOR TOWING AND BEING TOWED.....		
34. SECURE CARGO AND VEHICLES.....		
35. SERVE AS A MEMBER OF THE ANCHORING AND MOORING ALONGSIDE DETAIL.....		
36. SERVE AS BOAT COXSWAIN.....		
37. SERVE AS SIGNALMAN FOR WINCH, CRANE AND UNDERWAY REPLENISHMENT OPERATIONS.....		
38. SPLICE NATURAL FIBER, SYNTHETIC FIBER AND WIRE ROPES.....		
39. SUPERVISE LINE-HANDLING DETAILS.....		
40. USE ROAT HAILS, RECALLS, SALUTES AND ROAT ETIQUETTE.....		
41. USE, MAINTAIN AND STOW RIGGING AND CARGO-HANDLING EQUIPMENT.....		
42. BREAK-OUT AND COIL OR FIGURE-8 WIRE ROPE.....		
43. BREAK-OUT AND FAKE-DOWN LINES.....		
44. LOAD, DISCHARGE AND STOW CARGO.....		
45. COMPUTE MECHANICAL ADVANTAGE FOR BLOCK AND TACKLE.....		
46. COMPUTE SAFE WORKING LOAD FOR LINE, WIRE AND TACKLES.....		
47. RIG EQUIPMENT FOR OVER THE SIDE PRESERVATION.....		
48. DISTRIBUTE AND ATTACH RUNNING RIGGING FOR HANDLING CARGO.....		
49. RIG AND PREPARE FOR FUELING AND REPLENISHMENT AT SEA (SEND/REC).....		
50. OPERATE BOAT DAVITS.....		
51. OPERATE DECK WINCHES INCLUDING TWO WINCHES SIMULTANEOUSLY IN YARD-AND-STAY RIG.....		
52. OPERATE STERN ANCHOR WINCH.....		
53. REEVE VARIOUS BLOCK AND TACKLE ASSEMBLIES.....		
54. SERVE AS A MEMBER OF A BUOY PARTY.....		
55. PERFORM SMALL BOAT OR SHIP RESCUE OPERATIONS.....		
56. SUPERVISE PAINT REMOVAL, SURFACE PREPARATION AND PAINTING DETAILS.....		
57. MANAGE A PAINT SHOP OR PAINT LOCKER.....		

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Occupational Requirements for advancement to: BOATSWAIN'S MATE SECOND CLASS (BM2)	Date	Initials
1. SERVE AS MOUNT CAPTAIN.....		
2. PERFORM PREVENTIVE MAINTENANCE ON GROUND TACKLE.....		
3. DIRECT A DAMAGE CONTROL REPAIR PARTY SUBGROUP.....		
4. SUPERVISE LAUNCHING, STOWING AND REPACKING OF INFLATABLE LIFERAFTS AND EQUIPMENT.....		
5. DIRECT, ASSIGN AND INSTRUCT PERSONNEL IN DECK WATCH SECTION.....		
6. RECOGNIZE STORM INDICATIONS (WEATHER CONDITIONS).....		
7. RIG YARD-AND-STAY RIG FOR CARGO HANDLING.....		
8. SUPERVISE INSPECTION AND MAINTENANCE OF BOATS, INCLUDING INFLATABLE LIFERAFTS AND EQUIPMENT.....		
9. SUPERVISE LOADING, DISCHARGING AND STOWING OF CARGO.....		
10. SUPERVISE MAINTENANCE OF SHIP'S DECK EQUIPMENT.....		
11. SUPERVISE PREPARATION OF GROUND TACKLE FOR MOORING ALONGSIDE AND ANCHORING.....		
12. SUPERVISE PREPARATIONS FOR HEAVY SEA CONDITIONS.....		
13. SUPERVISE RIGGING FOR FUELING AND REPLENISHING AT SEA (SEND/REC).....		
14. SUPERVISE RIGGING OF ACCOMMODATION LADDERS, BOAT BOOMS AND BOAT DAVITS..		
15. SUPERVISE LOWERING AWAY AND HOISTING IN OF SMALL CRAFT.....		
16. MANAGE A BOATSWAIN'S LOCKER OR CANVAS SHOP.....		
17. SUPERVISE GENERAL UPKEEP OF SHIP.....		
18. SUPERVISE SMALL BOAT OR SHIP RESCUE OPERATIONS.....		
19. PLAN AND ORGANIZE PAINTING DETAILS.....		
20. MAINTAIN LOGS.....		
21. MAINTAIN RECORDS.....		
22. COMPLETE MAINTENANCE DATA SYSTEM (MDS) FORMS.....		
23. COMPLETE PLANNED MAINTENANCE SYSTEM (PMS) FEEDBACK REPORTS.....		
24. INVENTORY INSTALLED EQUIPMENT AND VERIFY SPARE PART SUPPORT IN COSAL....		
25. ORDER PARTS AND TOOLS.....		
26. RECOMMEND CHANGES TO THE ALLOWANCE PARTS LIST OR ALLOWANCE EQUIPMENT LIST.....		

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Occupational Requirements for advancement to: BOATSWAIN'S MATE, FIRST CLASS (RM1)	Date	Initials
1. PREPARE PLANNED MAINTENANCE SCHEDULES.....		
2. REVIEW COMPLETED MAINTENANCE DATA SYSTEM (MDS) FORMS.....		
3. DIRECT A DAMAGE CONTROL REPAIR PARTY.....		
4. SUPERVISE PREPARATION FOR CARRYING OUT ANCHORS OF VARIOUS SIZES.....		
5. SUPERVISE PREPARATION FOR MAKING MEDITERRANEAN MOOR.....		
6. SUPERVISE PREPARATION FOR MOORING TO A BUOY.....		
7. SUPERVISE TRANSFER OF PERSONNEL, CARGO AND MAIL.....		
8. SUPERVISE PREPARATION FOR TOWING AND BEING TOWED.....		
9. PLAN AND SCHEDULE WORKLOAD.....		
10. SUPERVISE MAINTENANCE OF LOGS AND RECORDS.....		
11. ORGANIZE AND SUPERVISE THE MANAGEMENT OF A PAINT SHOP OR PAINT LOCKER AND A BOATSWAIN'S LOCKER OR CANVAS SHOP.....		
12. INSTRUCT PERSONNEL IN BOATSWAIN'S MATE'S DUTIES.....		
13. MAINTAIN COSAL.....		
14. POST CHANGES TO SECAS.....		

NAVPERS 1414/4 (RM) (REV 4-86)

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Occupational Requirements for advancement to: CHIEF BOATSWAIN'S MATE (RMC)	Date	Initials
1. SUPERVISE HANDLING AND STOWING OF AMMUNITION AND FLAMMABLES.....		
2. PERFORM QUALITY ASSURANCE INSPECTIONS.....		
3. REVIEW PLANNED MAINTENANCE SCHEDULES.....		
4. VERIFY ACCURACY OF PLANNED MAINTENANCE SYSTEM (PMS) PACKAGE.....		
5. ORGANIZE A DAMAGE CONTROL REPAIR PARTY.....		
6. SUPERVISE MAINTENANCE OF GROUND TACKLE.....		
7. SUPERVISE MOORING WITH ANCHORS AND TO BUOYS.....		
8. MAINTAIN FILES.....		
9. PREPARE REPORTS.....		
10. PREPARE SAILING LIST.....		
11. MAINTAIN TICKLER FILE.....		
12. DEVELOP TRAINING PROGRAMS AND SCHEDULES.....		

NAVPERS 1414/4 (BM) (REV 4-86)

APPENDIX G: PQS RECORD

USS NEVERSAIL (FF 1000)
 DC DIVISION
 0001

POINT TOTALS	INDOCTRINATION		BASIC DC		3-M MAINT. FRS		432 H/D (301)		3-M WORKCENTER		3-M SUPPLY R. (302)		RUN-OFF/DISTRO		43355-54 (3301)		PROGRESS		PROG	
	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
BMC HOPKINS	11-2-86	2-1-86	5-3-86	2-28-86	2-28-86	2-28-86	2-28-86	2-28-86	2-28-86	2-28-86	2-28-86	2-28-86	2-28-86	2-28-86	2-28-86	2-28-86	2-28-86	2-28-86	2-28-86	2-28-86
BMI BROLIN	11-2-86	1-3-86	1-3-86	1-3-86	1-3-86	1-3-86	1-3-86	1-3-86	1-3-86	1-3-86	1-3-86	1-3-86	1-3-86	1-3-86	1-3-86	1-3-86	1-3-86	1-3-86	1-3-86	1-3-86
BM2 CROOK	10-7-86	1-3-86	3-2-86	3-2-86	3-2-86	3-2-86	3-2-86	3-2-86	3-2-86	3-2-86	3-2-86	3-2-86	3-2-86	3-2-86	3-2-86	3-2-86	3-2-86	3-2-86	3-2-86	3-2-86
BM3 SYKES	10-30-86	3-4-86	3-4-86	3-4-86	3-4-86	3-4-86	3-4-86	3-4-86	3-4-86	3-4-86	3-4-86	3-4-86	3-4-86	3-4-86	3-4-86	3-4-86	3-4-86	3-4-86	3-4-86	3-4-86
BM3 BELL	11-5-86	6-1-86	7-2-86	7-2-86	7-2-86	7-2-86	7-2-86	7-2-86	7-2-86	7-2-86	7-2-86	7-2-86	7-2-86	7-2-86	7-2-86	7-2-86	7-2-86	7-2-86	7-2-86	7-2-86


```

> ADM102          *** ADD PQS ASSIGNMENT ***          DATE
> <----- Message ----->
> Name ***** Dept **** EAOS          ** *** **
> Rate/Rank ***** Div **** PRD          *** **
> SSN *** ** **** W/C **** Prospective ** *** **
> ----- *** SAFEGUARD LAW PRIVACY ACT *** -----
>
>
> Area *****
> PQS Title ***** NAVEDTRA *****
> Watch Station Title ***** Watch Station *****
> Points Required **** Oral Board Required *
> Written Test Required * Performance Test Required *
>
> Date Assigned ** *** ** Assigned Duration **
> Passed Performance Test *** ** Total Points To Date ****
> Passed Board *** ** Current Status *
> Passed Written Exam *** ** Status Date ** *** **
> Completion Date
>
> Requal/Refresh Required *** **
>
> ENTER Accept Data          PF13 Aids PF14/15/16 *
>

```

```

> ADM299          *** MODIFY PQS ASSIGNMENT ***          DATE
> < Message
> Name ***** Dept ***** EAOS          ** **
> Rate/Rank ***** Div ***** PRD          ** **
> SSN          *** ** ***** W/C ***** Prospective ** **
>          *** SAFEGUARD IAW PRIVACY ACT ***
>          This data last modified by *** on ** **
>
> Area *****
> PQS Title ***** NAVETRA *****
> Watch Station Title ***** Watch Station *****
> Points Required ***** Oral Board Required *
> Written Test Required * Performance Test Required *
>
> Date Assigned ** ** ** Assigned Duration **
> Passed Performance Test ** ** **
> Passed Board ** ** ** Total Points To Date ****
> Passed Written Exam ** ** ** Current Status *
> Completion Date ** ** ** Status Date ** **
>
> Requal/Refresh Required ** **
>
> ENTER Accept Data          PF13 Aids PF14/15/16 *

```

```

> ADM100 *** DELETE POS ASSIGNMENT *** DATE
> < Message
> ***** Dept ***** EROS ** **
> Name ***** Div ***** PRD ** **
> Rate/Rank ***** W/C ***** Prospective ** **
> SSN ***** ** SAFEGUARD IAW PRIVACY ACT ***
> This data last modified by *** on ** **
>
> <WARNING - THIS POS ASSIGNMENT WILL BE DELETED.
> *****
> Area ***** NAVEDTRA *****
> POS Title ***** < Watch Station *****
> Watch Station Title ***** Oral Board Required *
> Points Required ***** Performance Test Required *
> Written Test Required *
>
> Date Assigned ** ** Assigned Duration **
> Passed Performance Test ** ** Total Points To Date ****
> Passed Board ** ** Current Status *
> Passed Written Exam ** ** Status Date ** **
> Completion Date ** **
>
> Requal/Refresh Required ** **
>
> PF1 Delete PF13 Aids PF15/16 *

```

APPENDIX H: ADM SURVEY RESPONSES

This synopsis is intended to provide an indication of the types of survey responses received applicable to training.

"Change the format for PQS printouts to match standard Navy PQS charts. This would preclude having to transcribe from printouts to charts." (PAC AOE)

"Allow a Department Head or Division Officer the ability to print his particular Department/Division's PQS report." (LANT FFG)

"Query Function . . . It is recommended that this function be available for PQS Watchstations." (LANT FFG)

"That the capability to print PQS reports for a specific watch station, individual, work center, or department be added." (LANT DD)

"Provide the capability within the Query Data Element List to extract PQS data for a specific individual or Watch Station." (LANT DD)

"There is currently no entry area to list schools attended by department/division personnel. Also there is no entry area to list schools scheduled for personnel." (LANT LHA)

"Usefulness of present ADM sys is minimal due to restrictions encountered when limited pre-programmed printing option only. . . . Exorbitant manhours have been expended without work reduction compensation because pre-programmed printing options and data input fields allow no local cmd modifications which preclude ready input and recall of command required information." (LANT AS)

"In order for SNAP ADMIN to effect work/simplification, it must be greatly streamlined to provide a more user-friendly environment" (LANT AS)

"Make all instructions . . . more user friendly. . . . important because a large number of personnel onboard have no previous computer experience. This causes frustration with a subsequent under utilization of SNAP II at it's full capability." (LANT AOR) [Ref. 46]

"Department/Division - This is supposed to be equivalent to the old Division Officer Notebook, but falls considerably short. Division Officers resist using it this because they say they have to keep duplicate records in order to have a full set of files on their men

Include space for training records for divisional and shipwide training.

Include a free form comments section (large to allow documentation of periodic counseling).

The SNAP II shore support establishment should provide automatic updates to the table (referring to PQS) similar to what is presently done with the COSAL from SPCC.

Areas of Further Expansion.

Long range training. This is an obvious candidate, but it is mandatory that it follow current TYCOM training manual guidelines to allow ease of changeover and minimize user resistance." (PAC CG) [Ref. 47]

This particular CG had provided inputs prior to the survey request. The depth and detail provided indicated that a comprehensive review was conducted toward providing inputs which would contribute to fleet readiness and reduce the administrative

APPENDIX I: USER FUNCTIONS/SUB-FUNCTIONS

1. MANPOWER MANAGEMENT

a. Berthing

- 1) Berthing Review/Update
- 2) Print Berthing Assets Report
- 3) Print Berthing List by Division
- 4) Print Ship's On-Board Locator (Alpha Roster)

b. Career Counselor

- 1) Career Counselor Review/Update
- 2) Print Career Counselor's Master List
- 3) Print Career Counselor's Interview Status Report
- 4) Print Career Counselor's Next Interview List
- 5) Print Career Counselor's EAOS List
- 6) Print Professional Development Board Report
- 7) Print Retention Program Eligibility List
- 8) Print Division Retention Program Eligibility List
- 9) Print Personal Retention Program Eligibility List

c. Department/Division

- 1) Department/Division Review/Update
 - a) Ship's Bill Review/Update
 - b) General Data Review/Update
 - c) Personnel Qualification Standards Review/Update

- 2) Department/Division Reports: Menu #1
 - a) Print Division Officer's Notebook
 - b) Print Collateral Duties List by Division
 - c) Print Off-Ship Status Report
 - d) Print Watch Bill List by Division
 - e) Print Prospective Gains Report
 - f) Print Prospective Losses Report
 - g) Print Mess Duty Eligibility List
 - h) Print Recall Bill

- 3) Department/Division Reports: Menu #2
 - a) Print Social Roster
 - b) Print Division Retention Program Eligibility List
 - c) Print Personal Retention Program Eligibility List
 - d) Print Ship's Bill Report
 - e) Print Ship's Bill Worksheet
 - f) Print Ship's Bill Listing by Individual
 - g) Print Watch Quarter and Station Bill
 - h) Print PQS History Report by Watch Station
 - i) Print PQS In-Progress Report by Watch Station
 - j) Print PQS Progress Report by Individual
 - k) Print Personnel Training History Report

d. Lifeboat

- 1) Lifeboat Review/Update
- 2) Print Lifeboat Muster List
- 3) Print Lifeboat Alpha List

e. Medical

- 1) Medical Review/Update
- 2) Print Immunization Status Report
- 3) Print Medical Examination Status Report
- 4) Print Dental Appointment Worksheet
- 5) Print Blind Type Listing
- 6) Print Sickle Cell Hemoglobin Report
- 7) Print Asbestos Screening Report

f. Personnel Office

- 1) Personnel Office Review/Update
 - a) Add Prospective Gain/New Member
 - b) Review/Update Records Already in System
 - c) Place Member in Delete Status
- 2) Personnel Office Reports: Menu # 1
 - a) Print Advancement Worksheet
 - b) Print Advancement Examination Order List
 - c) Print Advancement Examination Muster List
 - d) Print Advancement Eligibility List
 - e) Print Prospective Gains Report
 - f) Print Prospective Losses Report
 - g) Print Recall Bill
 - h) Print Ship's On-Board Locator (Alpha Roster)
- 3) Personnel Office Reports: Menu # 2
 - a) Print Clearance List
 - b) Print Collateral Duties List by Division
 - c) Print Collateral Duties List by Duty

- d) Print Off-Ship Status Report
- e) Print Good Conduct Award Eligibility List
- f) Print Seniority Listing
- g) Print Mess Duty Eligibility List
- 4) Personnel Office Reports: Menu # 3
 - a) Print Watch Quarter and Station Bill
 - b) Print Mailing List Worksheet
 - c) Print Mailing Labels
 - d) Print Social Roster
 - e) Print Birthday List
 - f) Print Delete Status List
 - g) Print Personnel Training History Report
 - h) Print PQS Ship's Summary Report
- g. Watch Bill
 - 1) Watch Bill Review/Update
 - 2) Print Watch Bill List by Watch and Section
 - 3) Print Watch Bill List (Brief)
- h. Security Force
 - 1) Security Force Review/Update
 - 2) Print PRP Screening Status
 - 3) Print PRP Roster
 - 4) Print Exclusion Area Access Worksheet
 - 5) Print Security Force Roster
- i. Schools
 - 1) Schools Review/Update
 - 2) Print Schools Projected Loss/Gain Report

- 3) Print Course Convening Report
 - 4) Print Schools Status Report
 - 5) Print Course Requal/Refresh Required Report
 - 6) Print Personnel with NECs Report
- j. Validation Tables
- 1) Validation Tables Review/Update
 - a) Ship's Bill Table
 - b) Berthing Table
 - c) Lifeboat Table
 - d) Watch Type and Duties Table
 - e) Collateral Duties Table
 - f) Retention Program Table
 - g) Schools Table
 - h) PQS Table
 - i) Security Force Table
 - 2) Print Validation Tables
 - a) Ship's Bill Table List
 - b) Berthing Table List
 - c) Lifeboat Table List
 - d) Watch Type and Duties Table List
 - e) Collateral Duties Table List
 - f) Retention Program Table List
 - g) Schools Table List
 - h) PQS Table List
 - i) Security Force Table List

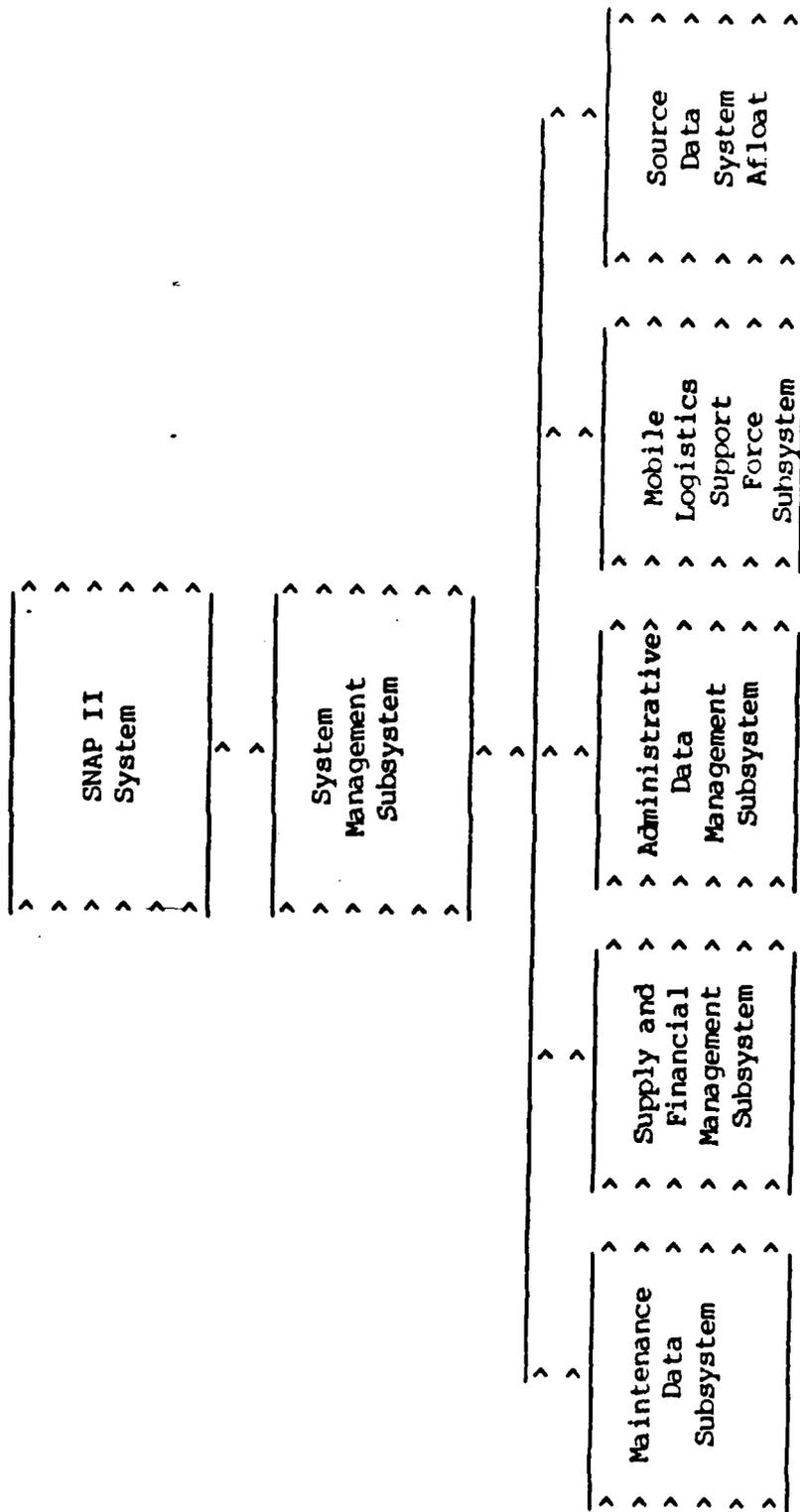
2. QUERY

- a. Build and Execute
- b. Maintain Saved Queries

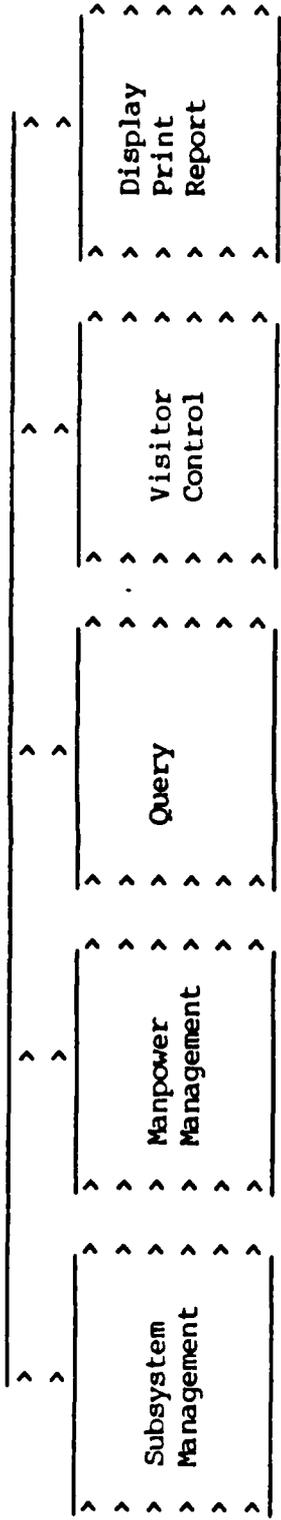
3. VISITOR CONTROL

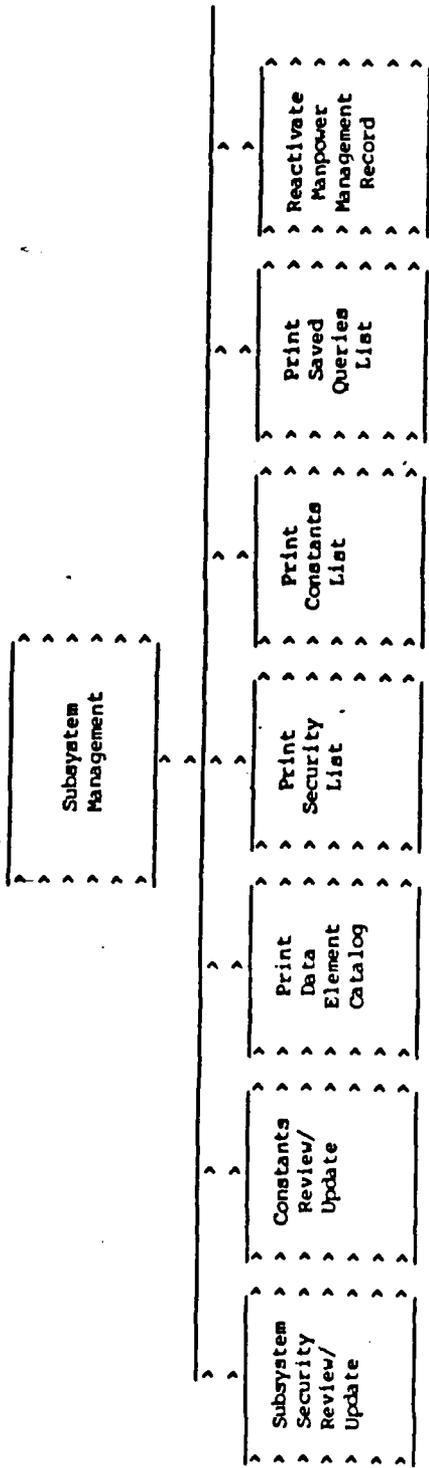
- a. Visitor Control Review/Update
- b. Visitor Control Validation Table Review/Update
- c. Print Visitor Control List by Name
- d. Print Visitor Control List by Organization
- e. Print Visitor Control Validation Table List

APPENDIX J: ADM SUBSYSTEM FUNCTION CHARTS

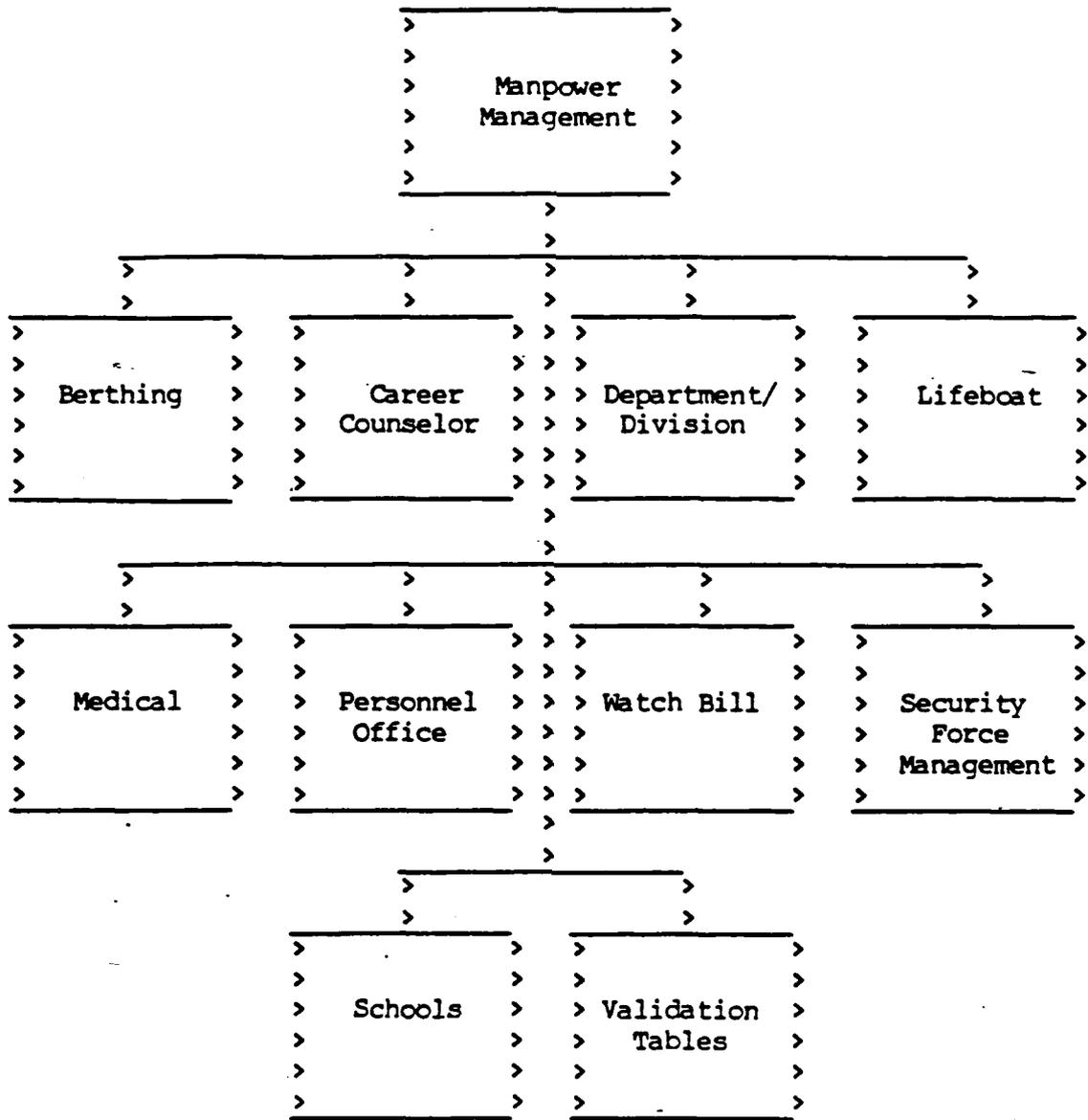


> Administrative
 > Data Management
 > Subsystem
 >
 >
 >





Subsystem Management



Manpower Management


```

>
>
> Career Counselor
>
>
>
>

```

```

>
>
>
> Print
> Career
> Counselor's
> Master List
>
>
>
> Print
> Career
> Counselor's
> Interview
> Status Report
>
>
>
> Print
> Career
> Counselor's
> Next Inter-
> view List
>
>
>
> Print
> Professional
> Development
> Board Report
>
>
>

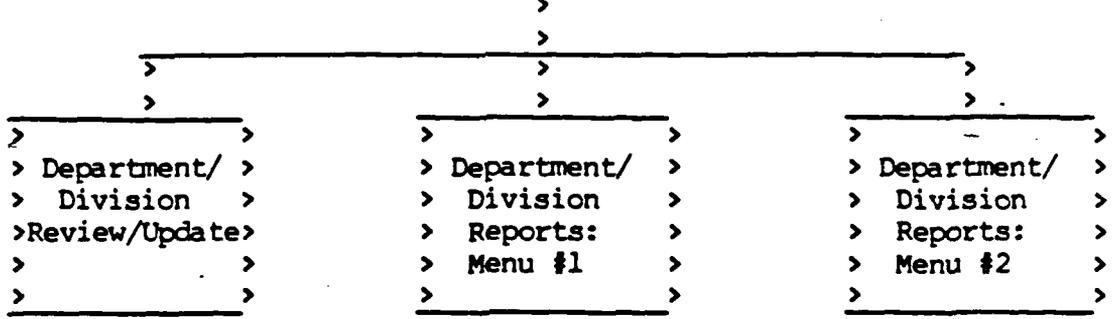
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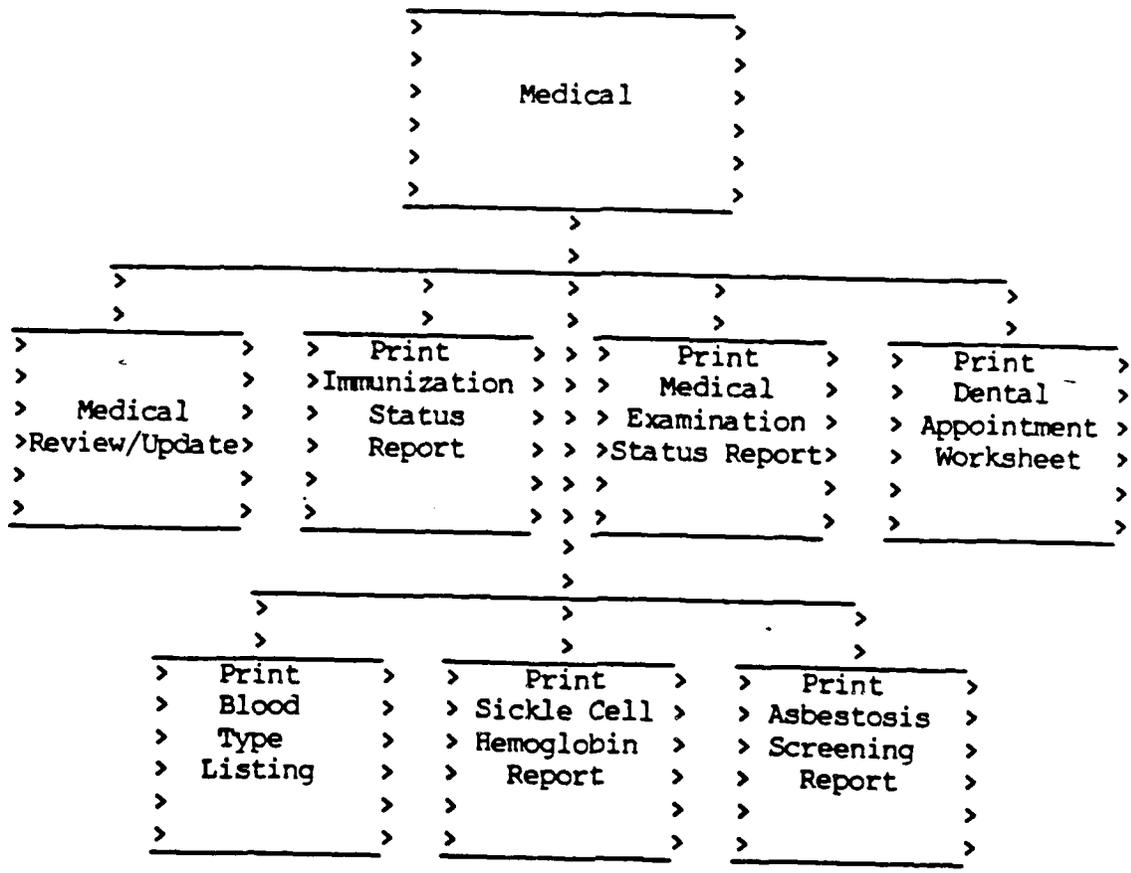
>
>
>
> Print
> Retention
> Program
> Eligibility
> List
>
>
>
> Print
> Division
> Retention
> Program
> Elig. List
>
>
>
> Print
> Personal
> Retention
> Program
> Elig. List
>
>
>

```

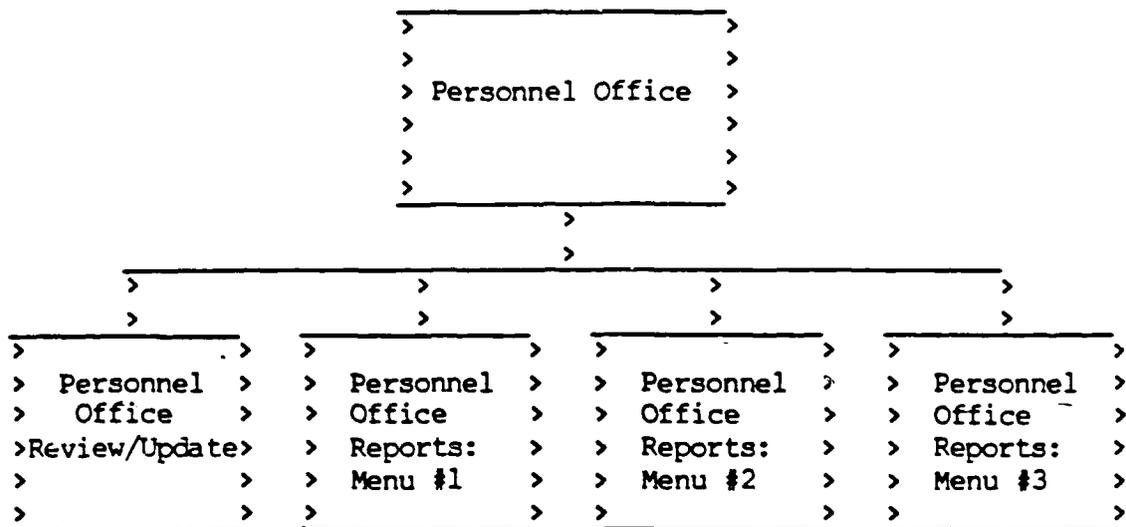
> >
> >
> Department/ >
> Division >
> >
> >



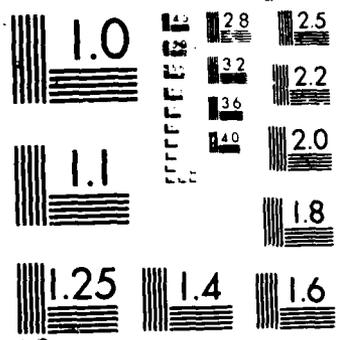
Department/Division



Medical



Personnel Office



```

> _____ >
>                                     >
> Personnel Office >
> Reports: >
> Menu #1 >
> _____ >

```

```

>
> _____ >
>                                     >
>                                     >
>                                     >
> _____ > > _____ > > _____ >
> Print > > Print > > Print >
> Advancement > > Advancement > > Advancement >
> Worksheet > > Examination > > Examination >
> > > Order List > > Muster List >
> > > > > >
> _____ > > _____ > > _____ >
>                                     >
>                                     >
>                                     >
> _____ > > _____ > > _____ > > _____ >
> Print > > Print > > Print > > Print Ship's >
> Prospective > > Prospective > > Recall Bill > > On-Board >
> Gains Report > > Losses Report > > > > Locator >
> > > > > > > > (Alpha >
> > > > > > > > Roster) >
> _____ > > _____ > > _____ > > _____ >

```

Personnel Office Reports: Menu #1


```

> _____ >
>                                     >
> Personnel Office >
>   Reports:      >
>   Menu #3      >
> _____ >

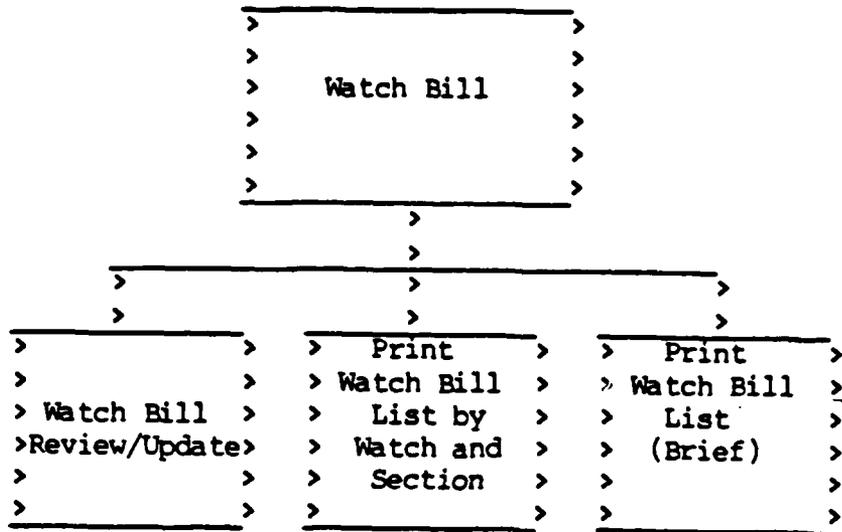
```

```

>
> _____ >
>                                     >
>                                     >
> _____ > > _____ > > _____ > > _____ >
>   Print > >   Print > > >   Print > > >   Print > >
> Watch Quarter > > Mailing List > > > Mailing > > > Social > >
> and Station > > Worksheet > > > Labels > > > Roster > >
>   Bill > > > > > > > > > > > > >
> _____ > > _____ > > _____ > > _____ > >
>                                     >
> _____ > > _____ > > _____ > > _____ > >
>   Print > >   Print > > >   Print > > >   Print > >
> Birthday > > Delete > > > Personnel > > >   PQS > >
> List > > Status List > > > Training > > > Ship's > >
> > > > > > > > > > History Rpt. > > > Summary > >
> > > > > > > > > > Report > > >
> _____ > > _____ > > _____ > > _____ > >

```

Personnel Office Reports: Menu #3



Watch Bill


```
> _____ >
> Validation >
> Tables >
> Function >
> >
> _____ >
```

>

>

```
> _____ >
```

```
> _____ >
> Validation >
> Tables >
> Review/Update >
> >
> _____ >
```

```
> _____ >
> Print >
> Validation >
> Tables >
> >
> _____ >
```

Validation Tables Function

> _____ >
> Display Print >
> Report >
> >
> _____ >

Display Print Report

APPENDIX K: DIVISION OFFICER'S NOTEBOOK REPORT

REPORT NAME: D:\11800_011150C-1-N018000

REPORT NUMBER: MPRO17

SECTIONS: Department/Division (Manpower Management)

PURPOSE: This report will provide three pages on each individual listing all data necessary for personnel management.

SORTS: MMF-DEPARTMENT, MMF-DIVISION, MMF-NAME

SELECT CRITERIA: SSM, Entire Command, Department, Division, or Work-Center

LINE BREAK: None

PAGE BREAK: MMF-NAME

DATA ELEMENTS: MMF-NAME, MMF-SSN, MMF-RATE, MMF-PNEC, MMF-SMEC, MMF-NEC-3, MMF-NEC-6, MMF-PAY-GRADE, MMF-DATE-OF-RANK, MMF-PRO, MMF-EAOS, MMF-EXTENSIONS-OBSERV, MMF-SEX, MMF-GCT, MMF-ARI, TOTAL-GCT-PLUS-ARI, MMF-DOB, MMF-RPT-DATE, MMF-GCA-ELIG-DATE, MMF-DEPARTMENT, MMF-DIVISION, MMF-WORK-CENTER, MMF-ED-YEARS, MMF-MESS-OUT-DATE, MMF-COMPARTMENT, MMF-BUNK, MMF-LOCKER, MMF-DESIGNATOR, MMF-SWO-ESMS, MMF-MD-BODY-FAT, MMF-ASVAB, MMF-ASVAB-TFORM-NUM, MMF-TIR-DATE, MMF-AV-RATE, MMF-MIL-CRS-COMP, MMF-MIL-EXAM-PASSED, MMF-PROF-CRS-COMP, MMF-PAR-COMPLD, MMF-SCHOOL, MMF-DTH-CRS-COMP, MMF-TIR-ELIG, MMF-REC-ADV, MMF-ADV-EXAM-AUTH, MMF-CAREER-INTENT, MMF-CC-COMMENT1, MMF-CC-COMMENT2, MMF-CC-COMMENT3, MMF-CC-COMMENT4, MMF-CC-COMMENT5, MMF-CC-COMMENT6, MMF-CC-COMMENT7, MMF-CC-COMMENT8, MMF-CC-COMMENT9, MMF-CC-COMMENT10, MMF-REPORTING-INT, MMF-GROWTH-INT, MMF-DETACHING-INT, MMF-MONITOR-OB-INT, MMF-ANNUAL-INT, MMF-MONITOR-17-INT, MMF-RETENTION-INT, MMF-RETIRE-INT, MMF-INCENTIVE-INT, MMF-SPECIAL-INT, MMF-NEXT-INT-TYPE, MMF-NEXT-INT-DATE, MMF-PRO-DEV-BRO-REASON, MMF-PRO-DEV-BRO-DATE, MMF-PRO-DEV-BRO-APPROVAL, MMF-PL-DATE, MMF-PL-REASON, MMF-CL-DATE, MMF-CL-BASIS, MMF-CL-AGENCY, MMF-CL-LEVEL, MMF-ACCESS-LEVEL-DATE, MMF-ACCESS-LEVEL, MMF-COLL-DUTY (1-10), MMF-COLL-DUTY-DATE (1-10), MMF-MARITAL-STATUS, MMF-SPOUSE-NAME, MMF-NUM-CHILD, MMF-MLIST-NAME, MMF-RECALL-PHONE, MMF-MLIST-STREET, MMF-RECALL-STREET, MMF-MLIST-CITY, MMF-RECALL-CITY, MMF-MLIST-STATE, MMF-MLIST-ZIP, MMF-RECALL-STATE, MMF-RECALL-ZIP-CODE, MMF-MLIST-COUNTRY, MMF-OD-COMMENT1, MMF-OD-COMMENT2, MMF-OD-COMMENT3, MMF-OD-COMMENT4, MMF-OD-COMMENT5, MMF-OD-COMMENT6, MMF-OD-COMMENT7, MMF-OD-COMMENT8, MMF-OD-COMMENT9, MMF-OD-COMMENT10, QVF-POS-AREA, QVF-POS-TITLE, QVF-POS-WATCH-STATION, QVF-DATE-ASSIGNED, QVF-STATUS-FLAG, QVF-STATUS-DATE, SCVF-SCHOOL-TITLE, SCVF-SCHOOL-CAMTRAC-NUMBER, SCVF-APPL-DEPT (1-10), SCVF-CONVENE-DATE, SCVF-SCHOOL-LEN, SCVF-SCHOOL-LEN-IND, SCVF-SCHOOL-LOC, SCVF-SCHOOL-STATUS, SCVF-SCHOOL-STATUS-DATE

SCREEN: ADM190

REPORT FORMAT: See Next three Pages

Division Officer's Notebook (Page 3)
continued

Safeguard IAM Privacy Act and/or FOIA

Date: 99 XXX 99(99999)

NAME: XXXXXXXXXXXXXXXXXXXX RATE: XXXXX DEPT: XXXX DIV: XXXX WORK CENTER: XXXX

PQS Area	PQS Title	PQS Watch Station	
	Date Assigned	Status	Status Date
XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXX	99XXX99	X	99XXX99
XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
	99XXX99	X	99XXX99

Course Title										Course Number
Dept1	Dept2	Dept3	Dept4	Dept5	Dept6	Dept7	Dept8	Dept9	Dept10	
										Course
										Status
										Convenc
										Len
										Location
										Stat
										Date
XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXX									
XXXX	99XXX99									
										999 X
XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXX									
XXXX	99XXX99									
										999 X

APPENDIX L: PQS REPORTS

REPORT NAME: PQS-Requal/Requal-Requal-Requal

REPORT NUMBER: GMR212

SECTIONS: Training (Manpower Management)

PURPOSE: This report will show those personnel who require a requalification or a refreshar on a particular PQS watch station.

SORTS: QPF-PQS-WATCH-STATION, QPF-REQUAL-DATE, MMF-DEPARTMENT, MMF-DIVISION, MMF-NAME

SELECT CRITERIA: PQS-REQUAL-DATE greater than or equal to a selected month and year, if blank all crew members will print

LINE BREAK: None

PAGE BREAK: None

DATA ELEMENTS: QPF-REQUAL-DATE, QPF-PQS-WATCH-STATION, QPF-PQS-WATCH-STATION-NUMB, MMF-DEPARTMENT, MMF-DIVISION, MMF-NAME, MMF-RATE

SCREEN: ADM194

REPORT FORMAT:

REQUAL DATE	WATCH STATION	MS NUMBER	DEPT	DIV NAME	RATE
XXXX99	XXXXXXXXXXXXXXXXXXXX	XXXXX	XXXX	XXXX XXXXXXXXXXXXXXX	XXXXX
			XXXX	XXXX XXXXXXXXXXXXXXX	XXXXX
			XXXX	XXXX XXXXXXXXXXXXXXX	XXXXX
	XXXXXXXXXXXXXXXXXXXX	XXXXX	XXXX	XXXX XXXXXXXXXXXXXXX	XXXXX
XXXX99	XXXXXXXXXXXXXXXXXXXX	XXXXX	XXXX	XXXX XXXXXXXXXXXXXXX	XXXXX
			XXXX	XXXX XXXXXXXXXXXXXXX	XXXXX
			XXXX	XXXX XXXXXXXXXXXXXXX	XXXXX

REPORT NAME: PQS-IO=PC00C053-8000C1-by-WAIED-Station

REPORT NUMBER: GMR209

SECTIONS: Department/Division, Training (Manpower Management)

PURPOSE: This report will provide a listing of those personnel who are presently in progress with a certain watch station PQS.

SORTS: QVF-PQS-AREA, QVF-PQS-TITLE, QVF-PQS-WATCH-STATION, MMF-DEPARTMENT, MMF-DIVISION, MMF-NAME

SELECT CRITERIA: QPF-STATUS-FLAG EQUALS "I"

LINE BREAK: None

PAGE BREAK: QVF-PQS-WATCH-STATION

DATA ELEMENTS: QVF-PQS-AREA, QVF-PQS-TITLE, QVF-PQS-WATCH-STATION, QVF-PQS-POINTS-REQD, QVF-PQS-ORAL-BO-REQD, QVF-WRITTEN-EXAM-REQD, QVF-PERFORMANCE-TEST-REQD, QVF-PQS-WATCH-STATION-NUMB, MMF-DEPARTMENT, MMF-DIVISION, MMF-NAME, QPF-PQS-DURATION, DURATION-TODATE, X-TIME-COMPLETION, QPF-POINTS-TD-QATE, POINTS-PERCENT, QPF-PQS-BOARD-PASS-DATE, QPF-PQS-EXAM-PASS-DATE, QPF-PERFORMANCE-TEST-DATE, QPF-STATUS-FLAG, QPF-STATUS-DATE

COMPUTED ELEMENTS: DURATION-TODATE, X-TIME-COMPLETION, POINTS-PERCENT

REPORT FORMAT:

PQS AREA: XXXXXXXXXXXXXXXXXXXX PQS TITLE: XXXXXXXXXXXXXXXXXXXX PQS WATCH STA: XXXXXXXXXXXXXXXXXXXX
POINTS REQD: 9999 ORAL BOARD: X EXAM: X PERFORMANCE TEST: X WATCH STA NUM: XXXX

DEPT	OIV	NAME	ASSIGNED DURATION	X TIME COMPLETED	POINTS TODATE	X POINTS COMPLETED	ORAL	WRIT	PERF	STATUS
XXXX	XXXX	XXXXXXXXXXXXXX	99	999	9999	999	XXXX	XXXX	XXXX	99XXXX
XXXX	XXXX	XXXXXXXXXXXXXX	99	999	9999	999	XXXX	XXXX	XXXX	99XXXX
XXXX	XXXX	XXXXXXXXXXXXXX	99	999	9999	999	XXXX	XXXX	XXXX	99XXXX
XXXX	XXXX	XXXXXXXXXXXXXX	99	999	9999	999	XXXX	XXXX	XXXX	99XXXX

REPORT NAME: PQS-PC08C033-8808C1-0X-1001X10001

REPORT NUMBER: GMR210

SECTIONS: Department/Division, Training (Manpower Management)

PURPOSE: This report will act as a counseling tool to show the individual all the PQS presently assigned to him, his progress on each watch station, and that PQS he has completed.

SRCTS: MMF-DEPARTMENT, MMF-DIVISION, MMF-NAME, QPF-COMP-DATE, QVF-PQS-AREA

SELECT CRITERIA: None

LINE BREAK: None

PAGE BREAK: MMF-NAME

DATA ELEMENTS: MMF-NAME, MMF-RATE, MMF-PRD, MMF-EAOS, MMF-EXTENSIONS-OBSERV, MMF-PL-DATE, MMF-DEPARTMENT, MMF-DIVISION, MMF-WORK-CENTER, QVF-PQS-AREA, QVF-POS-TITLE, QVF-POS-WATCH-STATION, QVF-PQS-ORAL-80-REQD, QVF-WRITTEN-EXAM-REQD, QVF-PERFORMANCE-TEST-REQD, QVF-PQS-POINTS-REQD, QVF-PQS-WATCH-STATION-NUMB, QVF-DATE-ASSIGNED, QPF-PQS-DURATION, DURATION-TODATE, X-TIME-COMPLETION, QPF-POINTS-TO-DATE, POINTS-PERCENT, QPF-PQS-BOARD-PASS-DATE, QPF-POS-EXAM-PASS-DATE, QPF-PERFORMANCE-TEST-DATE, QPF-STATUS-FLAG, QPF-STATUS-DATE, QPF-COMP-DATE

COMPUTED ELEMENTS: DURATION-TODATE, X-TIME-COMPLETION, POINTS-PERCENT

REPORT FORMAT:

NAME: ***** RATE: ***** PRD: ***** EAOS: ***** EXT: 99 PLO: 99***** DEPT: ***** DIV: ***** WORK CENTER: *****

PQS AREA	PQS TITLE	DATE ASSIGNED	DURATION TODATE	X TIME COMPLETED	POINTS TODATE	X POINTS COMPLETED	ORAL BOARD EXAM TEST DATE	WRIT PERFORM TEST DATE	STATUS DATE	COMPLETE DATE	BOARD EXAM TEST POINTS		M-S. NUMBER
											REQD	RECD	
*****	*****	99	99	999	999	999	*****	*****	*****	*****	*****	*****	*****
*****	*****	99	99	999	999	999	*****	*****	*****	*****	*****	*****	*****
*****	*****	99	99	999	999	999	*****	*****	*****	*****	*****	*****	*****

REPORT NAME: PQS-MAJESTEX-BERGESS-DX-MAILCD-SJ031600
REPORT NUMBER: GMR208
SECTIONS: Department/Division, Training (Manpower Management)
PURPOSE: This report will provide a listing of those personnel who have completed a selected watch station PQS.
Sorts: QVF-PQS-AREA, QPF-PQS-TITLE, QPF-PQS-WATCH-STATION, MMF-DEPARTMENT, MMF-DIVISION, MMF-NAME
SELECT CRITERIA: PQS-COMP-DATE (COMPLETION DATE) equals non-blank
LINE BREAK: QVF-PQS-AREA
PAGE BREAK: QPF-PQS-WATCH-STATION
DATA ELEMENTS: QVF-PQS-AREA, QPF-PQS-TITLE, QPF-PQS-WATCH-STATION, MMF-DEPARTMENT, MMF-DIVISION, MMF-NAME, MMF-RATE, MMF-PL-DATE

REPORT FORMAT:

```

PQS      PQS      PQS
AREA     TITLE     WATCH STATION
-----
DEPT DIV  NAME     RATE     LOSS DATE  PLANNED
-----
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXX XXXX  XXXX/XXX/XXXX  XXXX      99 XXX 99
  
```



```

> ADM096          *** ADD SCHOOL PERSONNEL DATA ***      DATE
> <----- Message ----->
> Name ***** Dept **** EAOS      ** **
> Rate/Rank ***** Div **** PRD      ** **
> SSN *** ** ** W/C **** Prospective ** **
> ----- ** SAFEGUARD IAM PRIVACY ACT *** -----
>
> Course Title
> *****
> CANTRAC Number *****
> Applicable NEC ****
> Course Length *** in Days/Weeks/Months *
> Mission Area ****
>
> Convene Date ** ** **
> Location *****
> Requal/Refresh Required *** **
>
> Status * Date ** **
> (A=Assigned, I=In Progress, C=Completed)
>
> ENTER Accept Data . PF13 Aids PF14/15/16 *

```

```

> ADM095      *** MODIFY SCHOOL PERSONNEL DATA ***      DATE  --
> <----- Message ----->
> Name ***** Dept **** EAOS      ** *** **
> Rate/Rank ***** Div **** PRD      ** *** **
> SSN *** ** ** W/C **** Prospective ** *** **
> ----- *** SAFEGUARD IAW PRIVACY ACT *** -----
> This data last modified by *** on ** *** **
>
> Course Title
> *****
>
> CANTRAC Number *****
> Applicable NEC *****
> Course Length *** in Days/Weeks/Months *
> Mission Area ***
>
> Convene Date ** *** **
> Location *****
> Requal/Refresh Required *** **
>
> Status * Date ** *** **
> (A=Assigned, I=In Progress, C=Completed)
>
> ENTER Accept Data      PF13 Aids PF14/15/16 *
>

```

```

> ADM997      *** DELETE SCHOOL PERSONNEL DATA ***      DATE
><
> Name ***** Message ***** Dept ***** EAOS      ** *** **
> Rate/Rank ***** Div ***** PFD      ** *** **
> SSN ***** W/C ***** Prospective ** *** **
>
> ***** ** SAFEGUARD IAW PRIVACY ACT ***
> This data last modified by *** on ** *** **
>
> <WARNING - THIS SCHOOL RECORD WILL BE DELETED.>
>
> <Course Title
> *****
> CNTRAC Number *****
> Applicable NEC *****
> Convene Date ** *** **
> Course Length *** in Days/Weeks/Months *
> Mission Area ***
> Location *****
> Requal/Refresh Required *** **
>
> Status * Date ** *** **
> (A=Assigned, I=In Progress, C=Completed)
>
> PF1 Delete      PF13 Aids      PF15/16 *

```


REPORT NAME: SC9991A-PC9J9E189-L9999/GRAD-BOB9E1-PAE9-2

REPORT NUMBER: GMR205

SECTIONS: Training

PURPOSE: This report will be a projected loss/gain worksheet showing all personnel having any association with a school or its related NEC.

SORTS: RCD-TYPE, SCVF-SCHOOL-TITLE

SELECT CRITERIA: The prospective gain or loss date non-zeroes

LINE BREAK: SCVF-SCHOOL-TITLE

PAGE BREAK: None

DATA ELEMENTS: SCVF-SCHOOL-TITLE, SCVF-SCHOOL-CANTRAC-NUMBER, SCVF-SCHOOL-APPL-NEC, SCVF-GRADS-REQ, SCVF-MISSION-AREA, SCVF-APPL-DEPT (1-10), MMF-DIVISION, MMF-NAME, MMF-RATE, MMF-PRO, MMF-EADS, MMF-EXTENSIONS-OBSERV, MMF-PL-DATE, MMF-PG-DATE, SPF-CONVENE-DATE, SPF-SCHOOL-LOC, SCVF-SCHOOL-LEM, SCVF-SCHOOL-LEN-IND, SPF-SCHOOL-STATUS, SPF-SCHOOL-STATUS-DATE

SCREEN: ADM196

REPORT FORMAT:

COURSE TITLE		COURSE NUMBER	APPLIC MEC	GRADS REQD	MISSION AREA							
APPLIC DEPT(1)	APPLIC DEPT(2)	APPLIC DEPT(3)	APPLIC DEPT(4)	APPLIC DEPT(5)	APPLIC DEPT(6)	APPLIC DEPT(7)	APPLIC DEPT(8)	APPLIC DEPT(9)	APPLIC DEPT(10)			
DIV NAME	RATE	PRO	EAOS	SERV	EXT	PLO	PCD	COURSE CONVENE	COURSE LOCATION	COURSE LEM/IND	STAT	DATE

```

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXX  XXX  XXX
XXXX XXXXXXXXXXXXXXX  XXXX  XXX99  99XXXX99  99  99XXXX99  99XXXX99  99XXXX99  99XXXX99  99XXXX99  99XXXX99  99XXXX99  99XXXX99

```


APPENDIX O: SCHOOLS VALIDATION TABLE

```

> ADM152 *** ADD SCHOOLS VALIDATION TABLE *** DATE
> < Message
>
>
> Course Title
> *****
>
> CANTRAC Number *****
> Applicable NEC ****
> Course Length *** in Days/Weeks/Months *
> Recual/Refresh Required ** (in Months)
>
> Applicable Dept
> 1 2 3 4 5
> **** **** **** **** ****
> **** **** **** **** ****
>
> Quota Required By * (TYOON, EDVR, General)
> Number Of Graduates Required ***
> Mission Area ***
> Remarks *****
>
> ENTER Accept Data PF13 Aids PF14/15/16 *
  
```

```

> ADM151      *** MODIFY SCHOOLS VALIDATION TABLE ***      DATE
> <----- Message -----<
>
> Course Title
> *****
> CANTRAC Number *****
> Applicable NEC *****
> Course Length *****
> Requal/Refresh Required *****
>
> Applicable Dept
> 1 ***** 2 ***** 3 ***** 4 ***** 5 *****
> *****
>
> Quota Required By * (TYCOM, EDVR, General)
> Number Of Graduates Required ***
> Mission Area *****
> Remarks *****
>
> ENTER Accept Data
>
> PF13 Aids PF14/15/16 *

```

```

> ADM153      *** DELETE SCHOOLS VALIDATION TABLE ***      DATE.
> <----- Message -----<
>
> <WARNING -- THIS SCHOOL WILL BE DELETED.<
>
> <Course Title
> *****
>
> CANTRAC Number      *****
> Applicable NEC      ****
> Course Length      *** in Days/Weeks/Months *
> Requal/Refresh Required ** (in Months)
>
>
> Applicable Dept
>
> 1 2 3 4 5
> **** * * * * *
> **** * * * * *
>
> Quota Required By * (TYCOM, EDVR, General)
> Number Of Graduates Required ***
> Mission Area ***
> Remarks *****
>
>
> PF1 Delete      PF13 Aids      PF15/16 *
>

```



```

> ADM161      *** MODIFY PQS VALIDATION TABLE ***      DATE
> <----- Message ----->
>
> PQS Area      ***** PQS Title *****
> Watch Station No. ***** NAVEDTRA No. *****
> Watch Station No. ***** Mission Area *****
>
> Total Personnel Required ***
> Total Points Required *****
> Oral Board Required *
> Written Exam Required *
> Performance Test Required *
> Requal/Refresh Required ** (in Months)
>
> Applicable to:
> Departments
>
> Divisions
>
> ENTER Accept Data
>
> PF13 Aids PF14/15/16 *

```

```

> ADM163      *** DELETE POS VALIDATION TABLE ***      DATE
> << ----- Message -----
> <WARNING - THIS POS WATCH STATION WILL BE DELETED.<
> POS Area ***** POS Title *****
> Watch Station ***** NAVEDTRA No. *****
> Watch Station No. ***** Mission Area *****
> Total Personnel Required ***
> Total Points Required ****
> Oral Board Required *
> Written Exam Required *
> Performance Test Required *
> Requal/Refresh Required ** (in Months)
> Applicable to:
> Departments *****
> Divisions *****
> PF1 Delete PF13 Aids PF15/16 *

```

APPENDIX Q: NAVMEC SURVEY FORMS

OPERATIONAL AUDIT DATA		ANALYST'S SIGNATURE _____		COMPLETION DATE				
NAVMEDDET SD 5310'S (Rev. 7-84)		ACTIVITY		PAGE				
DIVISION		RATING		1 of 5				
TASK ELEMENT TITLE (A)	NO. OF PERIODS (B)	SKILL LEVEL REQ. (C)	WORK UNIT (D)	TASK PERIODICITY (E)	TASK FREQUENCY (F)	ALLOWED MAN HOURS		
						TIME FACTOR (G)	PER WEEK (8x50-M) (M)	TOTALS (I)
ADMINISTRATIVE SUPPORT								
INDIRECT								
1. Supervision.								
a. Supervise personnel.								
(1) Direct, control and evaluate work center activities.		POC	Daily					
(2) Prepare schedules.		PO1	Schedule					
(3) Resolve personal problems.		POC	Resolution					
b. Accomplish personnel administrative duties.								
(1) Indoctrinate new personnel. (Do not include time for command orientation.)		POC	Orientation					
(2) Rate performance.								
(a) Counsel personnel.		POC	Session					
(b) Prepare enlisted performance reports.		POC	Report					
(c) Review enlisted performance reports.		POC	Report					
(d) Advance in rating.								
1 Administer PAR.		PO1	PAR					
2 Administer PQS.		PO1	PQS					
3 Proctor exams. (Includes E-3 exams and military leadership exams.)		POC	Exam					

OPERATIONAL AUDIT DATA
NAVMEDDET 50 5310'S (REV. 7-84)

ANALYST'S SIGNATURE

TASK ELEMENT TITLE (A)	NO. PERS. REQ. (B)	SKILL LEVEL REQ. (C)	WORK UNIT (D)	RATING		COMPLETION DATE	PAGE
				TASK PERIODICITY (E)	TASK FREQUENCY (F)		
ACTIVITY		DIVISION		TIME FACTOR (G)	PER WEEK (H)	TOTALS (I)	
(j) Nominate personnel for awards.		POC	Nomination				2 of 5
c. Inspect facilities.		POC	Inspection				
d. Investigate accidents and incidents.		POC	Investigation				
e. Perform escort duties.		SN	Escort				
f. Process special request shifts.		POC	Chit				
g. Prepare and process work requests for work not accomplished by ship's personnel.		POC	Work request				
h. Administration.							Category 11 Man-hour Totals
a. Draft communications.							
(1) Letter.		POC	Letter				
(2) Message.		POC	Message				
(3) Report.		POC	Report				
b. Type communications.							
(1) Letter.		SN	Letter				
(2) Message.		SN	Message				
(3) Report.		SN	Report				
(4) Plans, schedules, rosters.		SN	Roster				

OPERATIONAL AUDIT DATA

NAVWECDET 5310'S (Rev. 7-84)

ANALYST'S SIGNATURE

TASK ELEMENT TITLE (A)	NO. PERS. REQ. (B)	SKILL LEVEL REQ. (C)	WORK UNIT (D)	RATING		COMPLETION DATE		
				TASK PERIODICITY (E)	TASK FREQUENCY (F)	PAGE	ALLOWED MAN HOURS	
						TIME FACTOR (G)	PER WEEK (E+F+G) (H)	TOTALS (I)
(5) Enlisted performance evaluation reports.		SN	Report					
c. Incoming and outgoing communications. (1) Review and process incoming classified and unclassified communications. (2) Review and process outgoing classified and unclassified communications.		POC	Daily					
d. Maintain classified and unclassified correspondence file. (1) Maintain classified and unclassified file.		SN	Item					
(2) Dispose of records.		SN	Record					
e. Maintain log or register.		SN	Log/Register					
f. Maintain classified material. (1) Inventory classified material. (2) Destroy classified material.		PO2	Inventory					
g. Maintain classified and unclassified publication file. (1) Determine requirement and order administrative publication. (2) Maintain publications and directives.		PO2	Destruct					
h. Maintain department/division recall bill.		SN	Requisition					
i. Operate duplicating machine.		SN	Publications					
j. Collate, assemble and fasten copies manually.		POC	Bill					
		SN	Item					
		SN	Process					

APPENDIX R: STATISTICAL ANALYSIS OF NAVMEC SURVEYS

	MEAN	MEDIAN	STDEV	SEMEAN
TASK PERIODICITY	0.9688	1.0000	0.4118	0.0232
TASK FREQUENCY	10.7770	8.0000	9.6430	0.5440
TIME FACTOR	0.9586	0.0830	0.7327	0.0041
PER WEEK	0.8870	0.5250	1.0014	0.0572
MINUTES	5.7550	4.3910	0.2480	
TOTAL MINUTES				
PER WEEK	56.3400	32.5000	65.6300	3.7000

	MINIMUM VALUE	MAXIMUM VALUE
TASK FREQUENCY	0.0380	3.0000
TASK FREQUENCY	1.0000	60.0000
TIME FACTOR	0.0170	0.5000
PER WEEK	0.0100	9.0000
MINUTES	1.0000	30.0000
TOTAL MINUTES PER		
WEEK	1.0000	540.0000

Total Frequency indicates how often the task is done.
 (0.038 = semi-annually, 0.231 = monthly, 1.00 = once per week, 3.00 = 3X per week)

Task Frequency indicates the number of records maintained.

Time Factor indicates the amount of time required to maintain one training record. (0.017 = 1.00, 0.09586 = 5.755, 0.083 = 5.000, 0.500 = 30.000)

Per Week indicates total time (in minutes) expended per week maintaining all training records. Per Week value = Total frequency * Task factor * Time factor. (0.0100 < 1 minute per week, 0.525 = 31.5, 0.8870 = 53.5, 9.0000 = 540)

Minutes and Total minutes per week reflect conversion from frequency values used in survey reports to minutes.

APPENDIX S: COMTRALANT RECURRING DISCREPANCIES

- Administrative programs were not being updated or managed as required by higher authority. Ships were not familiar with governing instructions for admin programs (OPNAVINST 3120.32A, OPNAVNOTE 3120, COMNAVSURFLANTINST 3540.5).
- Individual training records were not maintained in accordance with OPNAVINST 3120.32a.
- Prerequisite training course had not been completed as required (COMNAVSURFLANTINST C3500.2C/CH 6, Pg 6-1).
- Personnel Qualification Standards were not established or functioning for those watch stations and systems for which PQS was established in accordance with NAVEDTRA 10061-AQ.
- Department/division training teams were not established or functioning (COMNAVSURFLANTINST C3500.2C/2020 B-3, pg 2-3).
- Prerequisite training was incomplete and/or training program was incomplete. (COMTRALANT OPORD 2000; COMNAVSURFLANTINST C3500.2C)
- Ship failed to meet minimum requirements of PQS achievements. (OPNAVINST 3540.34B)
- An effective long range first aid training program was not promulgated for non-medical personnel. (COMNAVSURFLANTINST 6000.1)
- First aid training for non-medical personnel was not documented in the Medical Department Training Log and Journal. (COMNAVSURFLANTINST 6000.1 ARTS 2212 and 3106)
- Shortages of qualified personnel or personnel with improper Navy Enlisted Classification (NEC) code existed. (COMNAVSURFLANTINST C3500.2C)
- No active Communications Security (COMSEC) training program existed; Signals Security (SIGSEC) training was not received. (CINCLANTFLT OPORD 2000; CINCLANTFLTINST C2200.1)
- Numerous examples where required number of school graduates not onboard or training programs not established.

APPENDIX T: PACIFIC FLEET PEB TRAINING EVALUATION SUMMARY

These questions are a sampling those used in evaluating the administration of training programs. These questions are not all inclusive of those used by CINCPAC PEB. Refer to CINCPACFLTPEBINST 3540.2A²⁶ for a complete listing of questions.

- Has the command implemented the respective TYCOM training instruction?

- Are the following schedules being maintained?

- * Command Long-range Training Schedule
- * Command Quarterly Training Schedule
- * Command Monthly Training Schedule
- * Command Weekly Training Schedule
- * Department Long-Range Training Schedule
- * Department Quarterly Training Schedule
- * Department Monthly Training Schedule

- Does the Department Quarterly Training schedule provide a ready Reference to the Status of the Engineering Department Training?

- Will the training program improve operational proficiency?

- Will the training Program develop individual crew member capabilities

- Is uncompleted training being rescheduled? Is there feedback on training scheduled, but not accomplished provided at the Planning Board for Training?

²⁶ Commander, Naval Surface Force, U.S. Pacific Fleet Instruction 3540.2A, Subject: Propulsion Plant Examining Procedures for Light-Off Examinations (LOES), 22 Apr 1986, pp. 4-1-39 - 4-1-42.

APPENDIX U: SUMMARY OF ATLANTIC EMTT QUARTERLY REPORTS

Abstracts follows of Atlantic Fleet EMTT quarterly

Summary reports:

- Ships refuse to follow COMNAVSURFLANINST 3500.9 (series) and the NAVEDTRA PQS managers guide. PQS boards are nothing more than inspection showpieces and not working documents. Computer software (SNAP II, Wang, Zenith) does not provide adequate spreadsheets or graphics to fully support PQS.
- PQS is not being administered as delineated by higher authority.
- Training programs are too general in nature and training is the first to slip when a crisis arises.
- Although training programs have shown improvement in planning, conducting and rescheduling missed training, the problem areas of the machinery spaces watchstanders are the direct result of inadequate training.
- Additional emphasis is needed by ships on the development and content of ship and engineering department long range training plans. A majority of ships visited lack long range training plans. Those that do exist often lack areas of training specified in OPNAVINST 3120.32A (SORM) and COMNAVSURFLANINST C3500.2 (MTP). . . . The guidance to ships should emphasize what is currently required for long and short range training plans, and the importance of standardization among divisions.
- Areas considered to be at a consistently low level: Training and PQS: Both programs are routinely in arrears in the areas of completed training documentation and development of realistic long range training plans. Departmental Training plans, reflecting the guidance of OPNAVINST 3120.32A, are rarely available for review. Divisional training procedures sometimes vary greatly between each other and are obviously not getting the proper supervisory attention needed. Too often the responsibility for the program is delegated to the E-4/E-5 level. QA review is not occurring.
- Areas considered to be at a consistently unsatisfactory level: Watchstation PQS and Training - Lack of documentation for training accomplished. . . . Insufficient training scheduled/unrealistic amount scheduled without regard to the ship's operating schedule.

APPENDIX V: PQS INTERIM QUALIFICATION LETTER

Date _____

From: _____ Department Head

To: Commanding Officer, USS _____

Subj: Interim Qualification for Watchstation

Ref: (a) PQS Management Guide (NAVEDTRA 43100-1C)

1. In accordance with reference (a), _____ (Name/Rate) is interimly qualified as _____ (Name of Watchstation).

2. This interim qualification is based upon _____ (Name/Rate) having met the requirements established by reference (a) and having demonstrated adequate knowledge of the duties and responsibilities of _____ (Name of Watchstation) through written/oral examinations administered _____ (Date).

3. For the purposes of this interim qualification the following qualification requirements have been deferred:

_____ POINTS/PCT OF FUNDAMENTALS

_____ POINTS/PCT OF SYSTEMS

_____ POINTS/PCT OF WATCHSTATION

Additionally, the following qualification have been deferred.

4. The above listed deferred qualifications will be completed by _____ (Date). At that time _____ (Rate/Name) will be designated qualified as _____ (Name of Watchstation).

Date

From: Commanding Officer, USS _____

To: _____ Department Head

1. The interim qualification of _____ (Rate/Name)
as _____ (Name of Watchstation) is noted and
approved.

Commanding Officer

APPENDIX W: CHANGE PROPOSAL IMPACT STATEMENT

SNAP II SOFTWARE CONFIGURATION CONTROL COMMITTEE
MEETING DATE: 17 JUL 87 LOCATION: NORFOLK, VA.

*** AGENDA ITEMS DISPOSITION SHEET ***

1. CHANGE PROPOSAL # SUBSYSTEM SUBMITTED BY
 N-86-01527 ADM CLF/USS ARCADIA

DETAILED DESCRIPTION: REVISE ADVANCEMENT WORKSHEET REPORT TO
CONFORM TO NAVEDTRA 1430/2.

HISTORY: NONE

DISPOSITION:

APPROVED FOR INCLUSION IN SW RELEASE Rel 5

DISAPPROVED CANCELLED WITHDRAWN COMPLETED

DEFERRED TO NEXT/FUTURE SCCC MEETING

REFERRED TO NEXT/FUTURE JCCB MEETING

REFERRED TO FUNCTIONAL MANAGER

REMARKS: _____

SNAP II SCOC AGENDA ITEM

1. CP NUMBER: N-86-01527 2. SUBSYSTEM AFFECTED: ADM

3. BRIEF CHANGE DESCRIPTION: Revise advancement worksheet report to conform to NAVEDTRA 1430/2.

4. IMPACT ANALYSIS: (Developer Impact Analysis Statement Attached)

a. EST LEVEL OF EFFORT TO DEVELOP: TOTAL MANWEEKS 7

b. IMPACT ON CURRENT DEVELOPMENT: YES _____ NO X

IF YES, DESCRIBE _____

c. IMPACT ON OTHER SUBSYSTEMS: YES _____ NO X

IF YES, WHICH ONE(S)? _____, _____, _____

d. IMPACT ON HARDWARE: DISK STORAGE _____ CPU MEM _____
OTHER _____

e. IMPLEMENTATION/TRAINING IMPACT: _____

5. NAVPASSO RECOMMENDATION:

APPROVE X DISAPPROVE _____ DEFER _____ WITHDRAW _____
FOR REL _____

6. COMMENTS: _____

SNAP II CHANGE PROPOSAL
IMPACT ANALYSIS STATEMENT

CP NUMBER N-86-01527

CATEGORY _____

CHANGE DESCRIPTION: Revise the Advancement Worksheet report to conform to NAVEDTRA 1430/2.

MANHOURS
Analysis: 1
Programming: 3
Testing: 2
Documentation: 1

BASIC FUNCTION(S) TO BE PERFORMED:

1. Change Advancement Worksheet to include information contained on NAVEDTRA 1430/2 to be used as worksheet.

2. Write new program to output NAVEDTRA 1430/2 form with pre-filled information.

NEW PROGRAMS/FILES REQUIRED: 1430/2 form program

EXISTING PROGRAMS/FILES AFFECTED: MPR041 -Advancement Worksheet

GENERAL DESIGN APPROACH: Change report format to be in same order as NAVEDTRA 1430/2. Change headings to match fields on NAVEDTRA 1430/2. Write new program to output a form that looks like NAVEDTRA 1430/2 and pre-fill fields.

HIGH RISK AREAS:

INTERFACE/IMPACT WITH OTHER SUBSYSTEMS:

RELATED CHANGE PROPOSALS:

DOCUMENTATION AFFECTED/REQUIRED: ADM Subsystem Specifications and ADM On-Line User's Manual.

DEVELOPER RECOMMENDATION/ALTERNATIVES:

REMARKS:

LIST OF REFERENCES

1. Bush, T., "KELSO COMMITTED TO 50 PERCENT PERSTEMPO", Navy Times, p. 26, 24 August 1987.
2. Navy Maintenance and Supply Systems Office, Norfolk, Virginia and Maintenance and Supply Systems Office Detachment Pacific, San Diego, California, Subject: Integrated Functional Description for Shipboard Non-tactical ADP Program II Shipboard Data System (SNAP II SDS), March 1981.
3. Chief of Naval Operations Instruction 1500.51A, Subject: Navy Training Strategy, 10 June 1985.
4. Chief of Naval Operations Instruction 3120.32B, Subject: Standard Organization and Regulations of the U.S. Navy, 26 September 1986.
5. NAVEDTRA 43100-1C, Subject: POS Management Guide, January 1987.
6. OPNAV Instruction 5230.16, Subject: Fleet Non-Tactical ADP Support Management Structure, 10 July 1978.
7. NAVMASSO Document No. Q-002 SS-001 A, Subject: Shipboard Non-Tactical ADP Program (SNAP) II Automated Information System (AIS) Administrative Data Management (ADM) Subsystem Specification, April 1986.
8. Navy Personnel Research and Development Center Technical Report 76-11, Subject: Computer-Based Shipboard Training Administration System: Development Phase, September 1975.
9. Navy Personnel Research and Development Center Technical Report 80-34, Subject: Shipboard Instruction and Training Management with Computer Technology: A Pilot Application, September 1980.
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