DOCUMENT RESUME

ED 059 343 VT 010 838

AUTHOR	Whitehead, Randall F.; And Others
TITLE	The Development of a Computer Assisted Distribution and Assignment (CADA) System for Navy Enlisted Personnel.
INSTITUTION	Naval Personnel Research Activity, San Diego, Calif.
SPONS AGENCY	Office of Naval Research, Washington, D.C.
REPORT NO	SRM-70-1
PUB DATE	Aug 69
NOTE	76p.
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	Computers; *Job Placement; *Manpower Utilization; *Military Personnel; *Personnel Directors; *Systems Analysis; Tables (Data)
IDENTIFIERS	CADA; Computer Assisted Distribution and Assignment

ABSTRACT

This report describes the development of a computerized system to assist Navy personnel managers in carrying out the functions associated with the distribution and assignment of enlisted personnel. This Computer Assisted Distribution and Assignment (CADA) System is aimed at the most efficient interaction between the computer and human manager to help maximize the effectiveness of the distribution and assignment decision-making process. In general, the CADA System will broaden the range of assignment alternatives for each man and billet; expand the number of decision criteria considered; and be more responsive to changes in the personnel and operational situation. Although the CADA System design outlined in this report is, from an operational standpoint, oriented toward application in the Pacific Fleet Enlisted Personnel Distribution Office, the basic conceptual and functional framework of the design has general application throughout the distribution and assignment system and to the Atlantic Fleet in particular. (Author)

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U. S. NAVAL PERSONNEL RESEARCH ACTIVITY

SAN DIEGO, CALIFORNIA 92152

RESEARCH MEMORANDUM SRM 70-1

AUGUST 1969

THE DEVELOPMENT OF A COMPUTER ASSISTED DISTRIBUTION AND ASSIGNMENT (CADA) SYSTEM FOR NAVY ENLISTED PERSONNEL

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AN ACTIVITY OF THE BUREAU OF NAVAL PERSONNEL

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August 1969

PF39.521.002.01.02
Research Memorandum SRM 70-1

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Problem

The need to ensure the maximum utilization of military manpower in support of the Navy's world wide operational commitments is a challenging problem for the enlisted personnel management system. This problem arises because the qualitative and quantitative requirements for personnel in the Navy generally tend to exceed the personnel inventory available to meet them. For this reason, the ultimate objective of the individual subsystems of enlisted personnel management is to make the most effective use of those personnel who are available to the Navy. However, in the final sense, the maximum utilization of the personnel force can be accomplished only through the optimal matching of specific individuals to particular billets. Since the matching of men and billets is the function of the personnel distribution and assignment system, the efficient operation of this system has a direct bearing on the accomplishment of the overall goals of all the other subsystems of personnel management. Moreover, and more important, the efficiency of the distribution and assignment system directly affects the personnel readiness of the Navy's operating forces and supporting establishment.

Background

Over the years the Chief of Naval Personnel has emphasized the importance of the enlisted personnel distribution and assignment system and has supported research seeking improvements in its concepts, policies, procedures, and organization. As a result, this Activity has been conducting a continuing research program in this area with the purpose of developing new and improved methods and procedures based on modern computer technology to enable personnel managers to make distribution and assignment decisions with greater speed, efficiency, and accuracy than is presently possible. The results of this research program are also intended to help increase the flexibility of the entire personnel management system in meeting the changing personnel and technological needs of the Navy.

One aspect of this program concerns the distribution and assignment of enlisted personnel in the fleet. Significant progress has been made in the development of a computer based system to assist the fleet Enlisted Personnel Distribution Offices (EPDOPAC and EPDOLANT) in carrying out their distribution and assignment functions. A previous report by Thorpe and Conner* described the development of prototype computerized model of the fleet personnel distribution system. The purpose of the present report is to describe the subsequent development of a Computer Assisted Distribution and Assignment (CADA) System representing a broad, encompassing application of computer technology to the management of fleet personnel distribution and assignment. In addition, the CADA System research as outlined in this

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*Thorpe, Robert P. and Conner, Richard D., A Computerized Model of the Fleet Personnel Distribution System, San Diego: Naval Personnel Research Activity, San Diego, February 1966 (SRR 66-13).

report is intended to serve as a framework for future computer oriented research in the EPDO responsible for the continental United States (EPDOCONUS) and in the Enlisted Personnel Division (Pers-B2) of the Bureau of Naval Personnel (BUPERS).

Approach

The general objective of this research is to design a computer assisted enlisted personnel distribution and assignment system to improve the utilization of enlisted manpower in the Navy. In line with this objective, the research approach has been primarily directed at determining the extent to which the computer could be more effectively utilized in the support of the decision-making aspects of the personnel distribution and assignment process. This approach involved, first of all, a comprehensive analysis of the present EPDOPAC personnel distribution and assignment system to identify the major distribution and assignment functions of the EPDO, the procedures by which these functions are currently carried out, and the specific criteria on which distribution and assignment decisions are made.

The understanding of the present system served as the logical foundation for a computerized system designed to provide assistance to the EPDO and type command users in the distribution and assignment of personnel to the fleet.

Findings and Conclusions

Conceptually, the Computer Assisted Distribution and Assignment (CADA) System described in this report is aimed at the most efficient interaction between the computer and the human distributor or detailer in order to maximize the effectiveness of the decision making aspects of the distribution and assignment process. In general, the CADA System will broaden the range of assignment alternatives for each man and billet, expand the number of decision criteria considered, and be more responsive to changes in the personnel and operational situation.

Although the CADA System design described in this report is, from an operational standpoint, oriented toward PACFLT application, the basic conceptual and functional framework of the design has general application throughout the distribution and assignment system and to the Atlantic Fleet (EPDOLANT), in particular. Moreover, the CADA System design outlined in this report can be used to facilitate both the planning and implementation of a centralized system for personnel distribution and assignment. Under the centralized concept, certain functions currently performed by the EPDO's would be performed at the BUPERS level. Other functions of the EPDO's and BUPERS would be modified to varying degrees. The CADA System design, however, is capable of accommodating these changes with a minimum of difficulty. As a result, all the research effort already expended in the development of the CADA System as well as the planned effort for an operational test of the system design would be directly related to the successful implementation of the centralized concept. If, on the other hand, the decision is made not to centralize the present system, the results of the CADA System research would still have application for the improved management of the distribution and assignment of enlisted personnel.

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INTRODUCTION

Problem

The need to ensure the maximum utilization of military manpower in support of the Navy's world wide operational commitments is a challenging problem for the enlisted personnel management system. The continuous evolution in the direction of highly sophisticated weapons and operating systems for ships and aircraft has resulted in a similar evolution in the caliber of technically trained personnel required. Since the qualitative and quantitative requirements for personnel generally tend to exceed the inventory available to meet them, the ultimate objective of the individual subsystems of enlisted personnel management--planning, recruiting, training, and so on--is to make the most effective use of those personnel who are available to the Navy. However, in the final sense, the maximum utilization of the personnel force can be accomplished only through the optimal matching of specific individuals to particular billets. Since the matching of men and billets is the function of the personnel distribution and assignment system, the efficient operation of this system has a direct bearing on the accomplishment of the overall goals of all the other subsystems of personnel management. Moreover, and more important, the efficiency of the distribution and assignment system directly affects the personnel readiness of the Navy's operating force and supporting establishment.

Background

Through the years the Chief of Naval Personnel has emphasized the importance of the enlisted personnel distribution and assignment system and has supported research seeking improvements in its concepts, policies, procedures, and organization. As a result, this Activity has been conducting a continuing research program in this area with the purpose of developing new and improved methods and procedures based on modern computer technology to enable personnel managers to make distribution and assignment decisions with greater speed, efficiency, and accuracy than is presently possible. The results of this research program are also intended to help increase the flexibility of the entire personnel management system in meeting the changing personnel and technological needs of the Navy. The overall objective of the research program is to help improve the effective utilization of enlisted personnel.

One aspect of this program concerns the distribution and assignment of enlisted personnel in the fleet. Significant progress has been made in the development of a computer based system to assist the fleet Enlisted Personnel Distribution Offices (EPDOPAC and EPDOLANT) in carrying out their distribution and assignment functions. A previous report by Thorpe

and Conner* described the development of a prototype computerized model of the fleet personnel distribution system. The purpose of the present report is to describe the subsequent development of a Computer Assisted Distribution and Assignment (CADA) System representing a broad, encompassing application of computer technology to the management of fleet personnel distribution and assignment. In addition, the CADA System research as outlined in this report is intended to serve as a framework for future computer oriented research in the EPDO responsible for the continental United States (EPDOCONUS) and in the Enlisted Personnel Division (Pers-B2) of the Bureau of Naval Personnel (BUPERS).

DISTRIBUTION AND ASSIGNMENT

Definitions of Terms

As stated earlier, an important factor in the Navy's problems of personnel management is that in many ratings there are considerably fewer men than needed to fill all of the required billets or jobs. Since all activities cannot receive all the people they need, it is necessary to ensure that each activity receives at least its "fair share." Therefore, the primary objective of the distribution function is the allocation of available manpower resources as equitably as possible. Within the constraints of distribution policy, the assignment function attempts to match the qualifications and preferences of particular individuals available for assignment with the specific requirements and characteristics of the vacant billets.

The terms "distribution" and "assignment" thus identify the two major functions of the overall system for moving enlisted personnel among billets in the Navy. Although these two terms are not used wholly consistently throughout the Navy, "distribution" generally refers to the allocation or wholesaling of personnel to administrative commands or to another echelon for assignment. "Assignment" generally refers to the detailing of men to specific billets, or specific types of billets, in fleet or shore commands.

Distribution and Assignment System

At present, the distribution and assignment of enlisted personnel is carried out under a three echelon system of managerial control; namely, the Chief of Naval Personnel, the Fleet Commanders-in-Chief, and the Fleet Type Commanders.

The Chief of Naval Personnel (Pers-B2) assigns recruits to Class "A" Schools, distributes personnel to the two Fleet Commanders, and details

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*Thorpe, Robert P. and Conner, Richard D., A Computerized Model of the the Fleet Personnel Distribution System, San Diego: Naval Personnel Research Activity, February 1966. (SRR 66-13)

directly to about 75,000 billets. The Enlisted Personnel Distribution Office, Continental U.S. (EPDOCONUS), also under the direction of the Chief of Naval Personnel, details directly to 90,000 billets within the continental U. S.

The Enlisted Personnel Distribution Office, U. S. Atlantic Fleet (EPDOLANT) and the Enlisted Personnel Distribution Office, U. S. Pacific Fleet (EPDOPAC) distribute personnel for the Fleet Commanders-in-Chief to the Type Commanders and detail personnel to overseas shore activities.

The Type Commanders, through their representatives in the Fleet EPDO's, then assign personnel to individual ships, squadrons, and activities. Overall, the two fleet EPDO's and the associated Type Commanders have distributional control over approximately 445,000 billets.

Although it will be well known to most readers of this report, it should be pointed out that the distribution and assignment process involves the handling and processing of the names and other relevant personal data of personnel and not the personnel themselves. Each EPDO is supported by a Personnel Accounting Machine Installation (PAMI) which provides, from the various computer storage files, most of the necessary personnel and activity information used by the EPDO for making distribution and assignment decisions. In BUPERS, similar informational support is provided to Pers-B2 by the Assistant Chief for Management Information (Pers-N). Once all the distribution and assignment procedures for each man have been carried out and the final decision made, the man's present and prospective commands are notified, transfer orders are prepared, and the man then physically moves to his new duty assignment.

RESEARCH APPROACH

The general objective of this research is to design a computer assisted enlisted personnel distribution and assignment system to improve the utilization of enlisted manpower in the Navy. Such a system will have potential application at the Bureau of Naval Personnel, Enlisted Personnel Distribution Offices, and fleet Type Command levels of personnel control.

In line with the above objective, the research approach has been primarily directed at determining the extent to which the computer could be more effectively utilized in the support of the decision making aspects of the personnel distribution and assignment process. It is true, of course, that the present distribution and assignment system utilizes computers to a high degree. This use, however, is primarily in terms of accounting or record keeping with the production of more or less routine reports for decision making. Certainly, one valuable contribution attributable to the computer is a complete personnel master file which contains on magnetic tape or disk an extensive, up-to-date record on each man in the Navy. This file, together with a file containing data descriptive of each naval activity, are the basic sources of information for personnel management. The distribution and assignment system, however, is still human-oriented--people still do most of the work. All of the decisions pertaining to

personnel movements are made by hand by human beings. On the surface, this situation may seem to provide personalized attention to the people involved. In actuality, the size of the workload and the limitation of available time work against giving lengthy attention to each case. As a consequence, the criteria on which decisions are made have tended to become more impersonal than personal.

As part of previous research by this Activity, a thorough analysis of the system has shown that, in many cases, the decisions are routine based on objective application of policy. In these cases, at least, the transfer of procedures to the computer could be done without harm to anyone and at a considerable saving in time and effort. In other cases, it was shown that the computer could be utilized as a device for the preliminary screening of personnel by evaluating their eligibility for certain assignments in terms of objective statements of management policy. The computer would thus provide as output a list of assignment "nominations" which the human detailer could evaluate against those criteria that cannot be efficiently included in a computer program. By transferring part of the total decision process to the computer, the human distributor or detailer can then give the necessary personal attention at the point where it is most needed.

Conceptually, the Computer Assisted Distribution and Assignment (CADA) System described in this report is aimed at the most efficient interaction between the computer and the human distributor or detailer in order to maximize the effectiveness of this decision making process. In general, the CADA System will broaden the range of assignment alternatives for each man and billet, expand the number of decision criteria considered, and be more responsive to changes in the personnel and operational situation. It should be pointed out, however, that the CADA System could never absorb all of the tasks now performed by the personnel manager. There are now, and always will be, special cases and situations requiring human attention and judgment. With the transfer of his routine duties to the computer, the manager could devote more time to those exceptional cases needing personal handling. The ultimate effects of the CADA System would be improved utilization not only of the Navy's enlisted personnel, but also, the personnel managers themselves.

As noted earlier, the overall distribution and assignment system has three echelons: BUPERS, the EPDO's, and the Fleet Type Commands. The present system is thus decentralized to a degree with similar functions being performed at and within each echelon. For this reason, the results of a computerization feasibility study at one echelon could be generalized, for the most part, to the other components of the overall system. Due to the close proximity of EPDOPAC and this Activity, the research for the development of the CADA System has focused on the distribution and assignment process as carried out by EPDOPAC and the associated Pacific Fleet Type Commands. Consequently, the CADA System design described in this report is, from an operational standpoint, oriented toward PACFLT application. However, the basic conceptual and functional framework of the design has general application throughout the distribution and assignment system, and to the Atlantic Fleet (EPDOLANT), in particular.

The following sections of this report include a description of the current PACFLT distribution and assignment process, an outline of the basic design of the CADA System, and a brief discussion comparing the characteristics of the CADA System with the current PACFLT system. The last section describes the future research plans for final development of the CADA System.

PRESENT PACIFIC FLEET (EPDOPAC) SYSTEM

Research in the initial phase of the development of the CADA System involved a thorough, comprehensive analysis of the present EPDOPAC personnel distribution and assignment system. The analysis of the Pacific Fleet system involved extensive interviews with EPDO and type command personnel and the study of all policies and directives related to fleet personnel distribution and assignment. The analysis was conducted to identify the major distribution and assignment functions of the EPDO, the procedures by which these functions are currently carried out, and the specific criteria on which distribution and assignment decisions are made. This information was essential in designing the CADA System since, at the very least, the CADA System must achieve the same end results as the present system and function within the same accepted standards. Therefore, the complete understanding of the present EPDOPAC system obtained from the analysis served as the logical foundation for the design of the CADA System.

Overview

It is the responsibility of EPDOPAC to ensure that each of the over 1300 activities in the Pacific Fleet has sufficient personnel, both in quantity and quality, to carry out effectively its assigned mission. Currently, these activities account for over 240,000 enlisted billets in nine major type command composites. These billets are further categorized into eight types of duty, as follows:

Shore Duty (Type Duty 1) is defined as duty in fleet units, staffs, and activities based ashore in the Continental United States, under distribution control of the fleet commander, and specifically designated as "fleet shore duty."

Arduous Sea Duty (Type Duty 2) is defined as ships, staffs, and other mobile units which spend considerable periods at sea away from their home-port during local operations and which, when deployed overseas, operate at sea extensively.

Overseas Shore Duty (Type Duty 3) is defined as duty performed ashore at activities outside the Continental United States where the prescribed Department of Defense accompanied tours are less than 36 months.

Toured (non-rotated) Arduous Sea Duty (Type Duty 4) is defined as sea duty performed in non-rotated ships, staffs, or other mobile units home-ported outside the Continental United States excepting Alaska and Hawaii, or in 12 month unaccompanied tour ships or staffs listed in OPNAVINST 4600.16 series.

Preferred Sea Duty (Type Duty 5) is defined as duty served in ships, staffs and other units which normally remain in their assigned homeport or operate locally therefrom only for brief periods.

Preferred Overseas Shore Duty (Type Duty 6) is defined as duty served at shore-based overseas activities where there are available suitable family accommodations and the prescribed Department of Defense accompanied tours are 36 to 48 months in recognition of the desirability of this duty.

In-Country Vietnam Duty (Type Duty 7) is defined as duty performed ashore at activities located within the Republic of Vietnam. This is a local PACFLT designation used in distributing and assigning personnel to Vietnam activities and units.

Toured Ships, Vietnam Duty (Type Duty 8) is defined as sea duty performed in non-rotated ships, staffs, or other mobile units homeported in the Republic of Vietnam This is also a local PACFLT designation used in distributing and assigning personnel to Vietnam activities and units.

In carrying out its mission in FY-68, over 150,000 personnel movements were effected under EPDOPAC cognizance. In nearly every case, the movement involved one or more decisions by EPDO and associated type command personnel. The analysis of the present PACFLT system provided a detailed knowledge of the nature of these decisions, the manner in which they are made, and the criteria on which they are based.

Functions and Procedures

Although the day-to-day operations of the EPDOPAC organization encompass a variety of managerial and administrative functions, the following five functions were determined to be most relevant to the process of distribution and assignment of personnel:

1. Determination of personnel requirements (billet vacancies).
2. Distribution of availabilities.
3. Assignment of availabilities.
4. Reassignment of fleet personnel.
5. Utilization of duty waiting lists.

The procedures used by the present PACFLT system for accomplishing these five major distribution and assignment functions are summarized below. A more detailed procedural description of each function is contained in Appendix A to this report.

1. Determination of Personnel Requirements (Billet Vacancies).

This function is accomplished once a month by type command detailers and normally takes from six to eight days to complete. The

source of the data for computing personnel requirements is the Enlisted Distribution and Verification Document (BUPERS Form 1080-14). The detailers first update the 1080-14 for each activity when they are received from the Personnel Accounting Machine Installation (PAMI). This involves manually entering on each 1080-14 all personnel actions--prospective gains and losses--that have occurred between the cut-off date of the 1080-14 and the date of its receipt, which is usually from eight to ten days after the cut-off date.

After the 1080-14's have been updated, the personnel shortages and excesses that exist within each activity are manually computed by rate and Navy Enlisted Classification (NEC) codes. Shortages and excesses are determined by calculating the differences between the manning prescribed by the PACFLT Enlisted Distribution Plan (EDP) and the projected on-board strength seven months in the future (POB-7). The personnel requirements for each activity are then determined by balancing excesses and shortages following prescribed EPDOPAC procedures; i.e., an excess in one pay grade of a rating will cancel a shortage in either the next higher or the next lower pay grade. Net shortages are then recorded on a vacancy work sheet, which is used by the detailer in the routine assignment of personnel during the month. In addition, for certain types of duty or activities, these requirements are also used to prepare monthly personnel requisitions which are submitted by the EPDO to BUPERS.

2. Distribution of Availabilities

Personnel made available to the fleet (referred to as "availabilities") are distributed to type commands by rating distributors utilizing a basic EPDOPAC distribution control document. This document is prepared monthly by the Personnel Accounting Machine Installation (PAMI). However, the data it contains are approximately two weeks old by the time the document is received. This requires that it be manually updated by rating distributors immediately upon receipt. For each type command, the document indicates by rate and pay grade group (i.e., E-5 through E-7 and E-4 and below) the prescribed allowance, EDP, and the ratio between on-board strength and EDP by month, from the current month (COB) through POB-7.

From the data contained in the distribution control document, rating distributors determine the number of available personnel to distribute to each type command. This is accomplished by visually comparing POB-7/EDP percentages for each pay grade group and computing the number of availabilities in each group to be allocated to each type command in order to maintain equitable on-board percentages. After the available personnel have been distributed, the distribution control document is manually updated by the rating distributors.

3. Assignment of Availabilities

This function is accomplished by type command detailers and by rating distributors for designated fleet activities and units, such as overseas shore activities and units homeported in Vietnam. The previously

mentioned billet vacancy lists prepared during the monthly determination of personnel requirements are utilized to match men to billets.

In making assignment decisions, detailers attempt to consider all pertinent billet and man-related variables. An individual's rating, pay grade, NEC's, take-up date, obligated service, and duty preferences are the man-related variables generally considered in the decision making process. However, since the assignment possibilities for personnel are limited to those billet vacancies existing within a single type command, in many cases, duty preferences are of relatively minor importance to detailers.

4. Reassignment of Fleet Personnel

Although there are numerous reasons why it may become necessary, or desirable, to reassign fleet personnel to other duty, it was determined that in the Pacific Fleet the two basic reasons for such actions are (1) to fill fleet drafts and (2) to "balance" activities and units within type commands in order to maximize the utilization of personnel. Personnel are also reassigned for humanitarian purposes, as an incentive to first-term personnel to reenlist, and to maximize the utilization of "short timers" (personnel with only a short time remaining in their enlistments). It was found, however, that the number of reassignments for such reasons are relatively small. Therefore, the following description of procedures is limited to fleet draft reassignments and to type command balancing reassignments. Descriptions of the procedures followed by PACFLT detailers for other types of fleet personnel reassignments are contained in Appendix A.

a. Fleet Draft Reassignments. This function is manually performed by rating distributors and type command detailers. Rating distributors compute draft quotas to be levied on each of the type commands on the basis of POB-7/EDP percentages. The quotas are then submitted to type command detailers who select the personnel to be reassigned in accordance with prescribed criteria. This is accomplished by manually screening each activity's BUPERS Form 1080-14 for eligible personnel. When an eligible man is located, the detailer decides if the man is to be reassigned, taking into consideration such variables as the EDP, the number currently on board, and the unit's employment schedule (deployment or return date). This procedure of search, locate, and reassign continues until the assigned quota has been filled or until all eligible personnel within the type command have been reassigned. In the event a type command has insufficient personnel eligible to fill its assigned quota, the unfilled portion is returned to the rating distributors for allocation to other type commands.

b. Type Command Balancing Reassignments. Normally, this function is performed by type command detailers only when insufficient availabilities are received to maintain equitable on-board strength in the activities and units within the type command. Balancing is accomplished, as necessary, at the time each activity's BUPERS Form 1080-14 is updated because excesses and shortages existing within activities and units of the type command are calculated at that time. Working lists of personnel excesses and shortages

are prepared and excess personnel are reassigned to activities where shortages exist. Excess personnel normally are reassigned to billet vacancies existing within an activity or unit having the same homeport or located within the same geographical area as their present activity or unit.

5. Utilization of Duty Waiting Lists

CINCPACFLT Instruction 1306.9 Series, Pacific Fleet Addendum to the Enlisted Transfer Manual (PATMAN), requires that EPDOPAC maintain waiting lists of personnel serving on "arduous sea duty" who desire reassignment to more desirable types of fleet duty; i.e., overseas shore duty, preferred sea duty, and new construction. Moreover, the instruction provides that personnel on duty waiting lists are to be given preference over new availabilities in the assignment to billet vacancies existing within these types of duties.

This function is performed by rating distributors, who detail personnel to overseas shore duty, preferred sea duty, and new construction. The waiting lists are screened periodically during each month, depending upon workloads, and personnel are reassigned to requested duty as practicable during such periods. Normally, however, waiting list personnel are assigned to fill vacancies existing in the duty of their choice only when they are in excess in their present billets or when replacements are available during screening periods. Thus, reassignments from the duty waiting list are minimal.

Decision Variables

As noted previously, a prime concern in the analysis of the present EPDOPAC system was to define precisely the criteria on which the various distribution and assignment decisions are based. In the course of the analysis, all BUPERS, PACFLT, EPDO, and type command policies and instructions relative to distribution and assignment were studied to identify the specific variables included in the criteria for decision making. For the most part, these variables can be considered as either "activity-related" or "man-related." These types of decision variables are described more fully below:

1. Activity-Related Variables

In general, the activity-related variables in distribution and assignment decisions specify how many personnel are needed by an activity, what their qualifications must be, when they are needed, and for how long they must serve. The basic statement of the numbers and kinds of personnel required is made by the Chief of Naval Operations in the Manpower Authorization (OPNAV-1000/2) document for each activity. Other necessary data include the type of activity, its location, and, if applicable, its operating schedule. All of the variables help the distributors and detailers to determine not only if a man meets the specified qualifications for filling a particular billet, but also, when related to the man's preferences, how well the billet will satisfy the man.

The ten major activity-related variables identified in the analysis of the PACFLT distribution and assignment process are:

a. ALLOWANCE/COMPLEMENT

b. ENLISTED DISTRIBUTION PLAN (EDP)

c. NEC REQUIRED

d. RATE/RATING REQUIRED

e. TYPE OF DUTY (SEA, SHORE, OVERSEAS, ETC.)

f. TYPE OF ACTIVITY (DD, CVA, SS, ETC.)

g. HOMEPORT/GEOGRAPHICAL LOCATION

h. OPERATING SCHEDULE

i. TOUR LENGTH

j. VACANCY DATE

More complete definitions of these variables as well as references to the supporting policies or instructions are included in Appendix B.

2. Man-Related Variables

Generally, the man-related variables involved in the decision making process are items which can be directly compared with the activity variables. The man's rate, rating, and NEC, for example, relate directly to what is required in the billet. Similarly, the man's preferences for type of activity and location are compared with the corresponding activity characteristics. In addition, the man's take-up date and amount of obligated service help place the man in a billet at the time he is most needed and where he can remain long enough to be most efficiently utilized.

Other man-related variables serve to "screen" personnel in terms of their eligibility for specific kinds of assignments. Various policies and instructions direct which personnel can or can not be assigned to certain duty. For example, men who are qualified for duty in submarines carry an appropriately coded Enlisted Designator in their records and normally must be assigned to submarine duty. Other examples of these variables include limited duty status, VEY status, combat (Vietnam) returnees, incentive reenlistees, hospital and brig releases, and so on.

The twenty major man-related variables identified in the analysis of the PACFLT system are:

a. RATE/RATING

b. NEC

c. ENLISTED DESIGNATOR

d. LIMITED DUTY STATUS

e. AVAILABILITY CODE

f. DUTY AND HOMEPORT PREFERENCES

g. TAKE-UP DATE

h. EXPIRATION OF ACTIVE OBLIGATED SERVICE (EAOS)

i. ACTIVE DUTY BASE DATE (ADBD)

j. DEPENDENCY STATUS

k. HUMANITARIAN (HUMS) STATUS

l. VIETNAM RETURNEE

m. LAST DUTY STATION

n. BRIG RELEASE

o. HOSPITAL RELEASE

p. VEY STATUS

q. CITIZENSHIP

r. SECURITY CLEARANCE

s. EVALUATION MARKS

t. AGE

More complete definitions of these variables as well as references to the supporting policies or instructions are included in Appendix C.

It should be noted that the man-related and activity-related variables listed in this section do not necessarily represent all of the factors considered in distribution and assignment decisions but are the factors considered in varying degrees in the majority of decision making situations. Every variable may not be considered in each decision, but some of the variables are considered in every decision. In designing a computer oriented system for distribution and assignment, however, each variable and each situation where it is applied must be specifically defined before inclusion in the various computer programs.

CADA SYSTEM DESIGN

The purpose of the Computer Assisted Distribution and Assignment (CADA) System is to bring the speed and power of advanced computer technology to bear on the problem of effective distribution and assignment of enlisted naval personnel. In terms of this purpose, the basic CADA System design employs the techniques used in advanced computer hardware and software systems to assist in the performance of the functional operations of the distribution and assignment process. It should be pointed out, however, that the CADA System is not merely the automation of present PACFLT distribution and assignment procedures. During the interviews of key personnel in the EPDO and type command offices, each was asked to criticize the present system and to offer suggestions of how the system could be improved if a greater degree of computerized assistance were available. These comments were then incorporated, as feasible, in the CADA System design. As a result, the CADA System represents the computerization of what should be done rather than what is done in the process of fleet distribution and assignment.

The previously described analysis of the present PACFLT system helped to identify three important factors which had to be considered in the design of the CADA System. First of all, it was decided to take full advantage of the significant effort being made within the Navy to improve the Naval Manpower and Personnel Management Information System (MAPMIS) which supports all functions of Navy personnel management. In particular, plans for an improved MAPMIS include a much broader base of both personnel and activity data than presently available. In addition to more data, the improved MAPMIS will have all data files updated much more frequently than at present with many personnel transactions and data element changes applied to the files on a daily basis.

A second consideration related to constraints of both time and cost in the design of a computerized system. It was determined that the processing for the daily distribution and assignment of available personnel should stay within the same time frame as the present work schedule. Certainly, it should not take longer to process personnel by the computerized system than it now takes to process them manually. Along with the need for speed was the need to stay within the practical limitations of the present computer equipment used in the system. It was obvious that the CADA System design would be unacceptable if it required the installation in the PAMI's of an entirely new, more expensive computer configuration at this time or in the immediate future.

The final constraining factor which had to be considered in the CADA System design was concerned with the need to maintain flexible user control over the system. The CADA System was intended to be based on the policies and procedures prescribed by the users--the EPDO and the Type Command Representatives. Since it was obvious that these policies would change over time and that emergency situations might necessitate sudden revisions of procedures, every effort was made to keep the CADA System as flexible as possible. For the most part, changes in policies and procedures as well

as in decision-variables and operational priorities can be entered in the system by means of user-prepared control cards not requiring extensive re-writing of computer programs.

Overview

Simply stated, the CADA System consists of a number of computer programs and a variety of data processing procedures specifically designed to carry out the ongoing functions of personnel distribution and assignment. For purposes of organization and description, these programs and procedures can be grouped into five operational "Phases" on the basis of both their purpose and the time frame in which they will operate. For example, the major operational component of the CADA System is Phase I, the Daily Nomination Phase. This Phase includes all of the programs and procedures involved in the distribution and assignment of availabilities on a daily operational basis. Phase II, the CADA Strength File Re-creation Phase, involves the monthly general updating of the CADA Strength File which is the basic data file for the System. Phase III, the Fleet Draft Phase; Phase IV, the Type Command Balancing Phase; and Phase V, the Rapid Inquiry Phase, involve special purpose processing performed when requested by the EPDO and type command users.

With the exceptions of Phase II, the CADA Strength File Re-creation Phase, and Phase V, the Rapid Inquiry Phase, each of the above phases is made up of a number of "Segments" which are sub-groups of certain related programs and processing steps carried out within the operational Phase. A general outline of the Phases and Segments of the CADA System design is given below:

Phase I - Daily Nomination Phase

1. File Update Segment
2. Billet Vacancy Calculation Segment
3. Quota Calculation Segment
4. Assignment Nomination Segment
5. Enlisted Assignment Document (EAD) Segment

Phase II - CADA Strength File Re-Creation Phase

Phase III - Fleet Draft Phase

1. Personnel and Billet Record Extraction Segment
2. Draft Quota Calculation Segment
3. Draft Nomination Segment

4. Enlisted Assignment Document (EAD) Segment

Phase IV - Type Command Balancing Phase

1. Excess and Shortage Calculation Segment

2. Balancing Nomination Segment

3. Enlisted Assignment Document (EAD) Segment

Phase V - Rapid Inquiry Phase

Each of these Phases is described in detail in the following sections of this report.

PHASE I - DAILY NOMINATION PHASE

The Daily Nomination Phase (Figure 1) is the major component of the CADA System and consists of five separate Segments which were listed in the previous outline. Each of these Segments is described more fully below.

1. File Update Segment

This Segment consists of a series of processing steps necessary to update the files utilized in the CADA System. The general organization and order of processing is as follows:

a. Edit and balance personnel changes

b. Edit and update the Activity file

c. Extract BUPERS transmission tape

d. Update the Enlisted Master File

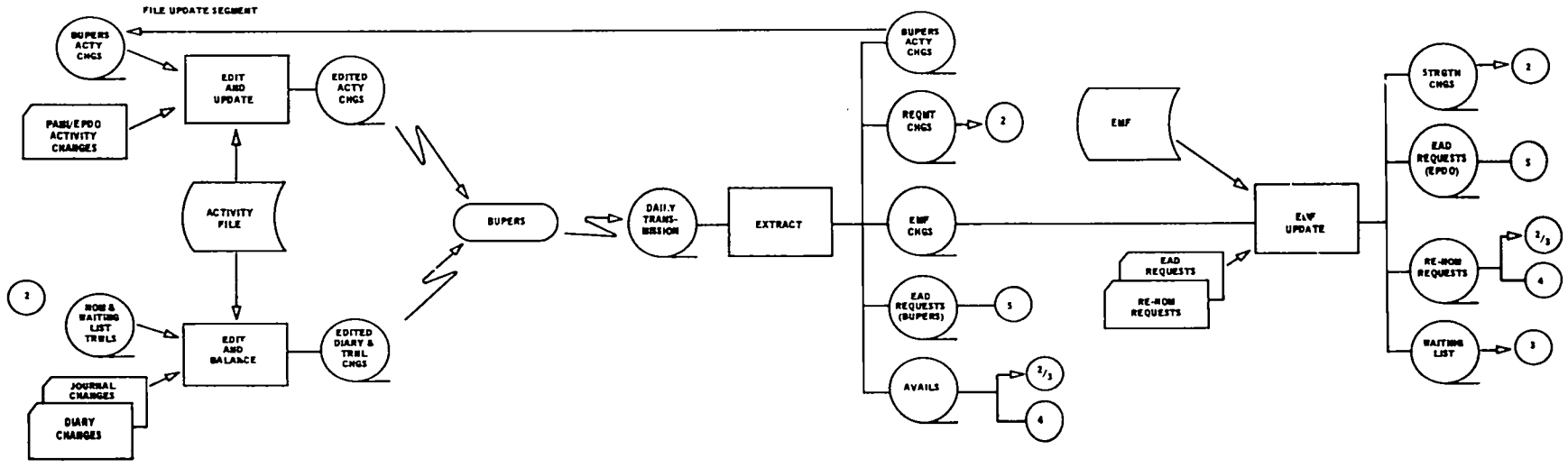
e. Update the CADA Strength File

It should be noted that the first four processing steps will be required under current MAPMIS planning and will be performed at the PAMI level in essentially the same manner regardless of the implementation of the CADA System.

a. Edit and Balance Personnel Changes. Personnel changes, including diary and journal changes received by PAMI and assignment nomination and duty waiting list journal changes generated by the CADA System, are edited and balanced daily prior to transmission to BUPERS for entry into the MAPMIS enlisted master record. This processing will be accomplished in accordance with prescribed MAPMIS procedures.

This processing step assumes that provision will be made to record duty waiting list data in the MAPMIS enlisted master record. It also

PHASE I - DAILY NOMINATION PHASE



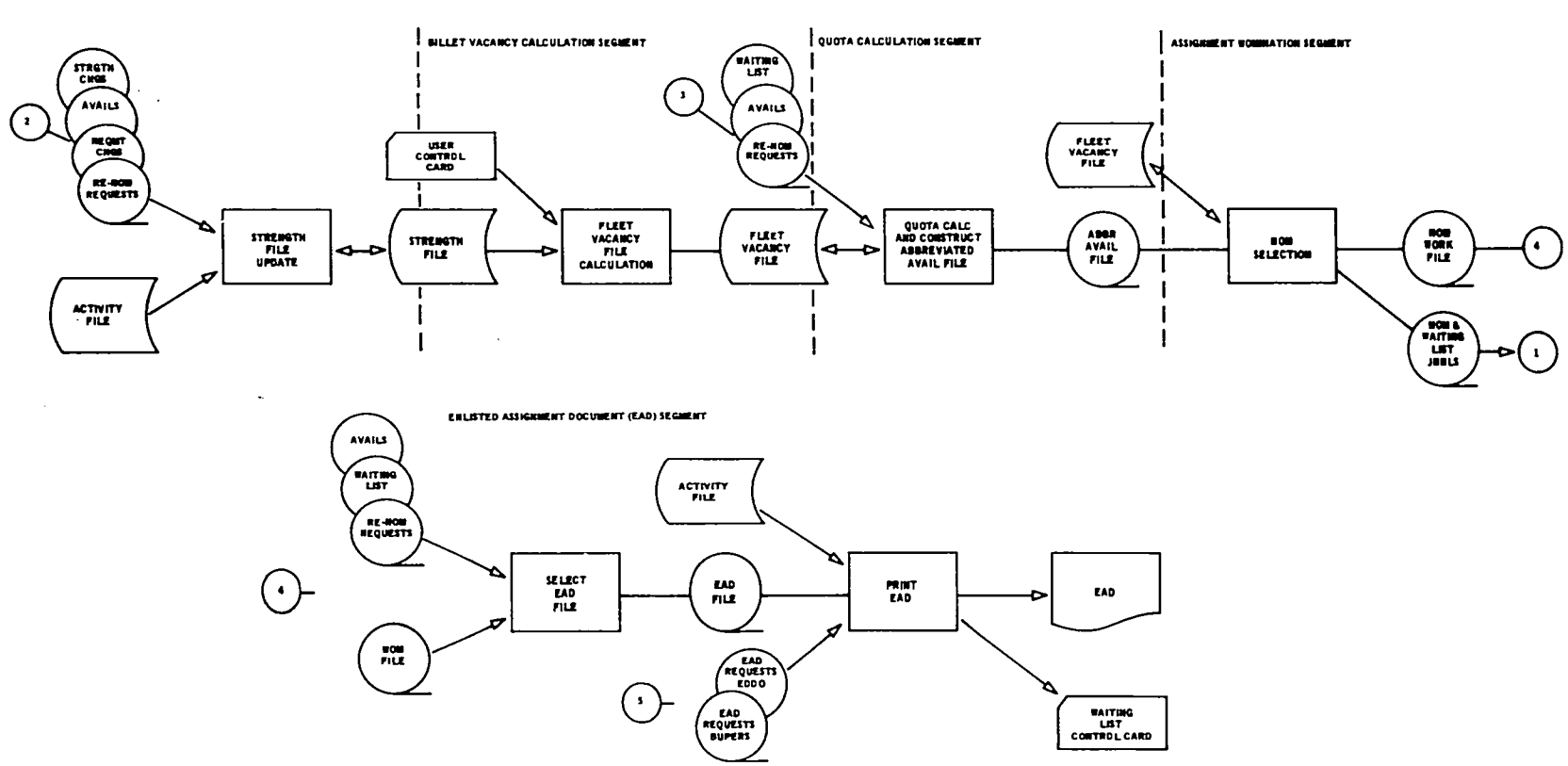


FIGURE 1

assumes that assignment nomination data, which will be flagged to indicate that nominations are tentative assignments, will be carried in the enlisted master record. The inclusion of these data elements in the master record will eliminate the need to maintain a separate duty waiting list file at the PAMI level and will also reduce the number of processing runs required to update the CADA Strength File.

b. Edit and Update Activity File. BUPERS generated activity changes, such as additions and deletions of activities, changes in home ports, and changes in tour lengths, are grouped with changes generated at the PAMI/EPDO level for editing and for updating the Activity File. It is anticipated that this processing can be accomplished in one step because the volume of activity changes normally should be minimal. If the volume requires, however, processing will be performed in two steps, one for editing and the other for updating.

The edited local activity changes are then transmitted to BUPERS for updating the MAPMIS activity master record, and the BUPERS activity changes are applied to the PAMI Activity File, as noted above.

To eliminate the need for each fleet PAMI to construct and maintain a separate file of ship deployment schedules, it is recommended that provision also be made to carry ship employment data in the MAPMIS activity master record.

c. Extract BUPERS Transmission Tape. Under MAPMIS planning, a daily transmission tape is to be transmitted from BUPERS to the PAMI's. This transmission tape will contain various types of activity and personnel changes, such as changes in activity manning requirements (allowances and/or complements), and changes in the status of personnel, such as changes in rate, rating, and duty station assignments. The transmission tape will also contain messages, research records, records of personnel made available for distribution and assignment, etc. For further processing, the data contained in this transmission tape must be extracted and compiled to generate a working file for each type of action required. These working files will pertain to (1) activity changes, (2) manning requirements changes, (3) Enlisted Master File (EMF) changes, (4) availabilities, (5) messages, etc. The files generated by this process which are applicable to the operation of the CADA System are depicted in the general flow chart of the Daily Nomination Phase, Figure 1.

The Enlisted Assignment Document (EAD) Request File generated by this process will contain only those records that have been requested from BUPERS when they are not available in the PAMI files.

d. Update Enlisted Master File. The processing for this step updates the PAMI EMF utilizing the EMF change file generated in the above step. The processing methods and criteria to be used to accomplish this function will be those prescribed by MAPMIS.

In addition to updating the EMF, this processing step also:

(1) Generates a working file of changes for updating the CADA Strength File.

(2) Selects records for which EAD requests have been received from users.

(3) Selects records for which renomination requests have been received from EPDO.

(4) Generates a duty waiting list working file.

Each of these working files will be utilized to perform subsequent processing as indicated in Figure 1.

e. Update CADA Strength File. In the CADA System, all distribution and assignment processing revolves around the CADA Strength File. This file contains summarized billet records for each activity as well as status count data, by rate and NEC, of the personnel on board for the current month (COB) and the personnel projected on board (POB) for each succeeding month from POB-1 through POB-12 and POB-18. In addition, this file contains nomination data, also by rate and NEC, to indicate the total tentative assignments made by the CADA System but not yet approved by EPDO distributors and/or detailers. This data element will be referred to as the "Nomination Total."

This processing step utilizes the following working files to update the CADA Strength File:

(1) Strength Change File

(2) Availability File

(3) Manning Requirements Change File

(4) Renomination Request File

2. Billet Vacancy Calculation Segment

This Segment of the Daily Nomination Phase consists of a series of three processing steps that are designed to accurately calculate billet vacancies existing within activities. The general order of execution of these processing steps is:

a. Establish prescribed manning requirements

b. Calculate billet vacancies

c. Develop type command status count totals.

Each of these three steps is discussed below:

a. Establish Prescribed Manning Requirements. This processing step is concerned with user control card interpretation. Billet vacancies normally are calculated on the basis of a predetermined prescribed manning requirements figure, such as EDP or manning level. However, by means of specially prepared control cards, provision is made for the user to override these standard calculations and to specify a different manning requirements figure, such as allowance or complement. The user may specify the manning requirement figures to be used in calculating billet vacancies and/or distribution quotas for (a) certain billets within an activity, (b) selected activities, (c) selected type commands, or (d) all fleet activities.

b. Calculate Billet Vacancies. This processing step normally calculates billet vacancies using a standard user-prescribed projected on board (POB) figure; e.g., POB-6 or POB-7. However, as noted above, provision is made for the user to prescribe a different POB figure for certain types of records; viz., billet, activity, type command, or fleet, by means of a POB control card. In this event, billet vacancies are calculated on the basis of a POB designated by the user.

The calculation of billet vacancies is performed in the following manner:

(1) The process begins by calculating the excesses and shortages, by pay grade, existing in a rating within an activity. This is accomplished by subtracting the Manning Requirements Total from the sum of the prescribed POB Total and Nomination Total. Positive (plus) differences are excesses and negative (minus) differences are shortages.

(2) The process then "balances" excesses and shortages according to the following pattern to calculate by pay grade the net rating shortage:

E-7 excesses cancel E-6 shortages

E-6 excesses cancel E-7 and/or E-5 shortages

E-5 excesses cancel E-6 and/or E-4 shortages

E-4 excesses cancel E-5 and/or E-3 shortages

E-3 excesses cancel E-4 shortages

(3) If the above pay grade balancing process results in a net rating shortage of zero, no further processing of the rating is required and the program returns to the first step to process another rating. If, however, shortages do exist, the values are stored, by pay grade, in an Activity Rating Shortage Count Table for later processing use.

(4) The next processing step determines which, if any of the activity's rating shortages are NEC shortages.* This is accomplished in the following manner:

(a) All NEC records for the rating are pulled from the CADA Strength File, and excesses and shortages are calculated, by pay grade, for each NEC.

(b) NEC excesses and shortages are then balanced to calculate net shortages. NEC balancing, however, is performed without regard to pay grade. That is, an excess in one pay grade will cancel a shortage in any other pay grade of the rating.

(c) Upon completion of balancing, any existing NEC shortages are stored, by pay grade, in an Activity NEC Shortage Count Table.

(5) The process then records the billet vacancies (shortages) of the Activity on a Fleet Vacancy Working File by rating, pay grade, NEC, and date of vacancy; e.g., COB, POB-1, POB-2, etc. To accomplish this, the following processing steps must be performed:

(a) As each NEC vacancy is written on the Fleet Vacancy File, the corresponding pay grade count is reduced by one on both the NEC Shortage Count Table and the Rating Shortage Count Table. This process continues until either the NEC Shortage Count Table or the Rating Shortage Count Table is reduced to zero.

(b) If the Rating Shortage Count Table is reduced to zero and values still remain on the NEC Shortage Count Table, the remaining NEC shortages are written on the Fleet Vacancy File. These vacancies are flagged to indicate that any nominations that may be made to fill the vacancies are in excess of rating requirements.

(c) If the NEC Shortage Count Table is reduced to zero and values still remain on the Rating Shortage Count Table, the remaining rating shortages are written on the Fleet Vacancy File.

It should be noted that the data contained in the Fleet Vacancy File can be used by the PAMI to prepare personnel requisitions, as required, for submission to BUPERS.

c. Develop Type Command Status Count Totals. This step develops by rating and pay grade groups, accurate, up-to-date status counts of the personnel charged to each type command. These data are required for use in the Quota Calculation Segment to insure equitable distribution of availabilities.

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*For purposes of this report, the term "NEC" refers to NEC's other than four zeros (0000).

The process develops type command Status Count Totals for each pay grade within a rating by tallying the activity manning requirements records and the on board count records in the applicable type commands using the data contained in the updated CADA Strength File. These totals are computed on the basis of the user prescribed manning requirements and POB and Nomination Total figures.

After each type command's on-board count totals are computed, these totals are adjusted (increased), as appropriate, by the number of "predesignated" and "special case" availabilities received for assignment to activities within the type command. This procedure is necessary to charge these unassigned availabilities to the applicable type command in order to ensure equitable distribution of the "general" availabilities received for distribution and assignment.

"General" availabilities are defined as personnel made available by BUPERS and Fleet Commands for assignment to general sea duty (Type Duties 2 and 4) but who may be assigned to any other type of duty, as needed. "Predesignated" availabilities are defined as personnel made available, primarily by BUPERS, for assignment to a specified type of duty, such as fleet shore duty, overseas shore duty, and submarine duty. "Special case" availabilities are defined as personnel who must be given special consideration for assignment, such as humanitarian availabilities and first term reenlistees.

To provide the data necessary to ensure equitable distribution of available supervisory, journeyman and apprentice skill levels, the next processing step combines the adjusted totals for each rating within a type command into the following pay grade groups:

E-6 and E-7 are summed together

E-5 stands alone

E-4 and below are summed together

The results of this process are then written on the Fleet Vacancy File and used as input to the Quota Calculation Segment.

3. Quota Calculation Segment

This Segment performs two separate functions: first, it calculates a "fair share" quota of general availabilities for assignment to activities within each type command, and second, it generates an Abbreviated Availability File for use in the Assignment Nomination Segment. In general, processing for this Segment is performed in the following manner:

a. Tally General Availabilities. The process first tallies, by rating and pay grade group (i.e., E-6 and E-7, E-5, and E-4 and below) the general availabilities to be distributed and assigned. These tallies include the general availabilities listed in the Availability Working File as well

as those personnel previously nominated but for whom renomination requests have been received by PAMI, as listed in the Renomination Request File. The results of this tallying process are later used to allocate availabilities on a "fair share" basis.

b. Compute Type Command On-Board Percentages. Next, the process computes the percentage of each type command's manning requirements projected to be on board at the prescribed POB utilizing the applicable POB status data contained in the Fleet Vacancy File. The following formula is used for computing these percentages:

$$\text{\% of manning requirements} = \frac{\text{POB count x 100}}{\text{manning requirements}}$$

c. Quota Allocation. Once the availability tally has been made and on-board percentages have been computed, the process equitably allocates the general availabilities to the various type commands. This "fair share" distribution is accomplished as follows:

(1) An availability is numerically allocated to the type command with the lowest manning percentage.

(2) The availability tally is reduced by one.

(3) The manning percentage is recomputed for that type command.

This process continues until all availabilities have been distributed. In the event there are more availabilities than requirements, based on user prescribed manning requirements, the excess are forwarded to EPDO for manual distribution and assignment. It should be noted that this processing step determines distribution quotas but does not nominate personnel for distribution to type commands. These quotas serve as limiting guidelines for the Assignment Nomination Segment.

d. Construct Abbreviated Availability File. Current MAPMIS planning provides that the records of personnel made available for assignment contain all the information necessary to prepare EAD's in complete detail. All of these data are not considered, however, in the assignment decision-making process. For example, availability records will contain the following types of information that normally are not directly applicable to assignment decisions: The individual's state of residence, religion, proficiency pay status, etc. It is considered desirable, therefore, that the CADA System Availability Working File generated during the File Update Segment be reformatted to include only those data elements necessary for the system to make optimal assignment nominations. Consequently, the objective of this processing function is to reformat the Availability and Waiting List Files into an abbreviated file for use in the assignment nomination process.

4. Assignment Nomination Segment

The function of this processing Segment is to nominate availabilities and personnel on duty waiting lists to billet vacancies within the fleet.

The Segment has two Subsegments corresponding to "quota controlled" and "non-quota controlled" assignment nominations. Each of these is described below:

a. Quota Controlled Subsegment. This Subsegment nominates duty waiting list personnel and general availabilities for assignment to fleet activities within the limits of the quota allocations calculated in the preceding processing Segment.

The nomination procedure involves numerous processing steps carried out in two stages. The first processing stage involves the comparison of each availability with each vacant billet on the basis of certain "standard" variables. These "standard" man-related and activity-related variables are those variables, such as rating, pay grade, NEC, take-up and vacancy dates, and duty preferences, which apply in every assignment case. The second processing stage involves a screening of the man/billet matches made in the first stage to ensure that the match is compatible with all relevant policy criteria. The variables considered in the second stage are those which apply to only certain men or billets; e.g., age, dependency status, EAOS, etc. If a man/billet match passes through the second stage, the man and billet are dropped from further processing and an assignment nomination is written on the Nomination (NOM) Working File. If a man/billet match is rejected in the second stage, the man and billet are returned to the first stage for re-processing. It should be noted that this second stage applies only to "general" availabilities since waiting list personnel are considered fully qualified in all respects for the duty requested.

In the actual processing of the first stage, each man is repeatedly exposed to all fleet billet vacancies until the best possible match of man and billet is obtained. The process consists of a sequence of twelve separate "scans" of the Vacancy File and the Abbreviated Availability File. Each "scan" represents an attempt to match a man to a billet on the basis of the specified standard variables. Each successive scan represents a "trade off" or compromise in matching these specified variables. This scanning process is illustrated in Figure 2.

Figure 2 shows the standard variables and the scanning sequence for comparison of man and billet in the first stage of the nomination process.

In the first scan of the sequence, each man and each billet are compared in terms of (a) the man's rating, pay grade, and NEC with the corresponding rating, pay grade, and NEC required in the billet; (b) the man's take-up date with the vacancy date of the billet; and (c) the man's duty preferences with the homeport and type of the activity in which the billet vacancy exists. If a man/billet match is made in the first scan, both the man and billet are either passed on to the second stage for processing in the care of general availabilities or written directly on the Nomination Working File in the care of waiting list personnel.

If a match cannot be made in the first scan, the process begins a second scan of men and billets. In the second scan, an attempt is made to match the man's pay grade with a billet vacancy one pay grade higher.

STANDARD VARIABLES

SCAN NUMBER	MAN/BILLET RATING	MAN/BILLET PAY GRADE	MAN PAY GRADE/ NEXT HIGHER BILLET PAY GRADE	MAN/BILLET NEC	MAN TAKEUP DATE/ BILLET VACANCY DATE	MAN DUTY PREFERENCES
1	X	X		X	X	X
2	X		X	X	X	X
3	X			X	X	X
4	X	X		X	X	
5	X		X	X	X	
6	X			X	X	
7				X	X	X
8				X	X	
9	X	X			X	X
10	X		X		X	X
11	X	X			X	
12	X		X		X	

Fig. 2. Standard Variables Compared in Each Scan of the First Stage of the Nomination Procedure

The other variables are matched as in the first scan. If a match is made in the second scan, the man and billet are passed on for further processing or are written on the Nomination Working File as previously described. If, however, a match is not made, a third scan of men and billets attempts a match without regard to the pay grade variable. In this manner, the scanning process continues trying to make a match ignoring in succession one or more of the variables, as indicated in Figure 2.

If a man passes through the twelve scans in the sequence without being matched to a billet, he is written off on a listing flagged for hand assignment.

It should be noted that although the procedure described above provides for a single optimal nomination for each availability, the system is capable of providing users with multiple nominations, if desired, by keeping all man and billet records in the scan process until the desired number of nominations for each man or for each billet has been made.

To ensure that fleet personnel serving on arduous sea duty are given preference over general availabilities for assignment to the more desirable types of duty, such as overseas shore and preferred sea duty, waiting list nominations are processed first. However, because waiting list nominations must be limited to type command quota allocations, the following processing steps are necessary to maintain "fair share" distribution:

(1) As each man/billet match is made from the duty waiting list, the quota for the applicable type command is reduced by one, and the quota for the type command from which the man is nominated is increased by one.

(2) The assignment nomination is written on the Nomination Working File and both billet and man are dropped from further processing.

The above waiting list processing continues until either the applicable type command quotas are reduced to zero or all available duty waiting list personnel have been nominated for reassignment.

After all possible waiting list nominations have been made, general availabilities are processed for nomination, within quota limitations, in a similar manner.

The nomination process also generates a Nomination Journal Action Record and a Duty Waiting List Journal Action Record, where applicable, for each nomination. This information is transmitted to BUPERS as a personnel change for use in updating the individual's MAPMIS record in the Enlisted Master File to indicate that a tentative assignment (nomination) has been made and, when applicable, that the individual is deleted from the waiting list.

b. Non-Quota Controlled Subsegment. This Subsegment processes predesignated and special case availabilities for nomination to billet vacancies existing within the fleet. The processing for this Subsegment

follows the same general flow as that described above for the Quota Controlled Subsegment. However, the processing for this Subsegment differs in the following major aspects:

(1) In the first stage of the nomination procedure, availabilities are exposed only to billet vacancies existing within the type command or type of duty for which they have been dropped, rather than to all fleet billet vacancies. For example, fleet shore duty availabilities are matched with fleet shore duty billets existing within the geographical areas specified. Fleet shore duty availabilities for whom no geographical area has been specified are exposed to all fleet shore duty billets to obtain optimum man/billet matches.

(2) The second stage of the nomination procedure is not required because each availability has been considered by BUPERS to be fully eligible for assignment to the type of duty and geographical area specified.

5. Enlisted Assignment Document (EAD) Segment

This final Segment of the Daily Nomination Phase of the CADA System accomplishes the processing necessary to print EAD's for availability and duty waiting list assignment nominations as well as in response to EAD inquiries.

Because the Nomination Work File contains abbreviated records of personnel nominated for assignment to fleet billet vacancies, it is necessary to match this file against the Availability File, the Duty Waiting List File, and the Renomination Request File to extract the data elements required for EAD preparation. The process sorts these files by service or Social Security Number, matches them, and writes the data on an EAD Working File, which is sequenced according to the needs and desires of the EPDO. For example, the user may specify that EAD's be sequenced by type command and by rating and pay grade within type command to expedite distribution within the EPDO.

After the EAD Working File has been established, it is used in conjunction with the EAD Request File and the Activity File to print EAD's. The Activity File is used to extract pertinent activity data, such as activity titles, as necessary. The process also generates a waiting list control card for each individual nominated for reassignment from the duty waiting list. These control cards are in the form of journal changes and contain all the information necessary for the PAMI to reestablish an individual on the duty waiting list in the event a waiting list nomination is not accepted by the EPDO. Control cards for accepted waiting list nominations will be destroyed.

PHASE II - CADA STRENGTH FILE RE-CREATION PHASE

The purpose of this Phase is to recompute on a monthly basis all on-board and nomination totals in the CADA Strength File. This process is necessary to establish current values for POB-1, POB-12, and POB-18 as well as to perform a systems check of the File Update Segment of the Daily Nomination

Phase. Figure 3 depicts the process flow for this Phase. In general, the first processing step readies the CADA Strength File for re-creation by clearing all present on-board and nomination totals. The process then summarizes the on-board and nomination data contained in the Enlisted Master File by rate and NEC for each fleet activity, following prescribed MAPMIS criteria. Finally, the process records the reconstructed on-board and nomination totals in the appropriate fields of the CADA Strength File.

PHASE III - FLEET DRAFT PHASE

The function of this Phase of the CADA System is to equitably select enlisted personnel from fleet type commands for reassignment to fill manpower drafts imposed upon the fleet. Personnel may be drafted from all fleet activities or the draft may be limited to specified type commands or activities. The drafting authority submits draft requests to PAMI in the form of Draft Request Control Cards that specify the criteria on which the draft will be based. The CADA System then nominates personnel from fleet billets in accordance with the specified criteria.

The control cards prescribe the criteria for the draft including the type commands and/or activities to be excluded as well as the qualifications and restrictions for selecting fleet personnel for reassignment. If not otherwise specified, the system will draft personnel on a "fair share" basis from all fleet type commands. If, however, the drafting authority desires to exclude certain type commands or activities from the draft, he specifies those to be excluded. For each type command, or portion thereof, to be excluded, the drafting authority must specify the cognizant detailer code, the type of duty, the area or geographical location, and, if an individual activity, the Bureau Unit Identification Code (BUIC). The drafting authority also specifies the number of personnel required by rating, pay grade, and NEC, the necessary obligated service, and the activities and their location for which personnel are being drafted. Also specified are the type command and activity "drawdown limits" which are used to calculate fair share drawdown quotas and to sequence activities in order of drawdown priority.

The drafting authority may also prescribe other criteria, such as age, dependency status, and evaluation marks. Any prescribed standard fleet draft criteria not included on control cards shall be considered in determining draft eligibility. (See Appendix D for Pacific Fleet Draft Criteria.)

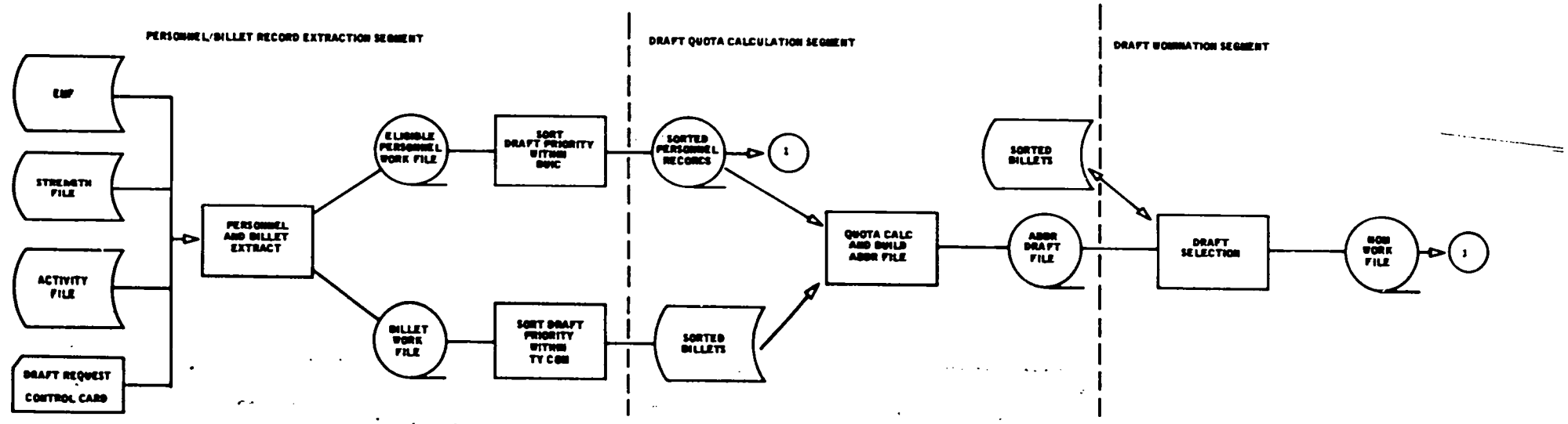
The Fleet Draft Phase as shown in Figure 4 consists of the following four processing segments:

1. Personnel and Billet Record Extraction Segment
2. Draft Quota Calculation Segment
3. Draft Nomination Segment
4. Enlisted Assignment Document (EAD) Segment

PHASE II - CADA STRENGTH FILE RE-CREATION PHASE

FIGURE 3

PHASE III - FLEET DRAFT PHASE



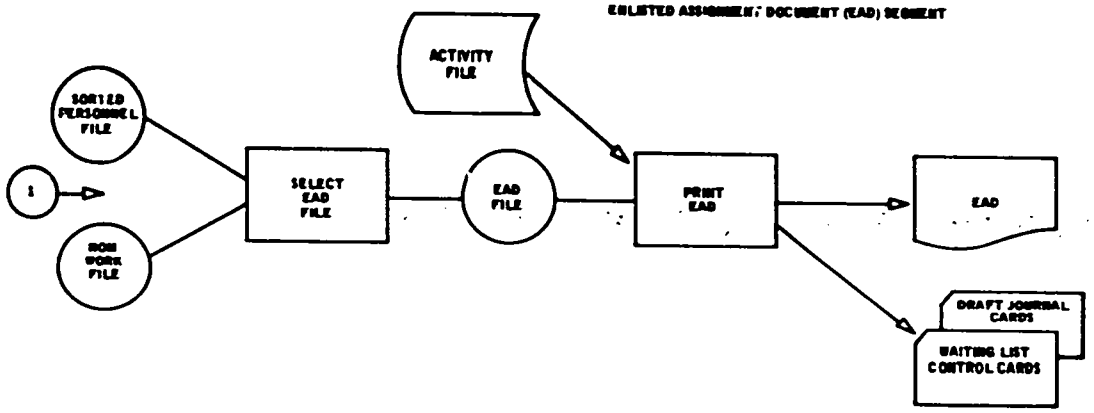


FIGURE 4

Each of these segments is discussed below.

1. Personnel and Billet Record Extraction Segment

This Segment utilizes the Enlisted Master File (EMF), the CADA Strength File, the Activity File, and the Draft Request Control Cards to generate two working files from which draft nominations will be made. The two working files generated in this Segment are: (a) a file of fleet personnel eligible for reassignment in accordance with the prescribed draft criteria (Eligible Personnel Work File) and (b) a file of the billets to which these eligible personnel are presently assigned (Billet Work File).

In general, the process flow for this Segment is:

a. The EMF is scanned to locate an individual who meets the prescribed draft criteria. When an individual is located, his record is placed in the Eligible Personnel Work File in Social Security Number sequence.

b. The process then tallies the record on an Eligibility Count Table for the applicable type command. These tally count tables will be used later in the process to calculate type command draft quotas.

c. The individual's billet record is then retrieved from the CADA Strength File and the process calculates the percentage of personnel projected on board in the billet at the prescribed POB. The billet record, together with the projected on-board percentage and the prescribed activity drawdown limit indicated on the draft control card, is then placed into the Billet Work File in BUIC sequence.

d. The process then returns to step "a" above and continues in the above manner until all eligible personnel and billet records have been processed.

e. Once the Eligible Personnel Work File and the Billet Work File have been constructed, they are resequenced as follows:

(1) Eligible Personnel Work File. Personnel records are resequenced in draft priority order within BUIC. Any personnel on the duty waiting list who have requested reassignment to the type duty and geographical area for which the draft is being made are given highest priority. These records are sequentially arranged in order of sea duty commencement date. Priority for the other eligible personnel is established on the basis of criteria prescribed by the drafting authority. For example, the criteria for establishing draft priority for eligible personnel in the Pacific Fleet are: sea duty commencement date, EAOS date, tour completion date, months on board, and primary dependency status.

(2) Billet Work File. Billet records are resequenced in draft priority order within type commands. Shore-line billet records (Type Duties 1, 3, and 6) within a type command are sequentially arranged in inverse order of POB percentage. That is, the billet with the highest percentage of

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personnel on board at the prescribed POB figure is given the highest priority for drawdown. Consequently, the billet with the most personnel will be drafted first.

Sea-line billet records (Type Duties 2, 4, and 5) within a type command are arranged in order of deployment status. For purposes of establishing billet draft priority, toured ships are considered to be in a deployed status. These data are extracted from the Activity File, as indicated in Figure 4. Billets in non-deployed ships are given highest draft priority, and these billet records are sequentially arranged by BUIC deployment date in inverse order of POB percentage. Once all non-deployed billet records are sequenced in priority order, deployed ship billet records are also sequentially arranged in inverse order of POB percentage.

2. Draft Quota Calculation Segment

The first processing step in this Segment is to develop up-to-date status count totals and POB percentages by type command for each rate to be drafted. This is accomplished in the manner previously described in the Daily Nomination Phase (pages 19-21). However, in this process rating pay grades are not summed together into pay grade groups and the POB figure used is the transfer date (month) specified in the draft control card. These status count totals and percentages, as well as the prescribed type command drawdown limits, are placed in the Billet Working File in descending order of POB percentages. "Fair share" quotas are then calculated as follows:

a. An allocation of one man is made to the type command with the highest POB percentage.

b. Each of the following counts are reduced by one:

(1) The Type Command Eligibility Tally Count Table

(2) The type command POB total

(3) The draft total

c. The type command POB percentage is then recomputed and resequenced, if necessary.

d. The process then returns to step "a" above and continues until one of the following occurs:

(1) The draft total is reduced to zero.

(2) All type command eligibility tallies are reduced to zero.

(3) All type command drawdown limits have been reached.

If the type command's eligibility tally is reduced to zero, or the prescribed drawdown limit has been reached, that type command is dropped

from the quota calculation process and no further allocations are made to it. If all type command eligibility tallies are reduced to zero, or if the prescribed drawdown limits have been reached for all type commands before the draft total is reduced to zero, the remaining draft requirements are returned to the drafting authority for disposition.

3. Draft Nomination Segment

The objective of this Segment is to nominate the most eligible personnel for reassignment from the fleet billets that can best afford to lose them. Since the Eligible Personnel Work File and the Billet Work File are sequenced in order of draft priority, nominations will be made in the following manner:

a. The billet record of the activity with the highest draft priority within a type command is matched with the personnel record having the highest priority within the activity.

b. The nomination is made, written on the Nomination Work File and the type command quota is reduced by one.

c. The billet record POB total is reduced by one and the percentage recomputed. If the recomputed POB percentage is greater than the prescribed activity drawdown limit, the record is resequenced in the proper draft priority order. However, if the activity drawdown limit has been reached, the record is dropped from further processing consideration.

d. The process then returns to step "a" above and continues until the type command quota is reduced to zero, or until the drawdown limits have been reached for all activities within the type command. If the type command's quota has not been reduced to zero before all the activities have been reduced to the prescribed drawdown limits, the remaining portion of the quota is reallocated to the remaining type commands.

e. The process then moves to the next type command and continues the above steps until all type command quotas have been reduced to zero or until all activities have been drawn down to the prescribed drawdown limits.

Upon completion of the above processing, any unfilled draft requirements are returned to the drafting authority for disposition.

4. Enlisted Assignment Document (EAD) Segment

The processing for this Segment utilizes the Nomination Work File, Eligible Personnel Work File, and the Activity File to extract data to prepare EAD's for draft nominations. This processing is accomplished in the manner previously discussed in the Enlisted Assignment Document (EAD) Segment of the Daily Nomination Phase on page 25.

PHASE IV - TYPE COMMAND BALANCING PHASE

This phase of the CADA System is designed to provide manpower managers with an automated system for maintaining equitable personnel balances in fleet activities to achieve optimal utilization of available personnel resources. In general, the function of this Phase is to determine where personnel imbalances exist within the fleet and to nominate personnel for reassignment to correct the imbalances. The general process flow for this Phase is illustrated in Figure 5.

This Phase of the CADA System is performed only when requested by the user who has the option, by means of control cards, of balancing all type commands simultaneously, selected fleet type commands, or specified activities within a particular type command. Moreover, ratings in all fleet controlled billets within a type command may be balanced, or the process may be limited to those ratings specified by the user.

This phase consists of the following three Segments:

1. Excess and Shortage Calculation Segment
2. Balancing Nomination Segment
3. Enlisted Assignment Document (EAD) Segment

Each of these Segments is discussed below.

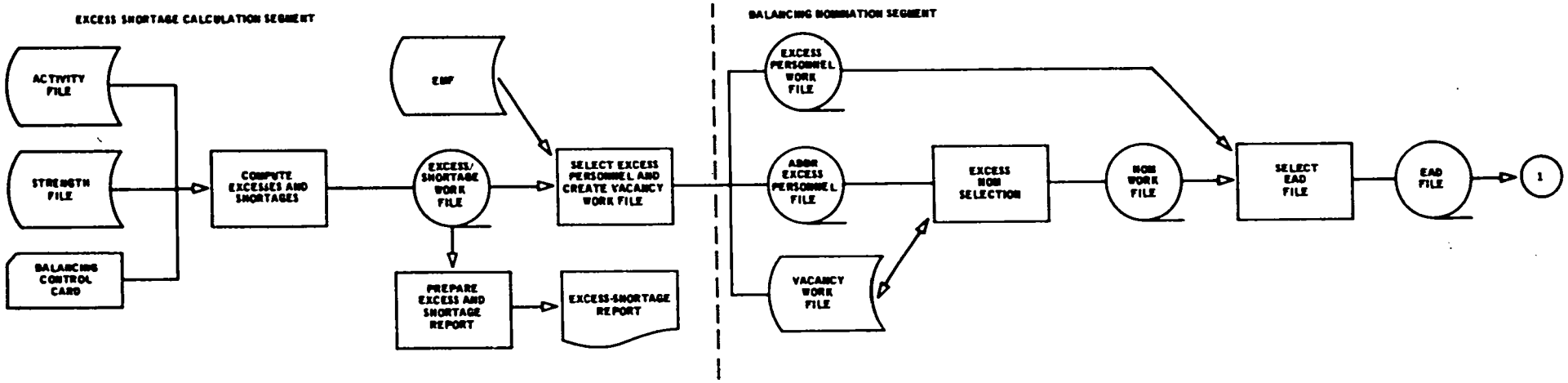
1. Excess and Shortage Calculation Segment

The objective of this Segment is to accurately determine, by rate and NEC, the personnel excesses and shortages that exist within each activity of a type command. The processing procedure utilized is identical to the procedure previously discussed in the Billet Vacancy Calculation Segment of the Daily Nomination Phase on pages 17-20.

Once all activity numerical excesses and shortages are calculated, the process writes them onto an Excess/Shortage Work File, by rate and NEC, in BUIC sequence within type command. This file is used to prepare an Excess/Shortage Report in type command sequence, if requested by the user.

The process then matches the numerical Excess/Shortage Work File against the Enlisted Master File (EMF) to generate an Excess Personnel Work File. The criteria normally used for selecting personnel records for inclusion in this file are: (a) months on board, (b) Expiration of Active Obligated Service (EAOS), (c) reenlistment status, and (d) SEAVEY status. Any additional user-prescribed criteria which may be included on the Balancing Control Card will also be utilized. In order to minimize computer time during the nomination scanning process, the Excess Personnel Work File is reformatted into an abbreviated file that contains only those data elements which are necessary for the system to nominate excess personnel for reassignment in accordance with user-prescribed guidelines and criteria. (See Appendix E, for Pacific Fleet Type Command Balancing Criteria.)

PHASE IV - TYPE COMMAND BALANCING PHASE



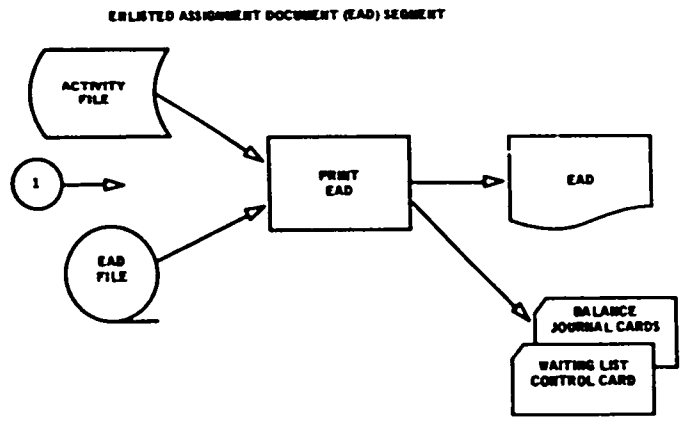


FIGURE 5

In addition to the Excess Personnel Work File described above, the process also generates a Vacancy Work File for use in the nomination process. Activity shortage data is extracted from the numerical Excess/Shortage Work File and written on the Vacancy File by rate and NEC in BUIC sequence within type command.

2. Balancing Nomination Segment

The processing for this Segment nominates excess personnel within a type command for reassignment to a vacant billet within the same type command. Nominations are based on the guidelines and criteria prescribed by the user. For example, in the Pacific Fleet, excess personnel are normally reassigned to an activity with the same homeport.

The processing for this function is essentially the same as previously discussed in the Quota Controlled Subseqment of the Assignment Nomination Segment of the Daily Nomination Phase (pages 22-24).

3. Enlisted Assignment Document (EAD) Segment

This final Segment of the Type Command Balancing Phase accomplishes the processing necessary to prepare EAD's for the excess personnel nominated for reassignment. The output from this processing is sequenced in BUIC order within type commands and is submitted to users for final disposition.

PHASE V - RAPID INQUIRY PHASE

The Rapid Inquiry Phase (Figure 6) of the CADA System is designed to make available to the user one-time, "instant need" report requirements. Highly flexible and user oriented, this phase allows the user to specify the data elements contained within the Enlisted Master File, Activity File, or CADA Strength File for report generation. Data elements selected for reporting may be extracted singularly or in combination.

Inquiry Control Card information supplied by the user will prescribe the data extraction criteria, the report content, and the sort and report format required. Control cards will be prepared for the extraction run, and by establishing control fields for the extracted data, the records will be sorted, totalled and formatted as requested, in the desired output form; i.e., special report form or reference card.

COMPARATIVE SUMMARY

The preceding sections of this report describe two systems for the distribution and assignment of enlisted personnel to the Pacific Fleet. While the present EPDOPAC system and the proposed CADA System are both directed toward the same objective of efficient personnel distribution and assignment, some fundamental differences exist between the two systems. This section will provide a comparative summary of the two systems in respect to their operational characteristics and functional capabilities.

PHASE V - RAPID INQUIRY PHASE

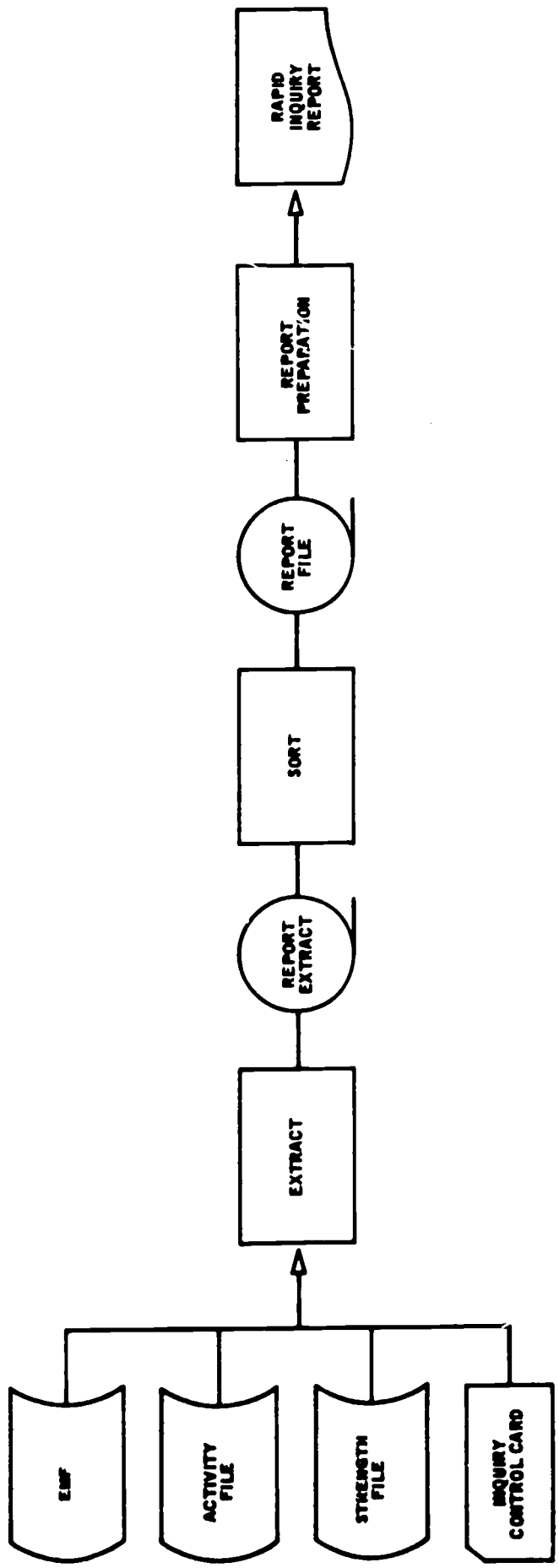


FIGURE 6

Operational Characteristics

The operational characteristics of the present EPDOPAC system and the proposed CADA System differ in terms of their supporting data base and the degree of user control over the system.

1. Data Base

As noted previously, the CADA System data base will be MAPMIS (Manpower and Personnel Management Information System) oriented, whereas the data base for the present EPDOPAC system is oriented to the current Navy Manpower Information System (NMIS). MAPMIS will provide the CADA System with considerably more data than is presently available in the current NMIS. For example, MAPMIS planning provides for the inclusion of five different NEC's on an individual while the present NMIS provides for only two. These additional data will better enable the CADA System to nominate personnel for assignment to billets where their training and skills can be best utilized, thus contributing to unit readiness and optimal utilization of personnel resources.

It should be noted, however, that the CADA System data base will require additional activity and personnel data from sources other than MAPMIS; namely, ship employment information (deployment dates, deployment return dates, and scheduled overhaul dates) and also duty waiting list information. Because these data are of such significance to the effectiveness of the CADA System and since current planning does not provide for their inclusion in BUPERS Master files, it is highly recommended that they be included in MAPMIS. If these data elements are not included in MAPMIS, PAMIPACFLT will be required to maintain and update separate data storage files for this information.

In addition to a broader data base, current MAPMIS planning provides that activity and personnel change data will be transmitted to PAMI's daily. Therefore, the data storage files utilized in the CADA System will be updated daily rather than monthly as are the present PAMIPAC data storage files. This feature will provide the CADA System with accurate, more up-to-date data upon which to calculate personnel requirements and to make distribution and assignment decisions.

2. User Control

As in the present system, the CADA System will be controlled by the users, EPDOPAC and the Type Command Representatives. The policies, procedures, priorities, and variables by which the CADA System will assist in the distribution and assignment of personnel will be prescribed by the users. In this sense, the users have control over the output of the CADA System by setting the constraints within which it must operate. Changes in policies, procedures, etc., will be entered into the system by means of control cards prepared by the user. This feature will enable the CADA System to respond rapidly and efficiently to user needs without requiring extensive rewriting of system programs. Moreover, the CADA System will ensure that policies,

procedures, priorities, etc., will be objectively applied in all appropriate situations. This will help prevent differences in actions due to the subjective interpretation of written directives by the various distributors and detailers as occasionally occurs in the present system.

Functional Capabilities

The present EPDOPAC system and the proposed CADA System also differ in their capability to effectively carry out the major functions of fleet personnel distribution and assignment. These differences are summarized below.

1. Determining Personnel Requirements.

The CADA System will calculate personnel requirements (billet vacancies) each working day as opposed to the present system in which requirements are manually calculated once a month. Thus, the CADA System will be capable of responding more rapidly and effectively to unexpected changes (e.g., losses, reenlistments, casualties, etc.) in the Pacific Fleet personnel situation.

2. Distribution of Availabilities

The CADA System will numerically distribute availabilities by statistically computing "fair share" quotas for type commands. In the present system, available personnel are distributed by rating distributors who mentally calculate the number to be allocated to each type command. By statistically calculating type command quotas, the CADA System will be capable of ensuring more equitable distribution of availabilities.

3. Assignment of Availabilities

The CADA System will, for the most part, expose each available man to billet vacancies existing in all type commands until the best possible match of man and billet is obtained. When the numerical quota for a type command has been filled, any remaining vacancies existing within the type command will be dropped from the screening process.

In the present system, on the other hand, an individual's assignment possibilities are limited to billet vacancies existing within the single type command to which he was allocated. By considering all fleet billet vacancies for each individual, the CADA System not only will help improve the utilization of available personnel resources but also will ensure the consideration of individual duty preferences.

4. Reassignment of Fleet Personnel

The CADA System will also be capable of providing assistance in the reassignment of fleet personnel to fill fleet drafts or for type command balancing actions.

a. Fleet Draft Reassignments. The CADA System will statistically compute "fair share" type command drawdown quotas for filling fleet drafts. Quotas will be based not only on type command POB-7 percentages, as is presently the case, but also on the number of draft eligible personnel within each type command. This feature of the CADA System will ensure the assignment of equitable type command drawdown quotas, and will also preclude the possibility of prescribing a quota in excess of the on-board count of draft eligible personnel, as occasionally happens in the present system.

In addition, the CADA System will have the capability to statistically determine the billets from which eligible men can be reassigned. The system will compute POB-7 percentages for each billet in which eligible personnel are serving and will select personnel for reassignment, within prescribed drawdown quota limits, from billets with the highest percentages.

In the present system, type command detailers visually screen BUPERS Forms 1080-14 to identify billets in which draft eligible personnel are serving. As an eligible individual is located, the detailer makes a personal judgment whether or not the man can be reassigned. Thus, it can be seen that the CADA System will ensure that personnel are reassigned from billets that can best afford to lose the men more effectively than does the present system.

b. Fleet Type Command Balancing Reassignments. The CADA System will calculate the numerical excesses and shortages of personnel existing within each activity and/or type command. Excess personnel eligible for reassignment will then be selected on the basis of criteria prescribed by the type command and by current policy. As in reassignment for fleet drafts, the CADA System will nominate personnel for reassignment from billets that can best afford to lose them more objectively than can be done under the present manual procedures.

5. Utilization of Duty Waiting Lists

The CADA System will process the duty waiting list daily rather than at periodic intervals throughout the month as in the present system. Personnel on the duty waiting list will be nominated to billet vacancies existing in the duty of their choice prior to processing availabilities for assignment nomination. This procedure will better ensure that personnel serving on arduous sea duty are given preference in the assignment to the more desirable types of fleet duty, in accordance with current CINCPACFLT policy.

FUTURE RESEARCH

The future plans for the CADA System research effort described herein are concerned, first of all, with the writing and testing of the various computer programs included in the system design. When all of the individual programs have been satisfactorily tested, the complete CADA System will be operationally tested on the PAMIPACFLT computer in parallel with the present

EPDOPAC distribution and assignment process. This operational test will provide data for a comparative evaluation of the CADA System and the present system. It can be expected that some modifications of the CADA System design may be necessary at this point to accommodate new or revised statements of user requirements.

If, in the end, the evaluation indicates that the CADA System is a substantial improvement over the present system and is also an acceptable replacement for present procedures, the research effort will then concentrate on the full implementation of the CADA System in EPDO and PAMIPACFLT. At that time, the research effort will also be directed at adapting the concept and procedures of the CADA System, as necessary, for test and eventual implementation in EPDO and PAMILANT, and then, subsequently, in BUPERS.

These plans for implementation of the complete CADA System as outlined in this report may be modified because of the current BUPERS plans for restructuring the enlisted distribution and assignment process. At the present time, a concerted effort is being made by Pers-B2, with the cooperation of the EPDO's and PAMI's, to develop a centralized system for personnel distribution and assignment. Under the centralized concept, certain functions currently performed by the EPDO's will be performed at the BUPERS level. Other functions of the EPDO's and BUPERS will be modified to varying degrees. The CADA System design, however, is capable of accommodating these changes with a minimum of difficulty. As a result, all the research effort already expended in the development of the CADA System as well as the planned effort for an operational test of the system design will be directly related to the successful implementation of the centralized concept. If, on the other hand, the decision is made not to centralize the present system, the results of the CADA System research will still have application for the improved management of the distribution and assignment of enlisted personnel.

APPENDICES

APPENDIX A
PROCEDURAL DESCRIPTIONS OF PACIFIC FLEET DISTRIBUTION AND ASSIGNMENT FUNCTIONS

The analysis of the present EPDOPAC system described in this report identified five major functions associated with the distribution and assignment of enlisted personnel in the Pacific Fleet. This appendix describes in detail the procedures followed by EPDOPAC and type command personnel in carrying out each of these five functions.

Determination of Personnel Requirements.

The purpose of this function is to determine the personnel required, by rating, paygrade, and Navy Enlisted Classification (NEC) Code, to fill the billet vacancies that exist or will exist within the fleet. In the Pacific Fleet, personnel requirements are computed monthly by type command detailers for each activity or unit within a type command. These computed requirements are used primarily by the detailers as "work sheets" in the routine assignment of personnel made available during the month. However, for certain types of duty or activities these requirements are also used to prepare monthly personnel requisitions which are submitted by the EPDO to BUPERS.

The basic data source for the computation of personnel requirements by detailers is the Enlisted Distribution and Verification Document (Form 1080-14). The first step in the computation procedure is to "update" the 1080-14 for each activity upon its receipt from the Personnel Accounting Machine Installation (PAMI). The personnel actions (i.e., prospective gains and losses) that have occurred in the approximately eight days between the 1080-14 cut-off date and the date of its receipt by the detailer are manually entered on the 1080-14.

Next, the manpower shortages and excesses that exist within each activity are computed, by rating, paygrade, and NEC. Rating shortages and excesses are calculated by paygrade from the difference between the number of personnel prescribed for each paygrade by the PACFLT Enlisted Distribution Plan (EDP) and the on-board strength for the paygrade projected seven months into the future (POB-7). Because the EDP for a paygrade of a rating normally encompasses the NEC allowances of the paygrade, NEC shortages and excesses are calculated, by rating and paygrade, from the difference between the NEC allowance and POB-7.

Rating and NEC excesses and shortages are then "balanced," as follows, to determine an activity's manpower requirements:

1. Rating Balancing.

Ratings are balanced by using excesses in one paygrade to cancel shortages in the next higher or lower paygrade according to the following pattern:

E-7 excesses cancel E-6 shortages
E-6 excesses cancel E-7 and/or E-5 shortages
E-5 excesses cancel E-6 and/or E-4 shortages
E-4 excesses cancel E-5 and/or E-3 shortages
E-3/E-2 excesses cancel E-4 shortages

For example, if an activity had a shortage in a particular rating of one E-6 and two E-4's and an excess of two E-5's, one of the excess E-5's would cancel the E-6 shortage and the other would cancel one of the E-4 shortages. The activity requirement for this rating, therefore, would be one E-4.

2. NEC Balancing.

Current instructions state that the NEC takes precedence over rate and rating in the distribution and assignment of enlisted personnel. Therefore, in compliance with these instructions NEC's are balanced by using excesses to cancel shortages without considering ratings and paygrades. For example, if an activity had a shortage of one E-6 with a particular NEC and an excess of one E-5 with the same NEC but in a different rating, the E-5/NEC excess would cancel the E-6/NEC shortage in the other rating. Thus, there would be no requirement for an E-6 with that particular NEC. The activity, however, may still have a rating requirement for an E-6 if the rating balancing procedures described above so indicate.

In the final computational step, the NEC requirements are compared with the rating requirements and the rating requirements are adjusted, as necessary, to reflect an activity's net manpower requirements. For example, if an activity's rating requirement were for two E-6's and the NEC requirement was for one E-6 with a particular NEC, the rating requirement would be reduced by one in order to remain within the EDP for the rating. Thus, the net rating requirement for the activity would be one E-6 without a specified NEC and one E-6 with a specified NEC. However, if the rating requirement were zero and the NEC requirement were for one E-6 with a specified NEC, the net manpower requirement would be for the one E-6/NEC combination because that particular billet would be vacant, notwithstanding the fact that the overall rating was at EDP.

Distribution of Availabilities.

The purpose of the distribution function is to distribute to the type commands an equitable or "fair share" of the enlisted personnel made available to EPDOPAC for assignment to duty within the Pacific Fleet. Currently, however, true equitability cannot be achieved because of existing operational commitments imposed upon the fleet. For example, EPDOPAC is required to preferentially man certain designated fleet units, including all Vietnam "in-country" activities and specified Vietnam toured ships. In addition, some personnel are made available to EPDOPAC by BUPERS for assignment to specific types or kinds of duty. These "predesignated" personnel are normally made available for assignment to fleet shore duty, overseas shore duty, submarine duty, and new construction activities. Thus, the "fair share" concept generally can only be applied to those personnel or activities not included in the above examples.

The distribution of availabilities is carried out by EPDO rating distributors each of whom is responsible for certain groups of ratings. Each day a varying number of availabilities are received by the rating distributors for action. Most of these availabilities come from outside the fleet via BUPFRS. Others are from PACFLT activities and are available for reassignment within the fleet. BUPERS availabilities include recruits, school grads and non grads, brig and hospital releases, general detail personnel, and personnel being rotated by the SEAVEY/SHORVEY system. PACFLT availabilities which do not go through BUPERS include personnel being rotated to other duty after completing tours of toured sea duty (OSVEY) or preferred sea duty (NEUVEY). In all cases, PAMPIPACFLT prepares a battery of punched cards for each availability containing the relevant personal data needed for distribution and assignment decisions.

Generally, the rating distributors first consider those availabilities "predesignated" by BUPERS for assignment. In most cases, these personnel are made available in response to the monthly personnel requisitions which are submitted to BUPERS. The predesignated personnel are distributed to the applicable type commands and the stated requirements of the type commands are updated accordingly.

In addition to the predesignated availables, the rating distributors also give initial consideration to certain "special case" availabilities such as first term reenlistees and humanitarian reassignees. These personnel are distributed according to appropriate policy.

Next, consideration is given to the remaining or "general," availabilities. These general availabilities are first screened to eliminate those not qualified for assignment to preferentially manned units. For example, Vietnam returnees and availabilities with insufficient obligated service to complete a tour are not eligible for assignment to Vietnam. The qualified availabilities are then distributed for assignment to preferentially manned units in sufficient numbers to maintain the units, as nearly as possible, at 100% of EDP. The duty choices of each individual, consistent with the needs of the service, are considered in the distribution of qualified availabilities to preferentially manned units.

Those general availabilities not qualified for assignment to preferentially manned units are then screened for assignment to fleet shore duty, overseas shore duty, preferred sea duty, and new construction activities. Sufficient numbers of qualified availabilities are distributed to applicable type commands to fill the stated requirements as nearly as possible. With the exception of recruit and Class A-School graduates, general availabilities are not utilized to fill fleet shore duty vacancies because petty officer vacancies are normally filled by predesignated personnel made available by BUPERS through SEAVEY procedures.

Finally, the remaining availabilities are distributed, by rating, to fleet sea-line type commands on a "fair share" basis. The fair share for each type command is computed by paygrade groups (i.e., E-5 through E-7 and E-4 and below) on the basis of the ratio of projected on-board strength (POB-7) to EDP. Availabilities are then distributed within appropriate paygrade

group to maintain equitable POB-7/EDP ratios in accordance with the "fair share" concept. A number of man-related variables, such as duty choices, limited duty status, enlisted designators, and NEC, are considered by rating distributors when filling fair share quotas to facilitate maximum consideration by detailers of each individual's preferences and qualifications.

Assignment of Availabilities.

The objective of this function is to assign enlisted personnel to billet vacancies within the type commands to which they have been distributed. Assignments are to be made in a manner that will achieve the best possible match of men and billets, within the constraints imposed by the needs of the service and the qualifications and preferences of the available personnel.

In the Pacific Fleet, the assignment function is performed by type command detailers for availabilities distributed for assignment to arduous sea duty (Type Duties 2 and 4), excluding designated preferentially manned units. EPDOPAC rating distributors perform the function for availabilities distributed for assignment to shore duty, overseas shore duty, preferred sea duty (Type Duties 1, 3, 5 and 6), to new construction activities, and to designated preferentially manned arduous sea duty units. The following procedures are followed by the distributors and detailers in the assignment of enlisted availabilities to the different types of duty.

1. Fleet Shore Duty (Type Duty 1).

With the exception of non-rated personnel and some Class A-School graduates, fleet shore duty vacancies are normally filled by personnel made available by BUPERS through the SEAVEY portion of the enlisted rotation system. SEAVEY personnel made available for assignment to fleet shore duty activities in the Eleventh, Twelfth, or Thirteenth Naval Districts are identified by BUPERS with availability codes 113, 123, and 133, respectively. These codes are included with other relevant information in the battery of punched cards compiled for each availability. Individuals identified with a code of 203 and without a specific geographical area indicated may be assigned to fleet shore activities as needed. High priority, consistent with the needs of the service, is given to duty preferences in the assignment of SEAVEY availabilities to activities within each geographical area.

When insufficient availabilities are received from BUPERS through SEAVEY procedures, vacancies are filled by fleet personnel through drafts levied on the sea line of the type commands (Type Duties 2 and 4). The procedures for fleet drafts will be descrited later in this appendix.

Since non-rated personnel are not included in SEAVEY rotation procedures, the filling of non-rated fleet shore duty billets must be accomplished in a different manner. Fleet shore duty non-rated billets within the Pacific Fleet consist of Non-rated Temporary Tour (NTT) billets to provide temporary non-rated personnel for the performance of mess cooking and other housekeeping duties, and permanent non-rated apprentice billets.

Recruit availabilities are utilized to fill NTT vacancies. Inasmuch as Seaman, Fireman, and Airman recruits are not made available in equal numbers from any specific graduating class, Seaman and Fireman recruits are used interchangeably to fill designated NTT vacancies. However, only Airman recruits are used to fill Airman designated NTT vacancies. Rate and duty preference are considered in the assignment of recruits to NTT fleet shore duty.

Non-rated personnel made available from ship inactivations, general detail, and recruit graduating classes are used to fill permanent non-rated apprentice vacancies. The factors considered in making assignments to this duty are rate, NEC, obligated service, limited duty status, duty preferences, last duty station, citizenship, and evaluation marks.

Most fleet shore duty designated striker vacancies are filled by Class A-School graduates. However, Class A-School graduate availabilities are assigned to fill such vacancies after five monthly personnel requisitions have been submitted to BUPERS and replacements have not been provided from SEAVEY. In selecting Class A graduate availabilities for assignment to fleet shore duty, consideration is given to rating, paygrade, NEC, duty preference, limited duty status, citizenship, last permanent duty station, and dependency status.

Personnel one paygrade below the billet requirement may be assigned to fill fleet shore duty vacancies when the required paygrade is not available.

2. Overseas Shore Duty (Type Duties 3 and 6).

Overseas billets are categorized as either overseas shore duty (Type Duty 3) or "preferred" overseas shore duty (Type Duty 6). In terms of personnel rotation policy, the former category is considered sea duty, while the latter is considered shore duty. Both categories of overseas duty are normally filled by SEAVEY personnel made available by BUPERS. Personnel coded "703" by BUPERS are designated for overseas shore duty, Type Duty 3, and have a specific geographical area for assignment indicated in the punched card battery. These personnel are assigned to an activity within the area specified. Personnel made available for assignment to preferred overseas shore duty are coded "203" and are also to be assigned to an activity within the geographical area indicated. If the punched card does not indicate a geographical area and does not include a statement indicating overseas shore duty is not desired by the man, availabilities coded "203" are assigned to any preferred overseas shore activity, as needed.

When SEAVEY availabilities are not received in sufficient numbers to fill either of the two category of overseas shore duty vacancies, personnel from within the fleet and those made available by BUPERS for assignment to general sea duty (Coded "403") are utilized. However, such personnel are assigned only to those overseas billets for which three monthly personnel requirements requistions have been submitted to BUPERS and for which no SEAVEY personnel have been made available. The priority

for selecting non-SEAVEY personnel for assignment to overseas shore duty are from:

a. First Term Reenlistees requesting such duty

b. Overseas shore duty waiting list (not for preferred overseas shore)

c. Vietnam returnees

d. OSVEY personnel completing 12 month unaccompanied tours

e. Other OSVEY availabilities

f. NEUVEY availabilities

g. General availabilities (including school and general detail)

h. SHORVEY availabilities (not for preferred overseas shore)

i. Fleet Drafts

3. Preferred Sea Duty (Type Duty 5).

This category is defined as duty in ships, squadron, and staffs which normally remain in the assigned home port, or operate locally therefrom only for brief periods. This duty is classified as "nuetral time" (i.e., neither sea duty nor shore duty) for rotation purposes. Preferred sea duty vacancies are filled to the maximum extent possible from a waiting list of fleet personnel serving on arduous sea duty (Type Duties 2 and 4) who desire transfer to this type of duty. Priority of assignments of eligible personnel from the waiting list is determined by:

a. Date of receipt of request

b. Operating schedule of present activity

c. Tour Completion Date (TCD) for men in toured sea duty activities

When insufficient eligible personnel are available from the waiting list, vacancies are filled from availabilities in the following order of priority:

a. Vietnam returnees

b. OSVEY personnel completing 12 month unaccompanied tours

c. Other OSVEY availabilities

d. General availabilities (general detail and school)

e. SHORVEY availabilities

4. Arduous Sea Duty (Type Duties 2 and 4).

Arduous sea duty (Type Duty 2) includes ships or units which spend considerable periods of time at sea away from their homeports during local operations and which when deployed overseas operate at sea extensively. Type Duty 4 includes toured (non-rotated) ships, staffs, or units homeported outside the Continental United States excepting Alaska and Hawaii. These two categories of arduous sea duty encompass approximately 70% of all PACFLT billets, and, as such, represent the major application of the personnel assignment function.

As stated earlier, the type command detailers assign to arduous sea duty the availabilities allocated to each type command by the rating distributors. The assignment decision, for the most part, strives for the best match of the qualifications and preferences of the man with the specified requirements and characteristics of the billet. However, this matching of man and billet is made considering both the relative personnel needs of the various activities and their deployment schedules. This consideration means that, with everything else being equal, a man will be assigned to the activity most in need of his rating, rate, and/or NEC. By the same token, with need for his rating, rate, and/or NEC being equal among activities, a man would be assigned to the one with the earliest deployment date. Generally, however, deployment schedules tend to be an overriding factor in assignments to arduous sea duty. In many cases, therefore, a man will be assigned to an activity which might need him less numerically than other activities but which has the greatest need in terms of its deployment schedule.

The type command detailers obtain updated information on operating areas and schedules from the appropriate type command staff operations departments. This information is used in conjunction with activity personnel requirements for setting priorities of personnel needs. These priorities are used by the detailers in the assignment of new availabilities and for the reassignment of personnel within the type command when necessary.

5. Assignment to New Construction Activities.

The EPDOPAC procedure for filling New Construction personnel requirements are as follows:

a. From personnel made available by BUPERS predesignated for assignment to New Construction.

b. From fleet personnel on the New Construction waiting list.

c. From general availabilities.

d. From fleet personnel made available for reassignment to

New Construction in response to EPDOPAC drafts levied on the type commands.

Personnel made available by BUPERS for assignment to New Construction are assigned to the activity specified.

Fleet personnel on the New Construction waiting list are assigned to the activity requested. When no particular activity is requested, personnel are assigned as needed. However, personnel attached to deployed activities are not generally considered available for assignment to New Construction unless their return from deployment is compatible with the date required for reporting to new duty station. Also, if attached to a toured activity, the tour completion date must be compatible with the reporting date.

Fleet Personnel Reassignments.

This function involves the reassignment of enlisted personnel to other activities within the fleet either to maintain effective fleet personnel readiness or to satisfy certain personnel policy requirements. The first case includes fleet drafts, balancing movements, and short timer reassignments while the second includes reassignments as reenlistment incentives or for humanitarian reasons. Each of these types of reassignments are described below.

1. Fleet Drafts.

When personnel requirements for high priority activities, such as Vietnam or New Construction, cannot be filled from normal sources of availabilities or volunteers, EPDOPAC may levy a draft quota on the various fleet type commands. These quotas for qualified personnel from each type command are set on a "fair share" basis to ensure equitability. Within the criteria for selecting personnel prescribed by EPDOPAC (e.g., rate, rating, NEC, etc.), the detailers attempt to fill the draft quota in a manner which causes the least hardship to the men and activities involved.

2. Balancing Movements.

It is occasionally necessary to move personnel to other activities within a type command in order to maintain an equitable balance of personnel among all activities. Because of advancements, non reenlistment, and losses for miscellaneous reasons the on-board strength may differ between activities. When the availabilities received by the type command through the regular distribution function are not sufficient to maintain equitable on-board strength in all activities, some personnel may be moved from activities having an excess of personnel to those having a shortage. Again, every effort is made to avoid hardship to the personnel and activities involved in the balancing movements.

3. Short Timer Reassignments.

In this context, short timers are personnel attached to units readying for deployment whose obligated service is three months or greater but is not enough to enable them to complete the deployment. Normally,

only short timers in excess of EDP are reassigned. Short timers generally are reassigned, within type commands, to units with the same homeport that are not scheduled for deployment prior to expiration of their obligated service.

4. Reenlistment Incentive Reassignments.

First term personnel can be reassigned to other duty within the fleet as an incentive for reenlisting. Inasmuch as first term reenlistees are guaranteed reassignment to a duty of their choice, consistent with the needs of the service, they are given priority over other availabilities in the assignment to existing billet vacancies.

5. Humanitarian Reassignments.

Personnel may request a temporary reassignment to alleviate a hardship of such a nature that it cannot be resolved by emergency leave. When approved, such reassignments are made to an activity of any type duty within the geographical area where the hardship may be alleviated. When no vacancies exist in any activity within the requested area, personnel are reassigned in excess of requirements.

6. Utilization of Duty Waiting Lists.

The purpose of this function is to utilize, in the distribution and assignment system, waiting lists of fleet personnel serving on arduous sea duty (Type Duties 2 and 4) who desire reassignment to a more desirable type of duty.

At present, EPDOPAC maintains separate waiting lists for personnel requesting reassignment to overseas shore duty (Type Duty 3), to preferred sea duty (Type Duty 5), and to New Construction. The eligibility criteria for submitting requests for reassignment to these more desirable types of duty are prescribed by the Fleet Commander in the Pacific Fleet Addendum to the Enlisted Transfer Manual, CINCPACFLTINST 1306.9A (PATMAN).

Requests for reassignment received by EPDOPAC are reviewed by the cognizant type commander for approval. Requests not approved are returned to originators indicating the reason for disapproval. The names of personnel submitting approved requests are placed on appropriate waiting lists, by rating and paygrade within rating.

Qualified fleet personnel on waiting lists normally are given preference over general availabilities in the assignment of personnel to fill billet vacancies in the types of duty for which waiting lists are maintained. Personnel on the overseas shore duty waiting list and the new construction waiting list normally are selected for reassignment in order of earliest sea duty commencement date. Selection from the preferred sea duty waiting list is in order of earliest date of receipt of request, within the limits imposed by the operating schedules of their present activity. For example, personnel serving in deployed ships (Type Duty 2) are not considered available for transfer prior to return from deployment. Personnel in toured ships (Type Duty 4) are not available for transfer prior to their

tour completion dates.

To ensure that duty waiting lists contain only the names of personnel eligible for reassignment, in accordance with current instructions and criteria, deletions are made when personnel on waiting lists:

a. Are selected for reassignment to duty requested.

b. Are entered in SEAVEY.

c. Are transferred from present command.

d. Submit requests for removal of name.

APPENDIX B
PACIFIC FLEET ACTIVITY-RELATED
DISTRIBUTION AND ASSIGNMENT VARIABLES

VARIABLE	REFERENCE
1. Enlisted Distribution Plan (EDP)	
a. Equitable distribution (rate/rating)	EPDOPAC INST. 1306.38G CINCPACFLT INST. 1306.8A PATMAN P1.4, TRANSMAN 1.51
b. EDP/POB-7 ratio	
c. Maintain Vietnam and other preferentially manned units at 100% of EDP	CINCPAC FLT policy
(1) No. 1 priority - Vietnam units	
(2) No. 2 priority - new construction	
(3) No. 3 priority - other preferentially manned units	
2. Rate/Rating Required	OPNAV 1000.2, CINCPACFLT INST. 1306.8A
3. NEC Required	OPNAV 1000.2
4. Type of Duty	
a. Shore duty (type duty 1)	TRANSMAN 2.3A
b. Arduous sea duty (type duty 2)	" "
c. Overseas shore duty (type duty 3)	" "
d. Toured arduous sea duty (type duty 4)	" "
e. Preferred sea duty (type duty 5)	" "
f. Preferred overseas shore duty (type duty 6)	" "
g. Viet in-country (type duty 7)	EPDOPAC category
h. Vietnam toured ships (type duty 8)	" "
5. Homeport (Seagoing Units)	
6. Geographical Location (Shore Based Units)	

VARIABLE	REFERENCE
7. Ship Operating Schedule	
a. Deployment date	
b. Return date	
c. Overhaul date	
8. Type of Ship	
9. Tour Length (Toured Units)	BUPERS INST. 1300.26 series Transman 6.31, 6.35
10. Billet Vacancy Date	
a. Projected date of vacancy	
b. New construction nucleus crew reporting date	
c. New construction balance crew reporting date	

APPENDIX C
PACIFIC FLEET MAN-RELATED
DISTRIBUTION AND ASSIGNMENT VARIABLES

VARIABLE	REFERENCE
1. Rate/Rating	
a. May be assigned to billet requiring next higher pay-grade, if necessary.	EPDOPAC Policy
b. HMC, HM1, HM2-8405 only may be assigned to independent duty units.	BUPERS MAN. C-5202(3)
2. Rating Designator	
a. Assign submarine designated personnel as follows:	
(1) SU designated-to sub-marine duty	TRANSMAN 10.33
(2) SS, SG, SP designated-to submarine duty	TRANSMAN 10.51
(3) All other submarine designated-to sub-marine duty if vacan-cies exist	EPDOPAC memo of 11 Aug 1965
3. NEC	
a. Takes precedence over rate/rating if requirement of billet	BUPERS spdltr PERS-B216-JEM-fs of 23 Sep 1965
b. Normally, assign to activity having require-ment	EPDOPAC INST 1306.40F
c. All nuclear power NEC's, except 3359 and 3389, must be assigned to nuclear power vessels	BUPERS ltr of 6 Oct 1965

VARIABLE	REFERENCE
4. Type of Availability	
a. 113, 123, 133 (Type Duty 1 avails)	
(1) 113--Assign to Eleventh Naval District Activity	TRANSMAN 3.31C
(2) 123--Assign to Twelfth Naval District Activity	
(3) 133--Assign to Thirteenth Naval District Activity	
b. 203 (Type Duty 1 or 6 avails)	TRANSMAN 3.31d
(1) Assign to Type Duty 6 Activity within geographical area indicated	
(2) If overseas service not desired-assign to any Type Duty 1 Activity, as needed.	
(3) If no statement that overseas service not desired and no geographical area indicated-assign to any Type Duty 1 or Type Duty 6 Activity, as needed	
c. 403 (General Avails)	
(1) Rated personnel, excluding designated strikers, may not be assigned to Type Duty 1 Activity	PATMAN P3.21, P3.23
(2) Assigned to Type Duty 3 or Type Duty 6 Activity only after 3 monthly personnel requisitions have been submitted to BUPERS and insufficient volunteers on waiting list	EPDOPAC INST 1306.6F EPDOPAC NOTE 1306 of 17 Feb 1967 PATMAN P6.1 TRANSMAN 3.31a
(3) Except for OM, IM, ML, PM, DT, ET-1598, SF-4915, SF-4916, and SF-4917, assign to Type Duty 5 Activity only if insufficient volunteers on waiting list	PATMAN P3.5

VARIABLE	REFERENCE
d. 703 (Type Duty 3 Avails) (1) Assign to Type Duty 3 Activity within geographical area indicated (2) If no geographical area indicated, assign to any Type Duty 3 Acitivity, as needed.	TRANSMAN 3.31d
5. Duty Preference	
a. Priority in assignment of career petty officers to duty of choice normally will be based on earliest sea duty commencement date	TRANSMAN 1.51e
b. Recruit honor students will receive priority in assignment to duty of choice	TRANSMAN 20.34
c. Vietnam returnees will receive priority over other avails in assignment to duty of choice	BUPERS NOTE 1306 of 8 Dec 1968
d. Priority consideration will be given to a request for assignment to DUBRO	BUPERS MAN. C-5207 BUPERS INST 1306.38
e. First term reenlistment incentive guarantees assignment to one duty preference	BUPERS INST 1306.73A
6. Expiration Of Active Obligated Service (EAOS)	
a. Normally, sufficient obligated service to complete prescribed tour required for assignment to overseas service (Type Duty 3, 4, or 6)	TRANSMAN 6.22a
b. Except for OM, IM, ML, PM, DT, ET-1598, SF-4915, SF-4916, and SF-4917, 24 months obligated service required for assignment to preferred sea duty (Type Duty 5)	TRANSMAN 3.54

VARIABLE	REFERENCE
c. Minimum obligated service required, from date of reporting, for assignment to new construction or re-activated units: (1) Nucleus crew - 24 months (2) Balance crew - 18 months (3) USNR Personnel - 18 months	TRANSMAN 15.42
d. Normally, sufficient obligated service to complete deployment required for assignment to unit readying for deployment	EPDOPAC Policy
e. Short time personnel (personnel attached to deploying unit with insufficient obligated service to complete the deployment) normally will not be reassigned prior to deployment unless in excess of EDP	CNO msg 29143Z of Mar 1968
7. Last Duty Station	
a. Preferred overseas shore duty (Type duty 6)-normally, not eligible for assignment to a Type Duty 6 activity or to a Type Duty 3 activity within the same geographical area.	TRANSMAN 3.44a
b. Overseas shore duty (Type Duty 3)-normally, not eligible for assignment to a Type Duty 3 activity within the same geographical area	TRANSMAN 6.23
c. Overseas service (Type Duty 3, 4, and 6) OSVEY availsnormally, not eligible for assignment to unit scheduled for deployment within three months of take-up date	EPDOPAC Policy

VARIABLE	REFERENCE
d. Preferred sea duty (Type Duty 5)-normally, assign to arduous sea duty activity (Type Duty 2 or 4)	EPDOPAC Policy
8. Combat Status (Vietnam Returnee)	
a. HM personnel-not eligible for assignment to repeat tour (Type Duty 7 or 8) prior to completing 15 months service in other fleet units, unless volunteer	BUPERS NOTE 1306 of 15 Jul 1968
b. Group VIII Personnel-not eligible for assignment to Vietnam rotating unit within 2 years, unless volunteer	BUPERS msg 151710Z of 1 Apr 1967
c. All other ratings-not eligible to repeat tour (Type Duty 7 or 8) within 3 years, unless volunteer	BUPERS NOTE 1306 of 8 Dec 1966
d. Once wounded requiring conus hospitalization or twice/thrice wounded-not eligible for assignment to Vietnam (Type Duty 7 or 8)	BUPERS INST 1300.39A
e. Not eligibile for assignment to deployed unit or to one scheduled for deployment within three months of take-up date without BUPERS approval, or by request of man	BUPERS NOTE 1306 of 8 Dec 1966
f. First priority, after depletion of waiting list, for assignment to preferred sea duty.	EPDOPAC INST 1306.55

VARIABLE	REFERENCE
9. Dependency Status	
a. Over four primary dependents-not eligible for assignment to accompanied tour of overseas service (Type Duty 3, 4, or 6) without prior approval of EPDOPAC	EPDOPAC INST 1306.56A
10. Age	
a. Under 18 yrs.-not eligible for assignment to Vietnam (Type Duty 7 or 8)	EPDOPAC INST 1300.38
b. Forty-six yrs. or older with 19 or more yrs. Naval service-normally, assign to unit of 6000 or more tons.	EPDOPAC INST 1306.48
11. Active Duty Base Date (ADBD)	
a. Pay grade E-2 reserve personnel-not eligible for assignment to foreign shore activity prior to completion of 2 months active duty	TRANSMAN 1.51k
b. Recruit personnel-not eligible for assignment to foreign shore activity prior to completion of four months active duty, including recruit training	TRANSMAN 1.51k
12. Limited Duty Status	BUPERS MAN C-5208
a. L1-Foreign national-must be assigned to duty prescribed by BUPERS	
b. L2-Disqualified for assignment to duty involving flying or to duty in submarines	

VARIABLE	REFERENCE
c. L3-Must be assigned to non-combatant vessel, overseas shore duty, or CONUS shore duty	
d. L4-Must be assigned to overseas shore or CONUS shore duty	
e. L5-Must be assigned to CONUS shore duty	
f. L6-May not be reassigned from present duty without prior approval of BUPERS or approval of administrative commander who issued last orders.	
g. L7-May not be assigned to duty involving ionizing radiation	
h. L8-Conscientious objector-must be assigned to non-combatant duty	
i. L9-Sole surviving son-may not be assigned to duty normally involving actual combat with the enemy	
13. Security Clearance	
a. Minimum of 40% of clerical personnel assigned to each overseas service activity or unit (Type Duty 3, 4, or 6) must be clearable for secret	CINCPACFLT INST 1306.6A
b. Non-clearable personnel not eligible for assignment to overseas service	TRANSMAN 6.21

VARIABLE	REFERENCE
14. Evaluation Marks	
a. Personnel with any mark lower than 3.2 during past 12 month period not eligible for assignment to new construction	TRANSMAN 15.41
15. Humanitarian Status	
a. Must be assigned to activity or unit, without regard to type of duty, where situation can be alleviated	TRANSMAN 18.1
16. Brig Release	
a. Normally, assign to arduous sea duty (Type Duty 2)	EPDOPAC Policy
b. Normally, not returned to previous activity	TRANSMAN 20.65b
c. Normally, assign to similar activity with similar operating schedule if vacancy exists	TRANSMAN 20.64
17. Hospital Release	
a. Normally, assign Type Duty 7, Type Duty 8, or new construction, if eligible and vacancy exists, otherwise distribute to previous fleet type command for assignment	EPDOPAC Policy
b. When made available to previous type command assign to previous activity if vacancy exists	EPDOPAC Policy

VARIABLE	REFERENCE
18. Availability Date	
a. Waiting list personnel normally considered available for reassignment from: (1) Deployed units-upon return (2) Toured units-upon completion of tour	EPDOPAC Policy
19. Take-Up Date	
a. Normally, assign to billet with compatible vacancy date	EPDOPAC Policy
20. VEY Status	
a. In SEAVEY/SHOREVEY-not eligible for reassignment to activity or unit requiring change in homeport or geographical area without prior approval of homeport	TRANSMAN 3.34

APPENDIX D
PACIFIC FLEET DRAFT CRITERIA

Standard criteria to be considered in the selection of personnel for nomination for reassignment to fill fleet drafts are set forth below. These considerations are in addition to criteria prescribed by the drafting authority (EPDOPAC), on the draft requests, if any.

ACTIVITY RELATED CRITERIA

1. SHIP OPERATING SCHEDULE

Nominate eligible personnel from sea-going units in the following order of priority:

a. Non-Deployed Units-latest to earliest scheduled deployment.
b. Deployed Units-earliest to latest scheduled return.

2. EDP/POB RATIO

Nominate eligible personnel from billets with the highest projected on-board percentage, normally excluding one for one billets.

MAN RELATED CRITERIA

1. SEAVEY STATUS

Personnel in SEAVEY not eligible for nomination if reassignment requires change of homeport or geographical location.

2. DLA (DISLOCATION ALLOWANCE) STATUS

Personnel who have received DLA during current fiscal year normally not eligible for nomination without SECNAVFIND if reassignment requires change of homeport or geographical location. If necessary to nominate to fill draft, indicate on EAD that SECNAVFIND required.

3. DEPENDENCY STATUS

Nominate eligible personnel in the following order of priority:

a. Twelve month unaccompanied overseas tour - least to highest number of primary dependents.
b. Accompanied overseas tour - least to highest number of primary dependents, with maximum of four.

4. COMBAT (VIETNAM) STATUS

Vietnam returnees not eligible for nomination to Type Duty 7 or 8 (Vietnam).

5. LIMITED DUTY STATUS

a. L-2 personnel not eligible for nomination to duty involving flying or for duty in submarines.
b. L-3 and L-8 personnel not eligible for nomination to combatant type duty.
c. L-4 personnel not eligible for nomination to shipboard duty.
d. L-5 personnel not eligible for nomination to shipboard or overseas shore duty.
e. L-6 personnel not eligible for nomination for reassignment.
f. L-7 personnel not eligible for nomination to duty involving ionizing radiation.
g. L-9 personnel not eligible for nomination to duty normally involving combat with the enemy.

6. EXPIRATION OF ACTIVE OBLIGATED SERVICE (EAOS)

Nominate eligible personnel with least amount of remaining obligated service.

7. TOUR CONTROL DATE (TCD)

Nominate eligible personnel, in toured activities and units, with nearest TCD.

8. TIME ON BOARD

a. Nominate eligible personnel in non-toured units, with earliest reporting date.
b. First term reenlistees not eligible for reassignment within 24 months of reporting date.

9. AGE

Personnel under 18 years of age not eligible for nomination to Type Duty 7 or Type Duty 8 (Vietnam).

10. ACTIVE DUTY BASE DATE (ADBD)

Non-rated undesignated personnel not eligible for nomination to duty on foreign shore prior to completion of four months active service.

11. EVALUATION MARKS

Personnel with any mark lower than 3.2 during the past 12 month period not eligible for nomination to new construction.

APPENDIX E
PACIFIC FLEET TYPE COMMAND BALANCING CRITERIA

The criteria to be considered in the nomination of excess personnel for reassignment within a fleet type command is set forth below. These criteria are in addition to any prescribed by the type commander requesting the balancing.

ACTIVITY RELATED CRITERIA

1. HOMEPORT/GEOGRAPHICAL LOCATION

a. Toured Activities and Units-Nominate personnel for reassignment to an activity or unit of the same type of duty located within the same geographical area or having the same homeport.

b. Non-Toured Units-Nominate personnel to a unit having the same homeport, if practicable.

2. OPERATING SCHEDULE (NON-TOURED UNITS)

Nominate personnel to a unit not scheduled for deployment within four months of an individual's return from deployment.

MAN RELATED CRITERIA

1. EXPIRATION OF ACTIVE OBLIGATED SERVICE (EAOS)

Nominate personnel with sufficient obligated service to complete the next scheduled deployment of the unit to which nominated, if practicable. If not practicable, the remaining obligated service normally should expire prior to the scheduled deployment.

2. SEAVEY STATUS

Normally, personnel in SEAVEY should not be nominated if reassignment will require change of homeport or geographical location.

3. DISLOCATION ALLOWANCE STATUS (DLA)

Nominate personnel who have received DLA during the current fiscal year to an activity or unit that will not require payment of another DLA (same homeport or geographical location).

4. TIME ON BOARD

a. Normally, nominate personnel with earliest reporting date.

b. First term reenlistees not eligible for reassignment within 24 months of reporting date.

5. TIME IN RATE

a. Nominate individual with least time in rate if reassignment is to billet requiring same rate.

b. Nominate individual with most time in rate if reassignment is to billet requiring next higher rate.

DISTRIBUTION LIST

Chief of Naval Operations (OP-01)
(OP-07)
Chief of Naval Material (MAT 0325F)
Chief of Naval Personnel (Pers-A3) (25)
Office of Naval Research (Code 458)
Commander in Chief, U. S. Atlantic Fleet (2)
Commander in Chief, U. S. Pacific Fleet (2)
Center for Naval Analyses
Naval Postgraduate School
Naval Personnel Research and Development Laboratory (3)
Special Assistant to Assistant Secretary of the Navy
(Manpower & Reserve Affairs)
Enlisted Personnel Distribution Office, U. S. Atlantic Fleet (5)
Enlisted Personnel Distribution Office, U. S. Pacific Fleet (5)
Enlisted Personnel Distribution Office, Continental
United States (5)
Personnel Accounting Machine Installation, U. S. Atlantic
Fleet (5)
Personnel Accounting Machine Installation, U. S. Pacific
Fleet (5)
Personnel Accounting Machine Installation, Continental
United States (5)
Assistant Chief of Staff (G-1), U. S. Marine Corps
Chief of Research and Development, U. S. Army
Human Resources Research Office, U. S. Army
U. S. Army Behavioral Science Research Laboratory
Personnel Research Laboratory, Lackland AFB
Personnel Management Group, U. S. Army
Human Factors Operations Research Laboratory, Bolling AFB
Science and Technology Division, Library of Congress
Defense Documentation Center (20)