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THESIS

**PERSONNEL PLANNING IN THE
MEDICAL SERVICE CORPS:
A TRAINING GUIDE FOR HEALTHCARE
EXECUTIVES**

by

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December, 1996

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A TRAINING GUIDE FOR HEALTHCARE EXECUTIVES**

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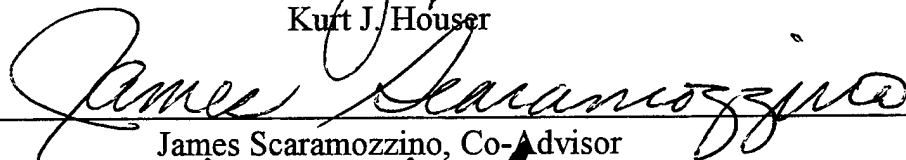
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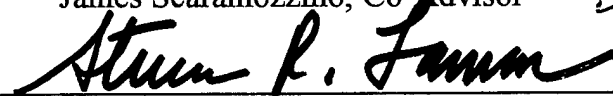


Kurt J. Houser

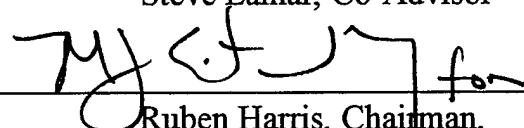
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ABSTRACT

During the past decade the Medical Service Corps (MSC) has undergone a myriad of changes. The most challenging change has been the pressure to downsize while maintaining an appropriate force structure to enable it to support two nearly simultaneous major regional conflicts as mandated by the Defense Planning Guidance. While the MSC has cogently developed requirements led measures to ensure that they can support its operational and peacetime requirements, the process of personnel planning has evolved to ensure that the proper number and mix of MSC officers are available. This thesis examines the current state of personnel planning in the Medical Service Corps. Of particular interest is to identify the various organizations involved in personnel planning and how Navy Medicine uses its personnel plans to meet its readiness and peacetime missions. The three personnel plans used by the Medical Service Corps: (1) End Strength, (2) Accession, and (3) Promotion, are used to ensure that the Medical Service Corps has on active duty the right number of officers, at the right grade at the right time. This thesis will identify and discuss the role various organizational entities have on the development of these personnel plans. Results from this research indicate that a more formal communication process and improved database management would greatly assist the Medical Service Corps in improving the effectiveness of personnel planning.

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I. INTRODUCTION

A. BACKGROUND

During the Navy Surgeon General's 1996 testimony before Congress, Vice Admiral Harold E. Koenig stated,

I have directed the Navy Medical Department to focus on five overarching priorities that pervade every area of our responsibilities: (1) Readiness, (2) People, (3) Technology, (4) Stewardship, and (5) the Health Benefit. Readiness for the Navy Medical Department means having the right people, with the right training and the right equipment, in the right place at the right time. . . . The Navy Medical Department views our people as our most important resource. My goal is to stimulate and enable each and every individual in Navy Medicine to reach his or her full potential by providing the very best opportunities for professional and personal growth. Navy Medicine's ability to meet our readiness and peacetime health care missions in the 21st century rests on two broad principles: (1) we will retain the best of the people we recruit, and (2) the best people will want to remain a part of Navy Medicine because of the challenge, training, professionalism, and overall environment Navy Medicine fosters [Ref. 30].

Currently the Defense Planning Guidance (DPG) consists of a mandate to maintain a ready force to fight and win two nearly simultaneous major regional conflicts [Ref. 1]. Navy developed a planning tool, the Total Health Care Support Readiness Requirement (THCSRR) to calculate the minimum manpower resources required to deliver high-quality health care to the operational forces of the Fleet and Fleet Marine Forces. In addition, the THCSRR has a sustainment component to

provide for a continuous flow of qualified personnel into the operational forces and overseas activities as people attrite either from the Navy or from their current skill level and move to a higher skill level. The THCSRR addresses the pressures for restructuring the medical force as a data-driven model that meets both parts of the readiness mission: (1) wartime requirements to support two nearly simultaneous major regional conflicts (MRCs) and (2) the day-to-day operational health care requirements in support of deployed Department of the Navy forces and isolated U. S. Medical and Dental treatment facilities necessary for a training and rotation base. The Surgeon General and DoD medical planners feel that THCSRR is the solution for balancing wartime, readiness, and contingency requirements, with providing health care as a benefit-of employment for Sailors, Marines, their families, survivors and retirees and their families.

On 14 December 1991, Program Budget Decision 742 consolidated Defense Health Program resources under the control of the Assistant Secretary of Defense (Health Affairs) for all medical resources except military personnel funds and resources in support of deployed medical units to include ship operations. The mission of the Defense Health Program (DHP) is to provide, and maintain readiness to provide, health care services and support to the armed forces during military operations and to provide health care services and support to members of the armed forces and others entitled to DoD health care. Most notably, during the budget and

execution cycle, DHP end strength is additive to the Services fiscal and end strength controls [Ref. 4]. Navy Medicine's major Claimant (commonly referred to as Claimancy, 18 the Bureau of Medicine and Surgery (BUMED)), accounts for about 70 percent of medical manpower. The remaining 30 percent of medical department force structure are owned and managed by claimants with direct "war fighting" missions such as Pacific and Atlantic Fleet, and Fleet Marine Forces. [Ref. 4]

The Medical Service Corps (MSC) is an important component of the Navy Medical Department. The MSC is vital to Navy Medicine meeting its readiness and peacetime missions. This thesis will describe the three personnel plans used by the MSC: (1) end strength, (2) accession, and (3) promotion. These three separate personnel planes, hereafter referred to as "Personnel Plans", are used to ensure that the Navy has the right number of MSC officers on active duty at the right grade at the right time. This thesis will identify and discuss the role various organizational entities have on the development of these personnel plans. Navy Medicine meets their target personnel figures to accomplish the DPG mission.¹

B. PURPOSE

For the past decade continual pressure has been placed on all branches of the military to find efficiencies, work smarter--not harder, and reduce force structure.

¹For this thesis--whenever personnel plans are referred to the author is specifically discussing the components of end strength, accession, and promotion plans. The author also uses the term personnel planners to describe those people involved in any one of the personnel plans discussed above.

Current emphasis on projects in work by DoD, led by Navy, including "Smartship", Smartbase", Smartcard," and "Homebasing" provide evidence of Navy's work on developing more efficient and cost-effective ways of meeting mission requirements. All these efforts focus on doing with fewer, more experienced, better trained, better qualified, and "smarter" personnel assets. This places additional burdens on personnel planners to determine the right mix of personnel needed to meet the ever-increasing complex and technical nature of responsibilities involved with all functional areas of Navy's mission.

Budgetary pressures, such as the Congressional 733 study--that directed each of the Services to do a detailed study of the medical force structure requirements to fight two nearly simultaneous major regional conflicts--was indented to verify the need for additional "right-sizing" efforts. Even though this is an extreme example of a budgetary endeavor that affects personnel, every seemingly innocuous budget proposal impacts force structure. Personnel planners have to remain "tied into" the ongoing Planning, Programming, and Budgeting System (PPBS). Navy recognized this "pull and tug" planning process and has incorporated manpower/personnel requirements determination into many organizations affected by the PPBS cycle. Navy personnel planning is very dynamic, but structured to allow for rapid reactions to systematic changes imposed by every stakeholder of the DoD budget process.

In order for robust and executable planning to occur, the Medical Service

Corps must logically develop plans with sufficient flexibility to allow quick responses to alterable operational and organizational changes. Communication amongst all key stakeholders is essential to ensure that the process works smoothly.

This thesis will be a training guide that can provide health care executives with an understanding of the personnel planning process. Although the primary focus of this thesis is the Medical Service Corps, basic concepts of personnel planning may apply to most Navy officer and enlisted communities. The purpose of this thesis is to provide an understanding of how this complex process evolves to the final product of ensuring attainment of targeted force structure mandated by the policies of all higher authorities. The results of this research can be used by all Navy healthcare executives to increase the understanding of what their roles are in this multifarious system. Additionally, this increased understanding further improves the communication that exists among the many responsible agencies involved in personnel planning.

C. CONTENT

Chapter II is intended to provide the reader with an overview of the big picture of how personnel planning is organized. This chapter will also discuss the evolution of the Defense Health Program and how medical manpower is established. This chapter will also discuss the Officer Programmed Authorization and distinguish among inventory, billets authorized, wartime and operational (day-to-day)

requirements. This chapter will also give a brief introduction of which organizations are responsible for the development of the individual personnel plans.

Chapter III will discuss the composition of the Medical Service Corps. This chapter will briefly discuss the role of the specialty leader in personnel planning as well as the general composition of the Medical Service Corps. It will include a listing of the Health Care Administration (HCA), Health Care Science (HCS), and Clinical Care subspecialties that comprise the Medical Service Corps.

Chapter IV will detail the process of the four personnel plans to allow the reader to quickly ascertain who is involved in the process of a specific plan and how their role is related to other plans in the process. This chapter will also include how communication flows both inter and "intra" organizationally.

Chapter V will provide a summary of results of the research and some recommendations for improving the communication among the organizations involved in personnel planning.

D. RESEARCH APPROACH

Research for this thesis was conducted in two phases. First, the author reviewed available literature on writing a training guide. Unfortunately, there was no reference available on how other Services provide training for health care executives in personnel planning. The author also reviewed literature related to how the Programming, Planning, and Budgeting System is described. The author used a

similar format as the RAND Corporation used in their publication, *The Decision Making Context in the Department of the Navy* [Ref 27]. Further literature review included directives, standard operating procedures, and other internal BUMED correspondence which Navy Medicine uses to accomplish personnel planning. The author then conducted extensive interviews with key personnel, including the Chief of Naval Operations Single Manpower Sponsor (N122), the Bureau of Naval Personnel, the Bureau of Medicine and Surgery, Navy Medicine's resource sponsor representative for the Chief of Naval Operations (N093), and the Commander, Naval Recruiting Command.

II. THE BIG PICTURE OF PERSONNEL PLANNING

A. INTRODUCTION

The National Military Strategy under the Defense Planning Guidance tasks the Secretary of Defense to develop a medical force structure to accomplish *all contingency operations* including operations other than war (OOTW) [Ref. 1 and Ref. 2]. The core mandate of the DPG has consistently stated that we must stand ready to fight and win two nearly simultaneous major regional conflicts. However, additional requirements prompt this definition to be refined. The military is increasingly asked to do more than fight aggressors. This new definition includes flexible and selective engagement involving a broad range of activities and capabilities to address and help shape the evolving international environment [Ref. 1]. The international environment is characterized by four dangers that the military must address: regional instability, the proliferation of weapons of mass destruction, international dangers such as drug trafficking and terrorism, and the dangers to democracy and reform [Ref. 1].

B. MEDICAL MANPOWER AND THE DEFENSE HEALTH PROGRAM

In order to accomplish these requirements the military must have the proper number (quantity) and mix (quality) of personnel. The development of personnel plans to accomplish this mission begins with the Chief of Naval Operations Single

Manpower Sponsor (N122) and ends with the Chief of Naval Personnel (CNP). The CNP is frequently referred to as the Chief, Bureau of Naval Personnel (BUPERS) and references to the action agencies associated with this organization will be referred to as BUPERS throughout this thesis. Similar to the duality of the Surgeon General's role as both the Chief, Bureau of Medicine and Surgery (CHBUMED) and Director, Navy Medicine (N093), the Deputy Chief of Naval Operations for Manpower and Personnel (N1) is "dual-hatted" as the CNP. N1 serves as the resource sponsor for numerous personnel programs and oversight of the Manpower and Personnel Navy (MPN) account as well as managing day-to-day policies and operations for all manpower and personnel related issues. Understanding the relationships of the key decision makers and the processes that generate the personnel plans to ultimately meet mission requirements is the goal of this research. BUPERS works in close coordination with various agents of the Surgeon General to derive the optimal personnel plans needed to meet Navy Medicine's mission, while complying with all legislation and directives imposed by higher authorities. The mission of the Navy Medical Department is as follows:

Our mission is to ensure the health of our sailors and Marines so that they are physically and mentally ready to carry out their worldwide mission.

We will accomplish this with a comprehensive health promotion program and, when illness or injury intervenes, we will be there to restore optimal health.

We strive to continually provide this same level of quality health care services to the families of active duty members and to all others entrusted to our care. [Ref. 3]

Before discussing these plans it is important to reiterate the history of how the funding of military medical manpower is determined. In December, 1991, Program Budget Decision 742 consolidated Defense Health Program resources under the control of the Assistant Secretary of Defense (Health Affairs) for all medical resources except military personnel and resources in support of deployed medical units to include ship operations. The mission of the Defense Health Program (DHP) is to provide, and maintain readiness to provide, health care services and support to the armed forces during military operations and to provide health care services and support to members of the armed forces and others entitled to DoD health care. Components of the DHP, in addition to the three medical departments, are the Uniformed Services University of the Health Sciences (USUHS), the Office of Civilian Health and Medical Program for the Uniformed Services (OCHAMPUS), and the Defense Medical Program Activity (DPMA). [Ref. 4]

Two significant resource issues shape the relationship between the DHP and the military medical departments: ownership of manpower resources during the programming and execution years, and capitation budgeting and programming for manpower and operations and maintenance resources [Ref.4]. During the programming years the DHP programs for military manpower and includes the

associated resources (in the case of Navy, MPN dollars and end strength) within the DHP profile. During the year of execution, those resources are transferred to the military departments to fund the programmed end strength. In the budget and execution cycle DHP end strength is additive to the Services fiscal and end strength controls [Ref. 4]. All BUMED activities are designated DHP, with the exception of research and development organizations. Military personnel assets for all non-medical and operational units, such as ships, Fleet and Fleet Marine Force and headquarters staff not associated with BUMED are designated non-DHP resources and are fully funded by the MPN account through all fiscal years. DHP accounts for about 70 percent of all medical department designated personnel. Overseas activities are included in non-DHP resources and for personnel this is the MPN account.

It is important, for budgeting purposes, to understand the concept of DHP. Since DHP is additive to the MPN account in the year of execution, Navy does not realize a direct benefit from reducing medical department assets. Additional indirect costs arise when medical force structure is reduced--resulting in increased CHAMPUS costs. As a result there are fewer dollars within DoD, resulting in fewer dollars to be transferred to the Services to buy equipment or personnel. Conversely, non-DHP requirements are derived from complex Efficiency Review analysis for shore and Required Operational Capability/Projected Environment (ROC/POE) for afloat and operations platform validated requirements. Any reductions to non-DHP,

without finding more efficient methods of meeting the personnel requirements has an significant negative impact on the overall fleet readiness. [Ref. 5]

Certification requires each Service Chief to submit testimony, or certify to Congress that any reductions in medical end strength above the percentages allowed by law would not increase CHAMPUS costs over 5 percent in 1 year or 10 percent over three years [Ref. 6]. Congress provides guidelines to each of the Services for an allowable percentage of reductions each year to allow for efficiencies without certification [Ref. 5]. Given the specific language restricting reductions to medical end strength, reductions are well planned for in advance of preparation of end strength plans [Ref. 5]. Even after initial lifting of Congressional protection, Navy Medicine continues to plan for about a 2.5 percent reduction throughout the budget cycle, ending in FY00. Past reductions to end strength were targeted at under-executed programs and did not result in real reductions in personnel. The net result was minimal impact on medical officer plans and policies [Ref 5].

C. MAJOR PARTICIPANTS

After the Defense Planning Guidance is established, the personnel planning process is used to provide the force structure necessary to meet the stated requirements. It is important to understand some fiscal terms used in the planning cycle. The execution year is the current fiscal year in which the Navy is operating. The Future Year Defense Plan (FYDP) refers to the execution, budget and all years

beyond. The FYDP years are usually six years in the future.

While Chapter IV discusses the major components of the personnel plans (end strength, accession, and promotion) in detail, a brief introduction to some of the organizations is provided now to better understand who is involved in personnel planning.

1. The Director, Total Force Programming, Manpower, and Information Resources Division (N12) manages the CNO's Single Manpower Sponsor (N122). N12 is responsible for ensuring that Navy manpower requirements are derived through an approved validation process (ER or ROC/POE) and that they are properly stated in the Navy Manpower database (Total Force Manpower Management System (TFMMS)). Following N12's charter to ensure that requirements are properly stated, N122 is charged with developing OPA. N122 certifies that programs are properly resourced during the PPBS cycle. N122 certifies that the OPA is appropriate to allow the Navy to meet its stated mission.

2. The Navy Surgeon General (N093) serves as the resource sponsor for Navy Medicine. The resource sponsor is responsible for programming Defense Health Program resources. Funding for claimancy 18 falls under the Defense Health Program.

3. The Chief, Naval Personnel (CNP) is responsible for preparing, monitoring, and executing personnel plans. The Assistant Chief, Naval Personnel for Military Personnel Policy and Career Progression (PERS-2), coordinates the personnel planning development. The Officer Plans and Career Management Division (PERS-21), executes the personnel plans. In particular the execution of the plans are the responsibility of three entities within PERS-21 that work together to ensure that the Navy has a sufficient number of personnel assets to accomplish their readiness mission, while staying within mandated end strength and control grade figures. The respective entities are: Officer Strength Plans (PERS-212C), Officer Accession Plans (PERS-212D), and Officer Promotions (PERS-212F).

4. The Navy Medical Department Officer Community Managers are organizationally assigned under PERS-21. The Medical Service Corps' Officer Community Manager (PERS-211M3) serves as the subject matter expert for Medical Service Corps issues and also serves as a liaison between the Director, Medical

Service Corps and BUMED in coordination and effective management of community issues within the MSC.

5. Once PERS-21 is tasked with developing the personnel plans--the community managers work with the manpower analysts--organizationally assigned to BUMED (MED-52)--to develop executable end strength, accession and promotion plans. The Medical Service Corps' manpower analyst uses the end strength, accession, and promotion guidelines prepared by PERS-21 to prepare the MSC personnel plans.

Before discussing personnel planning in detail it is necessary to understand some terminology used in personnel planning. Manpower requirements are established based upon the most effective and efficient methods of performing assigned duties [Ref. 9]. The end product is a cost-effective manpower requirements baseline to support the Planning, Programming, and Budgeting System (PPBS) [Ref. 9]. A requirement is obtained through an analytical study which determines that in order for a unit to fully meet its requirements it must fill certain occupational positions. A requirement provides a definition for the "quality" needed to meet a particular mission. End strength provides the "quantity" or generic definition of the number needed. End strength refers to a fully funded "un-qualitized" personnel place holder within the PPBS cycle. For example, the resource sponsor plans to have five officers to complete a mission (quantity), and the claimant verifies that the mission requires five specific types of officers to meet the mission. The claimant considers the best skill mix as well as the potential for the personnel planning system to grow the type of officer needed (quality). This simplistic definition provides a basic

concept of the relationship between the medical resource sponsor representative (N0931) and the claimant (CHBUMED). More generically, resource sponsors ensure that adequate funding is available to allow the claimants to execute mutually derived programs. [Ref. 5]

A billet is end strength with specific quality defining, pay grade and skill requirements (subspecialty codes, additional qualification designator, functional assignment codes, etc.). The total number of billets within an activity are usually an exact match to the end strength (quantity) available. This indicates that the billets are fully funded.

Inventory refers to the total number of people ("bodies") at any given time. Inventory can be thought of as a balance sheet--although the number of people 'flow' into and out of the system on a nearly daily basis, an inventory is given for a specific time. References are always accompanied by acknowledgment of the data source and the point in time when the number was derived [Ref. 5].

Figure 2.1 shows how end strength controls are generated. The Single Manpower Sponsor, N122, under the auspices of N12, is responsible for publishing the Officer Programmed Authorization (OPA), which provides Navy with end strength controls. OPA is the target total for Navy personnel planners to meet--presented by designator and grade. Further definition of skill and mix is not provided in the OPA. Changes to end strength controls are in the budget and out-years and

may cause the personnel plans to undergo changes. [Ref. 8]

Figure 2.1 also shows the cyclical process that the manpower planning process undergoes. The Program Objective Memorandum (POM) or Program Review (PR) process begins with the Manpower and Personnel (M&P) Assessment coordinated by N12 with input from resource sponsors and other program managers. POM is for all even years and programs are reviewed (PR) in odd years. Programming guidance is provided by N80 as a result of the initiatives presented and approved during the assessment. Using the guidance provided by N80 and analysis completed during the M&P assessment, resource sponsors prepare their Sponsor Program Proposals (SPPs). N122 in conjunction with N80 evaluates the SPPs to ensure that programs are properly resourced, comply with planning guidance, and do not conflict with mandates from higher authority. When difficult, controversial, or unfunded issues are

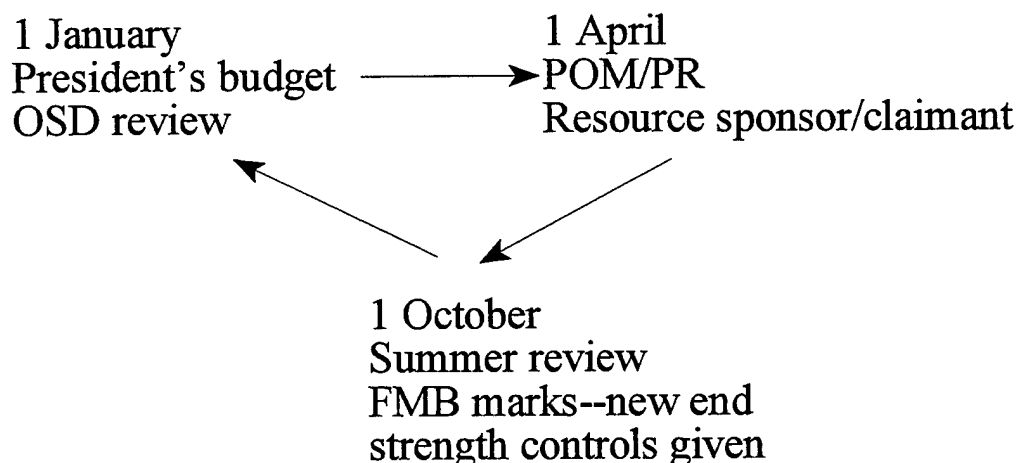


Figure 2.1. Generating OPA Controls
Source: N-1

finally adjudicated, FMB has all the pieces to prepare the President's Budget. Summer Review follows the POM or PR. During Summer Review OSD and NAVCOMPT reviews the manpower account and determines whether the programs are responsive to the operational needs of the military. Any changes made in Summer Review result in new end strength controls that must be executed by the personnel planners. All decisions made during the various phases of PPBS inevitably affect personnel. Accordingly, development of a new OPA follows immediately after completion of decisions made during the PPBS. [Ref. 8]

D. OFFICER PROGRAMMED AUTHORIZATION

The Officer Programmed Authorization (OPA) is the actual number of officers authorized to be in the inventory at the end of a given fiscal year. It is this target that the inventory manager (PERS-211M3) aims for. Only billets with OPA applied to them are valid authorized billets [Ref. 8]. OPA is the unqualified 'space-holder' which allows the program sponsor to 'buy' a body and the claimant to fill a billet [Ref. 8]. More simply, the Medical Service Corps can not assign an officer to a unit that does not have an authorization. The authorization allows the military to 'have a space available' in which to place a member. OPA is actually a modeling system which matches the Navy's end strength totals to billets [Ref 8]. The goal of the personnel planners is to have end of year end strength totals (inventory) match the OPA. If, however, the totals do not match, (and although they are usually less than

10 percent off, they rarely match) the OPA modeling program will calculate the end strength totals at the command. For example, if a command has 100 billets, but only 90 end strength totals, OPA will only count 90 authorizations for that command [Ref. 8]. Once the OPA is established, the Officer Community Manager verifies to ensure that differences in the OPA are expected due to changes that the resource sponsor and claimant made during the year.

As requirements change, changes to the MPN account affect all of the personnel plans. Hence, the personnel plans must be flexible to respond to the (policy, fiscal, requirement, and other) changes in the system. Figure 2.2 demonstrates the flow of the personnel planning process. Figure 2.2 provides a simple look at the flow of the plans from N122 to PERS2 to the Officer Community Manager to the Manpower Analyst--with changes affecting subsequent plans.

There are three times during the year that changes to end strength controls may take place. The process of determining end strength totals can be said to 'start' each year with the President's budget. During the program objective memoranda (POM) the resource sponsors and the claimant (the activities that 'buys' the bodies) may change their billet mix [Ref. 8]. At this time they submit any desired changes to N122, who in turn will change the end strength controls and forward the changes to

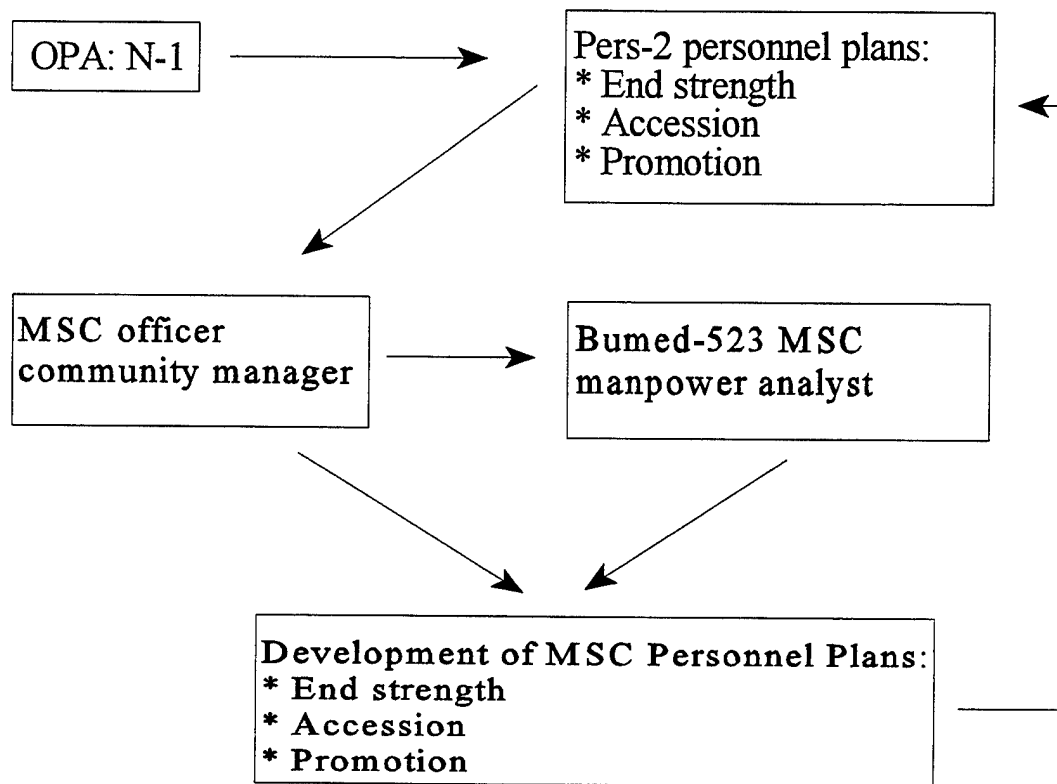


Figure 2.2. The Personnel Planning Process
Source: Pers-211M3

the strength planners at PERS-212C [Ref. 8]. Since these changes affect the OPA and the OPA is the target that the community manager must meet, these changes affect all of the strength plans that the community manager and the manpower analyst is responsible for developing. Thus a change by the resource sponsor and claimant will cause the strength planners (PERS-2) and (MED-52) to alter their personnel plans. For example, the resource sponsor and the claimant determine (due to changes in policy) that additional lieutenant physician assistants must be added to all activities. The Medical Service Corps must reallocate these positions to meet the new

requirement. Thus they must first 'grow' these O-3 physician assistants, and in the meantime take the compensation for these billets from another MSC community so as not to have more end strength than their authorization allows. It is important to understand that the community strength planners (PERS-2 and MED-52) have developed accession plans, promotion plans and end strength plans on the previous end strength controls--thus all of the organizations affected by these plans must react to these new changes in the OPA. After the end strength controls are developed to account for these changes, N122 will recalculate another end strength control. At this time the summer review takes place.

During summer review the FMB (formerly the Navy Comptroller, NAVCOMP) now has the responsibility of making any necessary reprogramming and changing the mix of officers [Ref. 8]. Again their changes are forwarded to N122 who makes the strength planners aware of any changes that are made by FMB. As described above any changes greatly affect the strength planners and affect their personnel plans.

The end strength control changes go through yet another change each year as the Office of the Secretary of Defense (OSD) now gets their turn at changing the end strength figures. The changes by OSD mark the final changes to the end strength controls and once again the OPA is run and targets are established and given to the appropriate strength planners and community managers for adjustments to their

personnel plans. This 'final iteration' is the new budget of the President and the cycle continues. [Ref. 8]

How does the military decide what jobs must be done to meet mission requirements? The requirement process, which will not be fully discussed, is an analytical process which provides personnel requirements necessary to staff a ship, squadron or hospital. These documents are the ships manning document (SMD), the squadron manning document, (SQMD), and for shore based facilities, such as hospitals, the efficiency review (ER) [Ref. 9]. These quantitative analyses provide the staffing requirements for Naval activities. A requirement however can not be filled unless it is authorized (paid for) to be filled--and for Medical Service Corps officers, as with all Naval officers, the OPA provides that authorization.

As was discussed earlier there is a distinction between billets and inventory. There is also a distinction between requirements and authorizations. A typical activity will have requirements, which are more than the activities billets, which in turn are greater than that activities inventory/bodies.

An activity is rarely manned to requirements. There are however some mandates on how an activity can be manned. A ship may not be funded with less than 90 percent of the requirements determined by the SMD [Ref. 9]. For hospitals there is no maximum or minimum funding level determined for requirements. Additionally, shore based facilities must rely upon availability of inventory and may

have Navy Manning (NMP) that is between 70-100 percent of billets allowed. Special NMP may allow for personnel to be assigned in excess of billets, based upon inventory levels for that community.

It is important to point out again that it is the OPA figure that the strength planners must use to match up end of the year strength totals. Chapter IV will discuss the personnel plans in great detail and when referring to end strength and meeting targets the author is talking about what the personnel planners do to meet this targeted total--the OPA.

III. COMPOSITION OF THE MEDICAL SERVICE CORPS

A. INTRODUCTION

The Medical Service Corps is comprised of over 32 subspecialties. These subspecialties can be broken down into three major classifications: (1) Health Care Administrators (HCA), (2) Health Care Scientists (HCS), and (3) Clinical Care givers. The diversity of the 32 subspecialties is unique, but all of the subspecialties work as a team. The Navy MSC differs from the other Services medical service corps'. In the Army, the Army Medical Specialists Corps (AMSC) is comprised of approximately 1000 officers from four clinical specialties. The rest of their specialists are considered their Medical Service Corps (like the Navy). The Air Force has a MSC "Administrative Corps" and a "Biomedical Sciences Corps" (BSC). Since their Administrative Corps has more control grade, the opportunity for selection is greater than for their BSC. [Ref. 10]

The uniqueness of the Navy MSC allows the corps to thrive through diversity. This "Many Specialties, Single Mission, One Corps" concept allows the Navy MSC to promote the 'best qualified officer' and, unlike the Army and Air Force, allows the HCS and clinical care officers improved promotion and career opportunities. [Ref. 10]

The Medical Service Corps also fosters continued education and professional development to ensure that its health care executives keep current with trends in

health care. Members are encouraged to be credentialed through the American College of Healthcare Executives (ACHE) or a technical credentialing body within their subspecialty. The current director of the MSC, Rear Admiral H. E. Phillips states that "Education, Professionalism, Experience, and Performance. . . these traits will be the hallmarks of the officers that will lead the world's finest Navy into the future" [Ref. 35]. These traits are fostered throughout an officer's career in the MSC.

B. A VERY DIVERSE CORPS

Currently the Medical Service Corps has over 2700 officers within over 32 subspecialties. Nearly 41 percent of officers are in Health Care Administration, 23 percent of officers are in the Health Care Science field, and 32 percent are in Clinical Care. The remaining 4 percent are in the individuals account which includes students in educational programs, such as the Army Baylor Program and the Naval Postgraduate School [Ref. 21]. Table 3.1 lists the various specialties within the three major categories. The majority of billets are in CONUS (73 percent). Additionally, 16 percent of the billets are OCONUS and 8 percent are operational.

Another indication of the diversity of MSC officers is evident in their educational level. Currently 16 percent of MSCs have a doctorate degree, 44 percent are masters prepared and 40 percent possess a baccalaureate degree. There are four major accession sources into the Medical Service Corps: (1) direct procurement, which accounts for 58 percent of new accessions, (2) the Health Services Collegiate

Table 3.1

SUBSPECIALTIES WITHIN THE MEDICAL SERVICE CORPS

HCA	HCS	CLINICAL CARE
<ul style="list-style-type: none"> * General HCA * Financial Management * Material Logistics * Manpower, Personnel, Training Analysis * Education and Training Management * Operations Research * Information Systems * Patient Administration * Medical Logistics * Medical Data Services * Medical Construction Liaison * Plans, Operations, and Medical Intelligence 	<ul style="list-style-type: none"> * Biochemistry * Microbiology * Radiation Health * Physiology * Aerospace Physiology * Aerospace Exper. Psychology * Entomology * Environmental Health * Industrial Hygiene * Research Psychology 	<ul style="list-style-type: none"> * Clinical Psychology * Audiology * Social Work * Physical Therapy * Occupational Therapy * Dietetics * Optometry * Pharmacy * Podiatry * Physician Assistant

Source: CDR Brannman (PERS-211M3)

Program (HSCP) accounting for 16 percent, (3) the Inservice Procurement Program comprises 12 percent of accessions, (4) and the Health Profession Scholarship Program (HPSP), for optometrists only, accounts for 6 percent of accessions. [Ref. 31]

Depending on the educational level of the individual or the degree requirement of the given subspecialty, MSC officers may enter the Navy at varying grades based upon entry grade credit. Table 3.2 shows at what grade some members enter depending on educational level.

Further diversity in the MSC is evident in gender and minority representation of its officers. Nearly 8 percent of MSCs are Black, 4 percent are Asian Pacific, 3.5 percent are Hispanic and over 3 percent are of other minority groups. In total, nearly 19 percent of MSC officers are ethnic minorities as compared to the overall Navy representation of 13 percent. Female officers comprise nearly 25 percent of MSC officers as compared to under 15 percent in the Navy as a whole. [Ref. 31]

Table 3.2

Varying Entry Grade Credit by Speciality

LT	LTJG	ENS
<ul style="list-style-type: none"> * Aerospace Experimental Psychology * Clinical Psychology * Entomology * Microbiology * Pharmacy * Podiatry * Optometry * Research Psychology 	<ul style="list-style-type: none"> * Aerospace Physiology * Audiology * Entomology * Microbiology * Environmental Health * Pharmacy * Physical Therapy * Physiology * Social Work * Health Care Administration 	<ul style="list-style-type: none"> * Dietetics * Environmental Health * Industrial Hygiene * Medical Technology * Occupational Therapy * Pharmacy * Physician Assistant * Radiation Health * Health Care Administration

Source: CDR Brannman (PERS-211M3)

C. THE ROLE OF THE SPECIALTY LEADER

Since the inception of the Medical Service Corps in 1947, MSC officers have served to administer and provide quality health care throughout the world. Due to the diverse background of these specialties the Medical Service Corps has specialty leaders who serve a variety of functions.

In a 1993 message from the Director of the Medical Service Corps, Rear Admiral (RADM) S. T. Fisher stated some of the roles of the speciality leader. RADM Fisher stated that the speciality leader is the designated "expert in (their) profession" [Ref. 29]. Furthermore, the former Director of the corps stated that the speciality leaders carry "family" responsibilities within the MSC. As stated by RADM Fisher:

You will be responsible to look after the professional growth and development of each individual within your speciality. You must be involved in the detailing process, giving advice and counsel on assignment decisions that will promote individual growth and development and also effective and efficient utilization of skills. . . . You will work closely with recruiting to ensure accession standards and recruiting plans will optimize the quality of accessions. You will need to be involved in mentoring, coaching, and counseling members of your speciality so that you can provide them and others good advice for career decisions. You must also be a communication link between your community and my office so that I'm constantly apprised of your successes and concerns [Ref. 29].

Thus the skills and diversity of the corps are "linked" through the speciality leader relationships with not only the MSC Director, but the personnel planners involved in the overall management of the corps. The speciality leaders serve as a critical link in the development of the personnel plans--and their roles will be discussed in detail in Chapter IV.

IV. PERSONNEL PLANNING IN THE MEDICAL SERVICE CORPS

A. INTRODUCTION

As was shown in Chapter II the personnel planning process is a fluid process which must rely on accurate information and must be capable of major changes in relatively short periods of time. By the time the POM, Summer Review and the President's Budget are determined the, personnel plans are likely to have changed significantly and the number of organizations affected by these changes are many. The following will describe the personnel plans and show how the system must be flexible to make the changes as required.

The major responsibility for the execution of the Navy's personnel plans lies within Bureau of Naval Personnel (PERS-2 - The Assistant Chief of Naval Personnel for Military Personnel Policy and Career Progression). The individual promotion plans are executed by the following codes and must be meticulously coordinated: strength planning (PERS-212C), accession planning (PERS-212D), and promotion plans (PERS-212F). The personnel planners at PERS-2 are located on the first deck of the Navy Annex and they are separated by not more than 10 yards and several dividers, which makes working together convenient. As will be discussed, all of these BUPERS planning officers work closely with the individual officer community managers to ensure that the community and the Navy's plans are appropriately met.

1. End Strength Planning

End strength planning, as all of the plans discussed, is an iterative process. Policy changes, changes to the budget, and changes made by the resource sponsors all affect the end strength controls. The Navy's end strength planning branch at the Bureau of Naval Personnel (PERS-212C) is responsible for the management of the aggregate strength planning totals. They work closely with the accession and promotion planners as well as the individual officer community managers to accomplish Naval strength planning.

a. The Aggregate Plan

The Navy's officer end strength planning, as depicted in Figure 4.1 appears quite easy to grasp. However, the process is complex and end strength totals are constantly changing to meet policy, budget and requirements needs. Since these figures are constantly changing and end strength totals at the end of the year are targeted to meet the OPA, the end strength planners are constantly changing their policies and working with accessions and promotions to meet these 'moving' targets [Ref. 12]. The goal of the strength planning branch is to formulate, update, and monitor strength plans by month and fiscal year specifying the gains, losses and total end strength by rank and community [Ref. 13]. As will be seen later, this same goal is followed by each respective community to ensure that the strength planning branch meets their end strength controls.

End Strength	=	Begin Strength	+	Gains	-	Losses
				Accessions from: - USNA - NROTC - OCS/AOCS - Direct - Prior Enlisted - Recall - Other		Losses due to: - Discharge - Retire - Resignation - Release - Invol. Release - Other

Figure 4.1. Developing the Officer Strength Plan
Source: LCDR Terkhorn (PERS-212C)

The strength planning branch (PERS-212C) works across all officer communities. Changes to any one of these communities' authorized end strength causes the communities to alter policies that affect their accession and promotion plans. As stated earlier the end strength controls are developed by N1 and may be altered three times per year: by the resource sponsors during the POM, by the FMB during Summer Review, and during the President's Budget cycle. Any changes that occur during this cycle, N1 forwards the new end strength control figures to PERS-212C who make sure the appropriate adjustments are made. [Ref. 12]

The central element in developing, monitoring, and executing the officer strength plan begins with publication of end strength controls for each officer community. The OPA then provides the quantitative summary of funded and programmed billet authorizations by officer designator and grade [Ref. 8]. It is this

foundation from which end strength goals are derived [Ref. 12]. Even though the OPA provides a breakout of billets by communities and pay grades, it can only be used as a guideline in developing end strength controls. Certain adjustments must be made which are not reflected in the OPA. The adjustments which are made by the strength planners (PERS-212C) are shown in Figure 4.2. The Defense Officer Personnel Management Act (DOPMA), which will be discussed later, provides ceilings which are not reflected in the OPA. The promotion planners (PERS-212E) adjusts for the DOPMA controls, which by law cannot be exceeded, and assigns ceilings to the communities. Typically, the OPA contains more captain and fewer commander authorizations than are permissible in the DOPMA tables. The strength planners adjust the OPA grade 'mix' to maximize LCDR through CAPT authorizations [Ref. 12]. In addition, the medical community is 'fenced' at a minimum level. This figure is not captured in the OPA. If the OPA shows that Navy Medicine's billets are lower than the fence, the difference is made up from communities which receive unrestricted line (1000/1050) billets [Ref. 12]. For example, in FY94, the Medical OPA had 12,217 end strength although the fence was 12,329. The additional medical community end strength of 112 was taken proportionally from the unrestricted line community [Ref. 12].

After all adjustments have been made, the bottom line figure must still equal the authorized control, which may differ due to markups executed after the

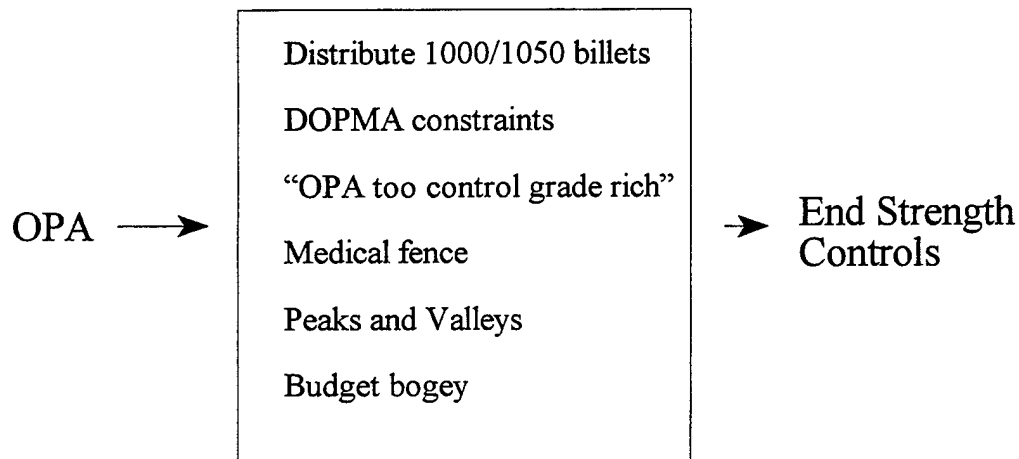


Figure 4.2. Developing Controls: Adjustments to OPA
Source: LCDR Terkhorn (PERS-212C)

OPA was authorized. After the OPA controls are provided they are 'scrubbed' by the end strength planners, officer community managers, and other applicable branches before the final end strength number is produced. From these controls, the individual communities strength planning begins.

b. End Strength Planning in the Medical Service Corps

All communities then participate in strength planning to target their inventory to the specified end strength figures. The communities all use the simple equation discussed above and specifically for the Medical Service Corps that method is shown in Figure 4.3. As can be seen in Figure 4.3, the cyclical process will conclude with end strength. The figures that make up this end strength are beginning strengths plus gains minus losses [Ref. 14]. Although a simple formula, this can be

End Strength	=	Begin Strength	+	Gains	-	Losses
				Accessions from:		Losses due to:
				- IPP		- Discharge
				- HSCP		- Retire
				- HPSP		- Resignation
				- Direct		- Release
				- NROTC		- Invol. Release
				- Recall		- Other
				- Other		

Figure 4.3. Developing the MSC Officer Strength Plan
Source: LT Olsen (PERS-212D)

a complex process for reasons discussed throughout this paper i.e., changes in end strength controls in mid-process or changes in expected gains or expected losses.

Based on the controls, the Medical Service Corps' Community Manager develops the execution year plan [Ref. 13]. The officer community manager (OCM) is provided with the previous years execution plan as a baseline for developing the new execution year plan [Ref. 13]. In the ideal world the end strength and accessions would remain fixed. End strength, set by Congress in the year's Defense Authorization Act, may in fact be lower due to internal policy decisions, FMB or OSD markups. If this is the case, all of the personnel plans must be appropriately adjusted.

The two major people involved in strength planning for the Medical Service Corps are the officer community manager (PERS-211M3) and the MSC manpower analyst (MED-523). When accounting for losses, the manpower analyst keeps track, through the Bureau of Medicine Information System (BUMIS), of expected losses for the upcoming year. Thus, when reports are run from the BUMIS system, the BUMIS database is only as accurate as the information the analyst puts into it. For example, if an officer submits their release from active duty papers, the analyst must input the information in the database so that when the next BUMIS report is run the officer will show up as a loss in the month he/she is leaving the Navy.

Although running the database appears to be a simple exercise, getting accurate data is sometimes difficult. An officer, for example, may only discuss their release and submit their papers to their speciality leader and detailer. If the analyst does not keep communication constant with both the detailer and specialty leader, the analyst may not be informed of the officer's release date, and thus the system is inaccurate. The long-term effects of this oversight on the Corps are severe. Since all of the plans are interrelated, not having an accurate account of officers in the BUMIS system could cause problems with the personnel plans.

An error in the BUMIS database can adversely affect the Medical Service Corps. For example, the analyst may have officers in the BUMIS database

who have left the corps. The analyst would then provides the officer community manager with an incorrect lineal list of officers who will be 'in-zone' for a promotion opportunity. This error would not only lower the promotion opportunity for those in zone, but would cause force structure problems if these officers are selected for promotion--then leave the service, impacting control grade figures. Like all communities, the MSC needs to staff to maximum control grade strength. If the MSC fails to promote to control grade strength those positions may be lost in future years. Not only is this issue parochial for the MSC, but mission readiness could be greatly influenced by this potential loss of control grade officers.

2. Accession Planning

For the Navy, accession planning is a vital process that has long term implications for shaping Navy's quality force structure as well as affecting the iterative process of personnel planning. A change in end strength targets may affect the rate of accessions. Also, specific community mix changes and thus policy changes that affect gains may occur, causing the accession planners to react accordingly. Since the Navy accesses (and promotes) based on vacancy rates, accurate information is vital to effective accession planning.

a. The Aggregate Plan

With four variables (end strength, begin strength, gains and losses), three of which are known or estimated to be known (estimated losses, expected end

strength, and begin strength) gains, the unknown, can be calculated. Furthermore, the Navy's accession planners at (PERS-212D) have planning tools that are used to estimate the gains. Calculating 'capped' accession programs, i.e., the Naval Academy, NROTC, Enlisted Commissioning Programs, and the Seaman to Admiral Program allows the accession planners to have a 'controlled' group of accessions on a yearly basis (for FY97, nearly 40 percent of the accession figures were controlled). [Ref. 15]

From the remaining gains the accession planners work closely with the specific community managers to determine the number and type of officers they wish to recruit. Each community may have specific programs to acquire recruits and the accession planners factor this into determining their final figures to recruit. Then PERS-212D, sends an officer recruiting goals letter (broken down by designator) to the Commander, Naval Recruiting Command, who then 'goals the field' of recruiters to meet the requirements.

b. Accession Planning in the Medical Service Corps

Although accessions are greatly affected by the changes that may occur as discussed above, much of the accession planning occurs internally prior to the PERS-212D Navy-wide involvement. For the Medical Service Corps the process is complex but accurate information and proper communication keep it adaptable to required changes. The MSC Community Manager (PERS-211M3) and the MSC

Military Manpower Analyst (MED-523) develop an accession plan to target inventory to the revised officer program authorization (ROPA). The strength planners develop the plan by taking current stock of personnel plus expected gains minus expected losses--thus an accession figure is developed which is met through the work of the Bureau of Naval Personnel Accession Planners (PERS-212D) and the Commander Naval Recruiting Command (CNRC). These organizations work together with the individual officer community managers to ensure that the Navy end strength figures are met.

The MSC accession plan is a process which involves many participants. First the MSC community strength planners (PERS-211M3 and MED-523) derive the expected number of new recruits needed by specialty. The number of accessions for the Medical Service Corps come from many different sources. There are lateral transfers from other communities that apply to the MSC, NROTC accessions, recalls, and the three largest methods: the Inservice Procurement Program, student programs, and direct procurement. [Ref. 15]

The recruiting process begins around 1 July, when the community manager forwards their accession plan to the BUPERS accession planners PERS-212D who 'goals' CNRC as to recruiting figures and mix. CNRC then gives direction to their recruiters as to the type and number of officers to recruit [Ref. 16]. CNRC's responsibility includes recruiting recalled officers, direct accessions, and candidates

for the Health Services Collegiate Program (HSCP) and the Health Professional Scholarship Program (HPSP). Accessions from the Inservice Procurement Program (IPP), NROTC, and changing designators are the responsibility of the MSC personnel planners at PERS-211M3 and MED-523. The recruiters have many tools they may use to recruit Medical Service Corps officers. The MSC Health Care Administration (HCA) community accepts 50 percent of direct accessions through the Inservice Procurement Program. Another tool for recruiters to use is the Health Service Collegiate Program (HSCP) and the Health Professional Scholarship Program (HPSP). The HSCP is available to students entering an accredited graduate program for Health Care Administration, Industrial Health, Environment Health, Physical Therapy, Pharmacy, Physician's Assistant, and Optometry [Ref. 16]. The HSCP provides the student with E-3 pay while in school and a commission upon graduation.² The HPSP program is for optometrists only and provides the optometrist with a full scholarship and monthly stipend (similar to the Medical School Scholarship Program). The final accession tool is direct ("outside") accession where members apply to be commissioned after completing an accredited educational program [Ref. 16].

² member must meet all physical qualifications and graduate with a GPA at or above 3.0. Member has a four year obligation after graduation, but is credited for pay purposes with 2 years TIG. Applicants must also be 34 years of age or younger.

For the FY97 accession plan, 139 officers were chosen: 81 were commissioned through direct procurement, 4 were recalled, 22 from the HCSP, 9 from the HPSP, 16 were from the IPP, 4 changed designator to the MSC, and 3 were NROTC accessions [Ref. 32]. The HCSP, HPSP, and direct accession policies have vast implications in force structure. A member with a graduate degree who is commissioned through one of these programs may be given credit for service and time in grade. For example, a Ph.D. prepared clinical psychologist can enter the MSC as a lieutenant with two years of service granted. While this seems like a good way to attract quality officers, the MSC has taken steps to address the implications for promotion and the flow points (the number of years one is in the grade prior to a promotion opportunity) of these officers. An officer granted entry grade credit at the O-3 level will have less fitness reports than their MSC peers. This may negatively affect the promotion opportunity to O-4 for these officers since the promotion board will have less performance evaluations on which to judge the officer.

The HSCP and the HPSP are popular for several reasons. As discussed earlier, there are many uncertainties in the accessioning process. Perhaps there are more retirements than expected. If the recruiter has students in these programs they have members who are committed to a commission upon graduation. This makes the strength planners able to accurately predict how many members of a specialty they can plan for [Ref. 15]. In addition, since members in the HSCP and HPSP program

are programmed gains two years in advance--the accessioning process is less uncertain due to changes in market (recruiting) conditions. If recruiting health professionals becomes difficult for CNRC in a certain year, the MSC will still have committed officers from these programs and can plan for these gains two years in advance [Ref. 16].

The direct accession program is a process where the recruiter submits a candidate's application to CNRC where it goes through an approval process. CNRC first reviews the package to determine if the applicant meets the program authorization and if so the application is submitted to MED-51 [Ref. 16]. The analyst at MED-51 then reviews the candidates qualifications and ensures that they meet the program authorization, listed in Appendix C, which includes the minimum requirements for entry level health care professional positions [Ref. 17]. If, for example, the member applying for a commission as a Health Care Administrator, will not (has not) graduate(d) from a college accredited by the Accrediting Commission of Education for Health Care Administration (ACEHA), for health care administration majors or if in a business program the American Assembly of Collegiate Schools of Business (AACSB), the application is not forwarded to the professional review board for consideration [Ref. 17].

The BUMED professional review board (PRB) consists of senior MSC officers in the Washington D.C. area. The PRB may decide not to recommend for

selection any of the applicants presented or may withhold recommendations until additional applicants are received for consideration. This process ensures that not only are accession quotas met, but also allows the PRB to recommend selection of only the most qualified applicants. Once quotas met, highly qualified applicants may be kept until the next fiscal year, when new quotas become available. [Ref. 11].

The specialty leader is asked to provide comments prior to the convening of the board since they are the most knowledgeable officers in their respective specialty. The specialty leader does not serve as a voting member of the board but has much influence on whether or not the person is accepted. [Ref. 17]

The specialty leader can provide a strong recommendation to the board either for or against the approval of the candidate and the PRB will strongly consider that recommendation. The specialty leader may contact the members licensing agency (if appropriate) and may contact the school and listed references to determine whether the candidate will be an acceptable member of the MSC--and in particular their community. If the PRB recommends commissioning, the application is sent back to CNRC for final selection. If CNRC does not approve of the applicant they will be denied entrance [Ref. 16]. It is rare for CNRC to not select a candidate which has been recommended by the PRB. This may happen in cases where CNRC becomes aware of some disqualifying action by the candidate that was not known prior to the convening of the PRB.

Obviously, the specialty leader has a vital role in personnel planning. The specialty leaders work with the analysts to ensure that an accurate number of expected losses are accounted for thus they can appropriately access the proper number and mix of officers to meet their targeted end strength. The specialty leader serves as crucial communication link for the MSC analyst. The MSC analyst (MED-523) uses the BUMIS data system and the expertise of the specialty leaders to track historical information on retention trends within each specialty. Knowing how many officers will attrite: via retirement, release from active duty, and twice failure to select, for example, the analyst can make an estimation of how many officers, and which mix, need to be accessed [Ref. 10]. Again, from this figure the cycle continues where the community manager provides PERS-212D with accession figures which provides CNRC with targeted goals needed to meet the MSC personnel requirements. CNRC then has the responsibility of recruiting the proper mix and number of administrators and allied health professionals.

Finally, it is important to note that changes in the OPA that occur during the year must be factored into the accession plan. If, for example, OPA figures are increased for health care administrators the strength planner will give CNRC permission to 'overship', (recruit and subsequently commission) additional HCAs. [Ref. 16]

3. Promotion Planning

a. The Aggregate Plan

Promotion planning in the Navy is coordinated by the promotion planners in PERS-212F. Since promotions is a vacancy driven system, the personnel planners take the OPA figures as broken down by the end strength planners--who worked together with the accession planners to determine gains and losses--to determine promotion rates.

The promotion planners (PERS-212F) break down the process as follows. First they develop a matrix of the end strength figures, broken down by grade, that were provided by the strength planners (PERS-212D) [Ref. 18]. Then the promotion planners break out the distribution of officers by control grade figures. The control grades are LCDR, CDR, and CAPT and the limit of officers in these grades is established by the Defense Officer Personnel Act (DOPMA), established by Congress [Ref. 18]. The Medical and Dental Corps are exempt from control grade limits, which means that they may have as many LCDR, CDR, and CAPT end strength as needed. Of course, these communities are subject to time in grade requirements.

The restructured OPA or (ROPA) is developed by the promotion planners in response to mandated control grade cuts (or gains). The promotion planners have detailed spread sheet programs that assist them in developing

promotion plans. One of these programs allows them to put the control grade requirements, Navy-wide, into the program, which will provide the control grade totals allocated for each community. This program allows PERS-212F to quickly give fair share distribution of any restructured OPA figures. The spreadsheet will cut any end strength reductions across the board depending on the percentage of control grade within the community in question. For example, the Medical Service Corps (MSC) has 6.7 percent of its OPA control grade ratio as captains. If the MSC must cut control grade end strength by 100 this figure would equate to a reduction in 7 captain authorizations and the personnel plans will be adjusted accordingly. [Ref. 18]

The law requires the Navy to provide “relatively similar opportunities for promotion” over a five-year period [Ref. 19]. It is the responsibility of the promotion planners to monitor all communities flow points and ensure that they are within the law and Navy guidelines [Ref. 18]. Then the promotion planners determine flow points from another spreadsheet program (FLOWMENU). While each Service defines “relatively similar opportunities” differently, the Navy guidelines are that promotions should be +/- 10 percent of DoD opportunity guidelines. The guidelines for these opportunities are listed below in Table 4.1.

It is also important to note that opportunity refers to ‘in-zone’ opportunity. For every officer selected above or below zone, this lowers the “in-zone” promotion rate. For example, if the Medical Service Corps has vacancies

Table 4.1

OFFICER PROMOTION/OPPORTUNITY AND TIME GUIDELINES

TO GRADE	OPPORTUNITY	FLOW POINT
Captain	50% +/- 10%	21 - 23 years
Commander	70% +/- 10%	15 - 17 years
Lieutenant Commander	80% +/- 10%	9 - 11 years
Lieutenant	95 - 100%	4 years
Lieutenant (Junior Grade)	Fully Qualified	2 years

Source: Pers-212F

which make it necessary to promote 50 captains, the promotion planners divide the available promotions by the rate of promotion opportunity, or 50/.5 (taken from table 7 for 50 percent promotion opportunity to CAPT), therefore there will be 100 commanders with the opportunity 'in-zone' to be promoted to captain. If 5 commanders are selected below zone and 5 commanders are selected above zone then the 'real' in zone promotion rate is actually 40 percent, or 40 selected 'in-zone' out of 100 with the opportunity. The lowering of the real 'in-zone' promotion rate is further exacerbated by the recent policy dictating that 10 percent of promotees be selected below zone. Although this policy is well meaning for the line community (to have officers reach Admiral at an increased pace) it is not efficient for the MSC which has few flag opportunities (currently two). For the MSC this simply lowers the 'in-zone' rate and causes competent officers to leave or be forced to leave the Navy.

Flow points are the time that the officer has in the Navy from his/her pay entry base date (PEBD). If the promotion planners notice that some communities have flow points higher than the guidelines they will 'compensate' that community with end strength from a healthy community [Ref. 18]. A healthy community is defined here as one in which the flow points are within the Navy's promotion opportunity guidelines. This policy is called compensation. The compensation policy gives the promotion planners the flexibility to ensure that all communities have the opportunity to promote within Navy guidelines. Compensation is usually provided when a community--for example, the Medical Service Corps is willing to provide another community, the Nurse Corps, with authorized end strength to ensure that the Nurse Corps can promote within the Navy Guidelines. A further example of this policy in effect is given in section C of this chapter.

b. Effects of TERA

The Temporary Early Retirement Act (TERA) was enacted in Congress to assist in downsizing efforts. Under TERA, lieutenant commanders, who have twice failed to select for commander and have over 15 years of service, were early retired. TERA has been a tool for promotion planners to use to keep flow points under Navy and DoD guidelines and keep promotion opportunities within Navy guidelines [Ref. 18]. TERA, scheduled to be discontinued in 1999, may be

accelerated and discontinued in FY98. The discontinuation of TERA will have a significant impact on promotion opportunity and retention factors.

When TERA is discontinued, it is expected that lieutenant commanders, twice failing to select for commander, will be permitted to stay in the Navy until they reach retirement at 20 years of service. Since lieutenant commanders are in the control grade limited positions, this severely affects promotion opportunities, which would in turn affect retention [Ref. 18]. The Navy would suffer by losing high quality junior officers who see the time to promotion opportunity (flow points) to LCDR to greatly increase. The Navy also has to deal with lieutenant commanders who know that they will not be promoted again in this system, but still require them to do the work of a lieutenant commander. The positive side is that training, education, and recruiting costs should decline because the LCDR will remain on active duty.

c. Promotion Planning in the Medical Service Corps

It should be clear just how important promotion planning is at ensuring that the Navy meets its end strength goals. For the Navy to meet these totals *and* maintain their control grade structure under DOPMA, promotion planning at the individual community level is vital to PERS-2 meeting its commitments. The Medical Service Corps plays an important part in meeting the end strength goals of Navy Medicine.

The time constraints of the promotion planning process is important to understand. For the FY98 promotion zone, PERS-212F submits its promotion plan (as discussed above) to the officer community managers in August 1996. The officer community managers (OCM) then work with their analysts (for the MSC it's Med-523) to develop their promotion plan. The OCM and analyst have approximately two weeks to have their plan forwarded to the Director of the Medical Service Corps, who signs the promotion plan and forwards it back to the OCM; who forwards the document back to the promotion planners at PERS-212F. This entire process was completed by 30 September 1996, which was less than two months. From here the aggregate plan is submitted to the Deputy Chief of Naval Personnel and to the Chief of Naval Personnel for approval. Then a NAVADMIN message announces the official plan to all hands [Ref. 10]. This process is shown graphically in Figure 4.4.

The Medical Service Corps' promotion plans are developed by the officer community manager (PERS-211M3) and the manpower analyst (MED-523). The Navy promotion plan for the following fiscal year is developed by October of the previous fiscal year. Thus the FY98 plan is distributed by PERS-212F in October 1997, and the community planners must work in advance to ensure that their plan accounts for any changes in their community.

estimated. The analysts then take the number of LCDRs the MSC is authorized.

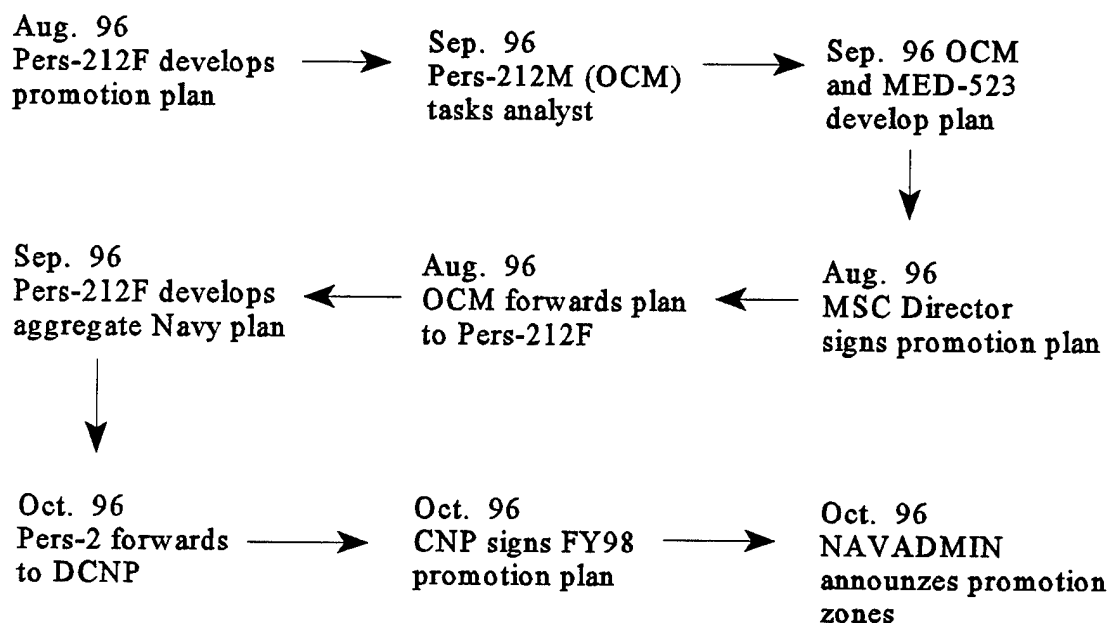


Figure 4.4. The Flow of Promotion Planning (for FY98 promotion plan)
Source: Pers-211

An abbreviated example of how the Medical Service Corps prepares a promotion plan for LCDRs is provided in Table 4.2. First expected losses are estimated. Using the 'in-zone' promotion opportunity guidance of a 70 percent promotion opportunity, the analyst then determines how many members should be in zone for a promotion opportunity.

Noticing that the authorized strength is larger than the restructured OPA by 32 members (627 vers 595), one should notice that this is illegal within the control grade limits. This is where the compensation policy discussed earlier has taken

affect. The Medical Service Corps is getting compensated 32 authorized end strength by another community in order to meet its flow point goals.

After these numbers are determined the analyst takes the current lineal list and determines the promotion zone. Since 109 selections are to be made and the 'in-zone' promotion opportunity is 70 percent, the analyst takes $109/.70$ and determines that 156 members will have an opportunity for 'in-zone' promotion.

The analyst is responsible for ensuring that the plans are accurate. To accomplish this the analyst must keep their Bureau of Medicine and Surgery Information System (BUMIS) accurate. All losses must be recorded when they occur. As was discussed in the end strength section this is sometimes difficult since the officer who is released from active duty may only alert the detailer of his/her decision to leave. Thus, the analyst must keep communication constant between he/she, the detailer and the specialty leader to ensure that the accounting in BUMIS is always correct.

As previously stated several current trends can significantly increase the flow point. Specifically, the discontinuation of TERA and the precept language in the instruction to the promotion board. Both of these issues affect the MSC by increasing the flow points and may cause high quality officers to leave the Navy due to the increased time to a promotion opportunity.

Table 4.2

FY97 PARTIAL PROMOTION PLAN

FY97	LCDR
Restructured OPA	595
Authorized Strength	627
Selections	109
Opportunity	.70
In-Zone Eligible	156
Flow Point	10-05

Source: Pers-212F FY-97 Promotion Plan

Restructured OPA - given from PERS-212F.

Authorized Strength - Total number that can be onboard by law.

Selections - Taken by authorized strength and number of losses.

Opportunity - 70% in-zone guidance Navy-wide.

Flow point - On average, members with 10 years and 5 months in zone.

V. CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS

As noted throughout this thesis, effective personnel planning requires organizations to collaborate to develop realistic and comprehensive end strength, accession, and promotion plans. Effective communication lines, both formal and informal, must exist between each agency for meaningful personnel planning to occur. For the Navy Medical Service Corps (MSC), as with other communities, it is imperative that Corps specific personnel plans be developed in concert with overall Navy plans. The Bureau of Naval Personnel Officer Community Manager (PERS-211M3) provides this link with the Navy's end strength, accession and promotion planners. The Medical Service Corps' Manpower Analyst (MED-523) provides this link with the other key agencies involved in the personnel planning process. Together (PERS-211M3 and MED-523) are responsible for accurate, timely, and proactive personnel planning.

The sole data source for the development of MSC personnel plans is the Bureau of Medicine and Surgery Information System (BUMIS). This database is maintained by the manpower analyst assigned to the Bureau of Medicine and Surgery (MED-523). The MED-523 manpower analyst cannot maintain an accurate personnel database without the dedicated support of the Bureau of Naval Personnel (BUPERS)

Detailing Sections (PERS-4415I/J); BUPERS Resignation, Redesignation and Retirement Sections (PERS-25/PERS-27); Commander, Naval Recruiting Command (CNRC-32); MSC Speciality Leaders; MSC Division (MED-OOMSC); Naval School of Health Sciences (NSHS-66) and the Naval Medical Information Command. If one of these organizational entities does not vigilantly strive to maintain an accurate BUMIS database, the quality of the MSC personnel plans will suffer. Consequently, the MED-523 manpower analyst must devote a significant amount of time coordinating information. The importance of an accurate BUMIS database to the MSC personnel planning process cannot be overstated.

The Navy Medical Service Corps personnel plans (end strength, accession, and promotion) are being developed in a conscientious manner. The Medical Service Corps is one of the most challenging Corps' in the Navy to actively manage because of its diversity, varying entry grade credit and the fact it is constrained by the Defense Officer Personnel Management Act (DOPMA), unlike the Medical and Dental Corps. There are several issues on the horizon that may affect these plans.

B. RECOMMENDATIONS

The Director, Medical Service Corps wants to ensure that his community thrives, not just survives. There are three broad based issues that the Medical Service Corps must aggressively and proactively address to ensure that this vital Designator remains a vibrant Corps: (1) Promotions, (2) Total Health Care Support Readiness

Requirement, and (3) the Relocation of the BUPERS Detailers and Commander, Naval Recruiting Command to Millington, Tennessee.

There are concerns with the Promotion Board process, particularly for Lieutenant Commanders (O-4). Line Navy wants to ensure that their "fast trackers" are identified early so they will be younger if selected for flag rank, making Navy more competitive for senior joint/specified command billets. To achieve this goal, the FY97 and FY98 promotion board precept language puts much greater emphasis on below zone (BZ) selections [Ref 34]. Below zone selections have historically identified officers who had displayed both distinctive professional competence and exceptional leadership potential. The standard has traditionally been that above zone and in zone officers were compared on an equal basis while BZ selections were clearly "head and shoulders" above average performers. The new below zone precept language that has been previously discussed caused the Medical Service Corps significant concern. This concern is graphically illustrated by the FY97 MSC LCDR (O-4) Promotion Board selection results. The in zone promotion opportunity for the FY97 LCDR Selection Board was 70 percent. Because of the new precept guidance, 10 percent of the selects were below zone. This resulted in only a 55 percent promotion opportunity for in zone candidates--because 5 percent of the selects came from above zone. This emphasis on below zone selections is compounded because so many MSC specialists (clinical psychology, optometry, pharmacy, etc.) receive

entry grade credit (advanced standing), based on education and/or experience. These specialists' performance records have a much shorter duration than their peers. In FY97, only 40 percent of above zone and in zone officers who entered active duty as O-3 were selected for O-4. Because of the very limited opportunities, one, for MSC flag selection, the new emphasis on below zone selection is not optimal for the MSC.

The Medical Service Corps is required to award entry grade credit for education and/or experience for selected specialties. The number of specialties being given advanced grade standing is increasing. As previously described, this advanced entry grade credit creates problems with promotion planning, particularly at the Lieutenant Commander grade (O-4). The Medical Service Corps is constrained under DOPMA. The Medical and Dental Corps also award entry grade credit, but are not DOPMA constrained. The personnel pyramid (billet structure) for the MSC, particularly at the O-4 grade, needs to be evaluated to determine the minimum billet structure (number of billet authorizations) to maintain flow points and promotion opportunity consistent with DOPMA guidance. If the Navy loses its Temporary Early Retirement Authority (TERA), this situation will be dramatically exacerbated. If TERA is eliminated O-4 and O-5 flow points will increase while promotion opportunities decrease--because non-competitive failed to select officers will remain in the Navy longer.

It appears inevitable that the Medical Service Corps billet authorizations will need to be restructured to be in conformance with the Total Health Care Support Readiness Requirement (THCSRR) model. THCSRR has established a sound floor for the minimum number of active duty specialists needed. Due to the intense and austere budget environment, there is a high probability that any specialty whose billet authorization exceeds its THCSRR requirement will be reduced to its THCSRR floor. Each specialty within the MSC will be fully manned by the end of FY97. It is imperative that the restructuring of the MSC billet file be phased so the inventory (body) drawdown can be accomplished in a gradual and methodical manner. For example, the fiscal year 2002 THCSRR requirement for optometry and pharmacy calls for a 58% and 46% billet reduction of these two communities, respectively [Ref. 33]. An incremental "right sizing" time line, spread out over 4 to 6 years, can be accomplished without "choking out" new accession. It is vital that the MSC maintain a steady stream of new accessions so new year groups and needed talent can be infused into the MSC on an annual basis. If the MSC is forced to restructure its inventory (bodies) to the THCSRR floor, unnecessary chaos and expense will result. Downsizing inventory has a cost. As previously discussed, it is imperative that TERA be continued. Moreover, the Bureau of Naval Personnel may need to consider other ways to reduce inventory, such as voluntary separation pays and selected separation bonuses, involuntary releases from active duty, etc. It is vital that BUPERS and

BUMED work closely together in order to effect these changes in a reasonable and cost-effective manner.

The majority of Bureau of Naval Personnel and Commander, Navy Recruiting Command (CNRC) organizational assets are scheduled to be relocated to Millington, Tennessee in FY98. For the Medical Service Corps, the BUPERS (PERS-4415) Detailing section and CNRC-32 (Medical Department Recruiters) are scheduled to be relocated to Millington. At this time the Medical Service Corps Officer Community Manager (PERS-211M3) will remain in Washington D. C.. It is critical that a formal communication system be established to ensure that "policy" and "execution" decisions within the personnel planning process are continually communicated. This communication system should be fully in place prior to anyone's relocation to Millington so the MSC personnel planning system does not suffer, particularly with the implementation of THCSRR on the horizon. The MSC personnel planning team must continue to work closely together to preserve the quality of the MSC.

APPENDIX A. ACRONYMS LISTING

733 Study	A study directed by Section 733 of the FY 1992 Defense Authorization Act which directed a detailed study of the medical force structure required to fight two nearly simultaneous MRCs. The final report was issued to Congress in June 1994.
733 Update	An ongoing update of the original Section 733 Study directed by the Deputy Secretary of Defense. The major objective of the update is to resolve differences among the Services which surfaced in the original study. The final report was given on 31 March 1996.
AC	<i>Active Component.</i> The active duty force.
AQD	<i>Additional Qualification Designator.</i> Identifies the qualifications required of the officer filling the billet beyond NOBC/PSUB.
ASD(HA)	<i>Assistant Secretary of Defense, Health Affairs.</i>
BA	<i>Billets Authorized, i.e.,</i> a billet with endstrength/authorization assigned to it.
Billet	A statement of a requirement for a particular job.
Billet file	A database of all billets; contains specific fields such as NOBC, PSUB, DESIG, etc.
BIN	<i>Billet Identification Number.</i> Similar to a social security number it never changes; used to track billets through the 'system'.
BSC	<i>Billet Sequence Code.</i> Numbering system used to sort billets at an activity into an organizational pattern.
BUMIS	BUMED Medical Department Officer Information System. An extract of the BUPERS Master Officer File, maintained by MED-52, updates Medical Department Officer PSUB/SSUB information.
CBTZ	<i>Combat Zone.</i>
CFY	<i>Current Fiscal Year.</i> Defines what billets are authorized right now.

CFY +1 Billets are authorized in the outyears.

CLAIMANT An owner of billets for resource purposes. Claimant 18 is BUMED who owns billets at MTFs; Claimant 27 owns all USMC billets, medical included.

CNA *Center for Naval Analysis.*

COMMZ *Communications Zone.* The area outside a combat zone.

DDO In THCSRR, the *Day to Day Operational* requirements for Navy Medicine; total of POF plus billets required for sea/shore rotation (minus non-rotational billets).

DESIG/GR *Designator/Grade.* For example, 2300G is MSC Captain; Grades are noted by alphabetical codes: G=Capt., H=CDR., I=LCDR., L=ENS; codes apply to billets and bodies. For the medical communities; 2100=Medical Corps, 2200=Dental Corps, 2300=Medical Service Corps, and 2900=Nurse Corps.

DHP *Defense Health Program.* The money allocated for the medical portion of the Defense Budget.

DMPG *Defense Medical Planning Guidance.* Issued by ASD(HA) to the services, details programming priorities for DHP; adjunct to Defense Planning Guidance.

DOPMA *Defense Officer Personnel Management Act.*

DPG *Defense Planning Guidance.* Issued by Secretary of Defense which sets the priorities and parameters for force sizing and programming by the Services. Usually issued every two years.

EDVR *Enlisted Distribution and Verification Report;* Produced monthly by EPMAC regarding each command's onboard enlisted staffing.

Endstrength What makes a billet valid; the money to pay the salary of the person assigned to the billet; a billet without endstrength is only a requirement.

EPMAC	<i>Enlisted Personnel Management Center; New Orleans, LA.</i>
FH	<i>Fleet Hospital. There are 10 (6 Active and 4 Reserve).</i>
FYDP	<i>Future Years Defense Plan. The POM is what modifies/changes the FYDP.</i>
IPS	<i>Illustrative Planning Scenarios. A sub-element of the Defense Planning Guidance which describes possible military scenarios by which the Services size forces. Defines the scenario, enemy and friendly forces available, and time lines for deployment and conflict resolution. The scenarios are divide into Major Regional Conflicts (MRCs) and Lesser Regional Conflicts (LRCs).</i>
JCS	<i>Joint Chiefs of Staff.</i>
JROC	<i>Joint Requirements Oversight Council. An instrument of the Chairman of the Joint Chiefs of Staff (CJCS). It assists the CJCS in carrying out his responsibility to assess military requirements for defense acquisition programs. Membership consists of the Vice-Chairman of the JCS and Vice-Chiefs of each service.</i>
JWCA	<i>Joint Warfighting Capability Assessment.</i>
M+1(+2...)	<i>Billets required during the first month (or 2nd, 3rd....12th) of mobilization. The MPAS System is the mechanism used to fill a portion of these requirements i.e., OCONUS Augmentation billets.</i>
MES	<i>Medical Endstrength.</i>
MOSR	<i>In THCSRR, the Medical Operational Support Requirement. The union (larger) of DDO and WAR requirements.</i>
MPAS	<i>Medical Personnel Augmentation System. Fills mobilization billets on certain classes of Amphibious ships, with USMC Medical Battalions and OCONUS medical treatment facilities.</i>
MRC	<i>Major Regional Conflict.</i>
NAVMAC	<i>Navy Manpower Analysis Center.</i>

NEC *Navy Enlisted Classification.* For example, and HM-8425 is an Independent Duty Corpsman; parallels PSUB for officers.

NMP *Navy Manning Plan.* Set by EPMAC and is the fair share of enlisted assets available for distribution and assignment to a command.

NOBC *Naval Officer Billet Code.* A general description of duties performed in a billet. A coding system that allows billets to be grouped based on scope and nature of duties. For example, all Director for Administration billets are coded as NOBC= 2615.

NOROT *No Rotation.* In THCSRR, ICONUS billets. These billets do not rate a rotation base billet in the DDO computation. As of the date of this document the only ICONUS location is Twentynine Palms, California.

OCM/ECM *Officer Community Manager/Enlisted Community Manager.* Both are in PERS-2 and responsible for cradle to grave personnel management of their assigned community.

ODCR *Officer Distribution and Control Report.* A report produced monthly that lists the personnel information regarding each command's officer staffing.

OMB *Office of Management and Budget.* The executive body equivalent to the CBO.

OPA *Officer Program Authorization.* The actual number of officers authorized to be in the inventory at the end of a given fiscal year. This is the target the inventory manager aims for. Only billets with OPA applied are valid authorized billets; OPA = Endstrength.

OSD *Office of the Secretary of Defense.*

OSD/HA *Office of the Secretary of Defense, Health Affairs.*

PDM *Program Decision Memorandum.* A step in the PPBS cycle; this is the document that forwards decisions the Defense Resources Board has made on POM issues in a given cycle.

POE	<i>Projected Operational Environment.</i> Guidance provided to planners in terms of the types of environments a particular platform will be expected to operate in.
POF	In THCSRR, <i>Peacetime operational Forces.</i> This includes medical billets on all Ships, USMC, OCONUS and ICONUS location.
POM	<i>Program Objective Memorandum.</i> Budgeting for future years on a "by program" basis; i.e., the DHP.
PPBS	<i>Planning, Programming, and Budgeting System.</i> The process of planning the Defense Budget.
PRG	<i>Program Review Group.</i> Pertains to the PBBS budgeting process.
PSUB	<i>Primary Subspecialty Code.</i> A descriptive statement of particular skills needed for a particular billet; also describes training and skills possessed by an officer.
RC	<i>Reserve Component.</i> The Reserve Force.
RFC	<i>Readiness Focused Capitation.</i> Allocation of budget dollars based on costs assignable or linked to readiness requirements.
ROT	<i>Rotation.</i> In THCSRR, the number of shore billets that would be required to support billets in the POF. These are shore billets needed to support our sea duty billets.
SELRES	<i>Selected Reservists.</i> Drilling reservists in a pay statue; i.e., those available at M+1. This is distinct from other categories or reservists; those reservists currently on active duty, or, those in a Voluntary Training Unit (drilling, no pay), as well as those in the Ready Reserve (no pay, not drilling).
SSUB	<i>Secondary Subspecialty Code.</i> See PSUB.
SUST	In THCSRR, <i>sustainment</i> is the sum of training billets required to maintain the overall strength of a community (replacements due to losses).

T-AH	<i>Hospital Ships.</i> Specifically T-AH 19 USNS Mercy (west coast) and T-AH 20 USNS Comfort (east coast); each has 1000 beds, 12 ORs and 1,200 staff.
TFFMS	<i>Total Force Manpower Management System.</i> The system used to maintain and make changes to the billet file.
TPPH	Denotes billets for <i>Transients, Prisoners, Patients, and Holdees.</i> These categories of personnel don't count against a command's "onboard" count.
TW	In THCSRR, <i>Theater Workload.</i> The billets associated with hospital ships and fleet hospitals.
UIC	<i>Unit Identification Code.</i> A unique 5 digit number to identify an activity in the billet file and other files. For example, UIC 00018 is the code to identify BUMED.
WAR	In THCSRR, <i>Wartime Requirements.</i> Theater Workload (TW) plus Force Structure (FS).

APPENDIX B. MEDICAL SERVICE CORPS SUBSPECIALTIES

Health Care Administrators

Financial Management
Material Logistic Management
Manpower, Personnel, Training
Education & Training Mgmt.
Operations Research
Information Systems
Health Care Administration
Patient Administration
Medical Logistics
Medical Data Services
Medical Construction Liaison
Plans/Ops./Medical Intelligence

Health Care Scientists

Biochemistry
Microbiology
Radiation Health
Physiology
Aerospace Physiology
Aerospace Exper. Psych
Entomology
Environmental Health
Industrial Hygiene
Medical Technology
Research Psychology

Clinical Care

Clinical Psychology
Audiology
Social Work
Physical Therapy
Occupational Therapy
Dietetics
Optometry
Pharmacy
Podiatry
Physician Assistant

Source: CDR Shayne Brannman, (Pers-211M3) Community Manager Brief, 1996

APPENDIX C. PROGRAM AUTHORIZATION

PROGRAM AUTHORIZATION 115

REVISED SEPTEMBER 1993

Program Authorization for: direct appointment as officers in the Medical Service Corps of the U. S. Naval Reserve for active duty, designation 2305. Pers 211M3 community manager.

- I. Program Authority: 10 USC 591, 593, and 5600.
- II. Quota: as prescribed by the Deputy Chief of Naval Operations (Manpower and Personnel).
- III. Qualifications:
 - A. **Citizenship:** must be citizens of the United States.
 - B. **Sex:** open to men and women.
 - C. **Age:** in accordance with provisions of Defense Officer Personnel Management Act (DOPMA) and applicable Naval Military Personnel Manual articles.
 - D. **Physical:** in accordance with the Manual of the Medical Department, chapter 15.
 - E. **Marital status:** no restrictions.
 - F. **Professional Requirements:** the minimum professional requirements for appointment are as follows:
 1. Health Care and Science section:
 - A. Aerospace Experimental Psychology: applicants must have completed a Ph.D. Degree in Psychology with primary emphasis in areas of industrial, experimental, engineering, learning, cognitive, personnel, training, or measurement psychology. Applicants may have completed a Ph.D. in human factors or in an interdisciplinary program emphasizing human factors, systems and information technology. Applicants who have completed a Master's Degree in one of these areas, and four years of

commissioned service will be considered. Experience in computer information and management systems, higher order computer languages, applied system design and evaluation is highly desired.

B. Aerospace Physiology: applicants must possess a Master's Degree in the biological sciences with an emphasis in human/mammalian anatomy, physiology, and related life sciences programs. Inorganic and organic chemistry, physics, and college mathematics are required courses. Completion of the following courses is highly desired: histology, microbiology, biochemistry, comparative anatomy/physiology, calculus, and computer sciences. Related degrees such as biomedical engineering, exercise physiology/physical education (exercise physiology emphasis). Kinesiology, and ergonomics will be considered. Applicants who have substantial experience in the life sciences or teaching profession are preferred.

C. Audiology: applicants must have a Master's Degree in audiology. Applicants must have a "certificate of Clinical Competence" from American Speech, Language and Hearing Association.

D. Chiropractic: applicants must have, as a minimum, a Doctor of Chiropractic from a chiropractic college approved by the Council of Chiropractic Education, passed all parts of the National Board of Chiropractic Examiners Test, and a current license from one of the 50 states or the District of Columbia. Additionally, immediately prior to accession onto active duty, applicant must have a minimum of one year experience in health care services and have been privileged in a Joint Commission on Accreditation of Healthcare Organizations (JCAHO) accredited facility.

F. Clinical Psychology: applicants must have completed all requirements for a Doctoral Degree in Clinical or Counseling Psychology from an accredited university or professional school. In addition, a full-time, one-year clinical internship or its equivalent is required. Accreditation of the clinical internship by the American Psychological Association is desired. Current licensure or registration in one of the 50 states or District of Columbia is required.

Clinical Psychology Internship Program: applicants must have completed all academic requirements for candidacy for a Doctoral Degree in

Clinical or Counseling Psychology from an accredited university or professional school. Completion of doctoral dissertation is preferred. However, applicants who have completed all other requirements, including doctoral committee approval of dissertation topic, may apply.

Clinical Psychology Doctoral Student Program(USUHS): Candidates may be selected annually for accession into the U. S. Navy, Medical Service Corps, and subsequent matriculation in USUHS Ph.D. program in Clinical Psychology. Applicants must possess a baccalaureate or master's degree from an accredited college or university. Candidates must have attained a minimum GPA of 3.0 on a 4.0 scale and score a minimum cumulative score of 1000 on the Graduate Record Examination.

F. Dietetics: applicants must have a Baccalaureate or Master's Degree in dietetics, foods and nutrition, institutional food service management, or public health nutrition. Additionally, applicants must have completed an internship, pre-professional practice program, or coordinated undergraduate program approved by the American Dietetic Association (ADA). Applicants who are already registered by the Commission on Dietetic Registration of the ADA are preferred; all applicants must become registered within one year on active duty.

G. Entomology: applicants must have a Master's Degree or Doctoral Degree in entomology or closely related degree in which the course work taken had an emphasis in entomology. Applicants should have a 3.2 GPA on a 4.0 scale in graduate study and a 3.5 GPA or better in entomology course work. Course work taken should include 30 or more hours (graduate and undergraduate) in entomology including courses in the areas of medical entomology, pest management, insect taxonomy, insect morphology, immature insects, mosquito biology, medical-veterinary entomology, insect ecology, insect toxicology, and insect physiology. Completion of a minimum of 3-5 hours in each of the following areas is highly desirable: acarology, parasitology, insect virology, invertebrate zoology, computer science, statistics, epidemiology, and environmental health. Experience in surveillance and control of disease vectors or medically important insects is also highly desired.

H. Environmental Health: applicants must have a Baccalaureate Degree with a major in environmental health or sanitary-science-related program area. Individuals who have Baccalaureate Degrees in other health related science majors may be considered if they have acceptable course work in environmental health and extensive public health training and experience. The following credentials are desired: registered sanitarian in a program recognized by the National environmental Health Association (NEHA).

I. Industrial Hygiene: applicants must have a Baccalaureate Degree in Industrial Hygiene or a related biomedical science field such as toxicology. Applicants who have completed requirements for a Master's or Doctoral Degree in these programs are highly preferred. Certification in comprehensive practice by the American Board of Industrial Hygiene (ABIH) is desired.

J. Medical technology: applicants must have a Baccalaureate Degree from an accredited college or university and certification of completion of a course of study in medical technology conducted by a school or program accredited by the Committee on Allied Health Education Association (CAHEA). Applicants must be certified as medical technologists by the American society of Clinical Pathologists. One year or supervisory experience in a hospital-based department of laboratory medicine is highly desired.

K. Microbiology: applicants must have a Master's Degree in microbiology or related areas such as bacteriology, parasitology, immunology or virology for clinical microbiology positions. A Ph.D. in these specialities is required for accession into research microbiology positions.

L. Occupational Therapy: applicants must have a Baccalaureate Degree from an accredited college or university and certification of completion of a course in occupational therapy accredited by the Council on Medical Education of the American Medical Association in collaboration with the American Occupational Therapy Association. National licensure from the American Occupational Therapy Association is required upon entry onto active duty.

M. Pharmacy: applicants must have a Baccalaureate or Doctor of Pharmacy Degree from an accredited college or university and submit evidence of registration as a pharmacist in one of the 50 states or the District of Columbia.

N. Physical Therapy: applicants must have a Baccalaureate Degree, Certificate, or Master's Degree in physical therapy from an institution accredited by an agency recognized by the U. S. Officer of Education or the Council on Post-Secondary Accreditation. Applicants should possess current licensure as a physical therapist. Those applicants not possessing current licensure or registration as a physical therapist in one of the 50 states or District of Columbia must obtain such credentials within one year of entry onto active duty.

Physical Therapy Student Program: a limited number of candidates without degrees in physical therapy may be selected annually for accession in the Navy MSC, and subsequent matriculation in the Army/Baylor University Program in physical therapy. Applicants must possess a Baccalaureate Degree or be in the final semester prior to receiving a degree, with satisfactory completion of courses as follows: 10-12 semester hours in biological sciences (at least one course in human anatomy and physiology); 8 - 10 semester hours in the physical sciences (at least one course in physics, one course in chemistry and one course in algebra); 8 - 10 semester hours in the behavioral sciences (at least two courses in psychology to include one course in growth and development and one course in abnormal psychology), and an advanced statistics course. Candidates must have a minimum GPA of 2.7 on a 4.0 scale, with a 3.0 in the required sciences category; score a minimum cumulative score of 1000 on the Graduate Record Examination and attain acceptable scores on the Miller Analogies Test.

O. Physician Assistant: applicants must have a Baccalaureate Degree from an accredited college or university and have completed a physician Assistant Education Program approved by the Committee on Allied Health Education and Accreditation (CAHEA). Applicants must be certified by the National Commission on Certification of Physician Assistants, Atlanta, Georgia. Those applicants not possessing current certification must obtain certification within one year of entry onto active duty.

P. Physiology: applicants must have a Master's Degree level of training in physiology. The majority of positions require the applicant to have a Doctoral Degree in physiology with a strong background in research.

Q. Podiatry: applicants must be a graduate of a college of podiatry accredited by the Council on Education of the American Podiatry Association. Current licensure in one of the 50 states or the District of Columbia is required upon entry onto active duty. Successful completion of a podiatric residency program approved by the American Podiatry Association is highly desired.

R. Optometry: applicants must have a Doctor of Optometry Degree from a college or university accredited by the Council on Optometric Education of the American Optometric Association and be licensed to practice in one of the 50 states or the District of Columbia. Eligibility to be licensed by a state or the District of Columbia by passing parts I, II, and III of the National Board of Examiners in Optometry may be accepted in lieu of licensure.

S. Radiation Health: applicants must have a Baccalaureate Degree with a major in radiation health, radiobiology, physics, chemistry, mathematics, or biology (which must include acceptable course work in physics or chemistry).

T. Research Psychology: applicants must have completed at a minimum all course requirements for a Ph.D. in psychology. Such applicants will be considered in an "all but dissertation" (ABD) status. The majority of the positions require applicants who have completed requirements for a Ph.D. in psychology, with emphasis on research in social, organizational, experimental, engineering, or physiological psychology. Demonstrated competence in research design and execution, as well as multivariate statistics is required. Applicants who have completed a Master's Degree in one of the areas, and four years commissioned service will be considered.

U. Social Worker: applicants must have completed a Master's Degree in social work from a graduate school of social work accredited by the Council of Social Work Education. Current licensure/certification as a clinical social worker by the jurisdiction where practicing; or if the jurisdiction

does not provide for licensure or certification of clinical social workers, certification by a national professional organization offering certification of clinical social workers is required upon entry onto active duty. Additionally, a minimum of two years post-Master's Degree supervised clinical social work practice is required. Mental health and family advocacy (child and spouse abuse) experience are highly desired.

V. For appointment to serve in one of the following specialties, applicants must have the minimum of a Master's Degree in, or relating to, the specialty concerned as follows: biochemistry (which may include pharmacology or toxicology) and radiation specialist (which may include radiologic physics, medical physics, health physics, radiation biology, radiation health, biophysics, or nuclear engineering).

2. Health Care Administration Section: applicants must have: a baccalaureate or master's degree from a college or university accredited by a regional accrediting and be a graduate of a program accredited by a specialized accrediting agency such as the Accrediting Commission on Education for Health Services Administration (ACEHSA) or the American Assembly of Collegiate schools of Business (AACSB). Applicants must major in Health Care Administration or Business/Management related areas such as human resources management, financial management, accounting, public administration, or management of technology and information systems. Baccalaureate applicants must submit their GMAT or GRE scores with their application. Applicants who have completed requirements for a master's degree in these programs are preferred. Administrative residency completion or professional employment experience in hospital administration in highly desired.

IV. Source:

A. Civilians

B. Enlisted personnel or reserve components of the other armed forces, provided an appropriate conditional release is authorized.

C. Enlisted personnel of the regular Navy and Naval Reserve (active or inactive).

D. Commissioned personnel of any branch of the armed forces (active or inactive) who are not otherwise eligible for interservice transfer or superseding appointment, provided conditional release (other services only) or contingent release (USN/USNR only) is approved by member's service component.

V. Indoctrination: Selectees will receive six weeks of military orientation training at the Naval Officer Indoctrination School (OIS), Newport Rhode Island. Aerospace physiologists and aerospace experimental psychologists will be ordered to the Naval Aerospace Medical Institute (NAMI) for six months duty under instruction in aerospace physiology/psychology, after completion of OIS.

VI. Appointment: Ensign through lieutenant, Medical Service Corps, U.S. Naval Reserve, designation 2305. Entry grade credit for educational accomplishment may be awarded in accordance with SECNAVINST 1120.2B. Specialists for which work experience credit will be granted will be identified annually in the officer recruiting goaling letter and changes thereafter.

VIII. Active Duty Obligation: three years from the date of appointment. The balance of service, sufficient to complete eight years total, may be served in a ready reserve status.

Approved: \S\
Chief of Naval Personnel

Date: 9/26/93

Nov. 17 1993

MEMORANDUM FOR COMMANDER NAVAL RECRUITING COMMAND

Subj: PROGRAM AUTHORIZATION (PA) 115 REVISION

Ref: (a) MED-OOMSCA/3U786773 of 25 Oct 93 (NOTAL)
(B) Program Authorization 115 dated September 93

1. Per reference (a), the following revision to reference (b) is forwarded, reflecting recent changes and trends in Health Care Administration:

Health Care Administration Section:

Applicants must have a baccalaureate or a master's degree from a college or university accredited by a regional accrediting agency. The directory of accredited bodies, Accredited Institutions of Postsecondary Education, is published by the American Council of Education.

Baccalaureate graduates must have a major in one of the following: Health Care Administration, Health Services Management, Health Policy, or Business/Management, Human Resources Management, Financial Management, Accounting, Public Administration, or Management of technology and information systems. Baccalaureate applicants must submit their GMAT or GRE scores with their application.

Master's graduates must have a professional degree in health services management, business management or policy (i.e. MHA, MHSA, MBA, MPA, MPS), or a graduated degree (i.e. MS or MA) with a major field of concentration in health services management. Beginning October 1, 1995, the graduate program must also be accredited by a specialized accrediting body such as the Accrediting Commission on Education for Health Services Administration (ACEHSA) or the American Assembly of Collegiate Schools of Business (AACSB).

Applicants who have completed all the requirements for a master's degree in the areas specified above are preferred. Master's degree programs which include a component of experiential learning, i.e. and administrative residency or internship, are highly desired. Previous professional employment in a health services management or policy position is an advantage.

Subj: PROGRAM AUTHORIZATION (PA) 115 REVISION

2. Poc for questions concerning this change should be addressed to CDR Knox,
Pers-211M3, DSN 223-2327/COMM 703-693-2327.

\S\
LEE F. GUNN
ACNP for
Military Personnel Policy
And Career Progression

Copy to:
Pers-211M
BUMED-OOMSCA

Feb 15 1996

MEMORANDUM FOR COMMANDER NAVAL RECRUITING COMMAND

Subj: PROGRAM AUTHORIZATION (PA) 115 REVISION

Ref: (a) MED OOMSCB1/0075 OF 3 Nov 95 (NOTAL)
(b) Program Authorization 115 dated 26 September 93 w/rev 1

1. Per reference (a) the following revision is forwarded, reflecting recent changes and trends in Health Care Administration:

(a) change paragraph III F(2) to read:

Health Care Administration Section:

Applicants must have a Masters degree with a major in Healthcare, Hospital or Health Services Administration or a Master's in Business Administration with a concentration in Health Care Administration. Programs must be accredited by the Accrediting Commission on Education for Health Services Administration (ACEHSA) or American Assembly of Collegiate Schools of Business (AACSB). Residency completion and employment experience in Healthcare Administration (PPO, HMO, Managed Care) is highly desired.

2. If there are any questions please contact LCDR Ray Lewis (Pers-212D) at 693-2325 or CDR Shayne Brannman (Pers-211M3) 693-2327.

\S\
S. R. LOEFFLER
ACNP for
Military Personnel Policy
and Career Progression

Copy to:
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LIST OF REFERENCES

1. National Military Strategy of the United States of America, February 1995.
2. Forward...From The Sea, Department of the Navy, 1995.
3. Journey To Excellence: Meeting the Challenges of the Future. Medical Department of the United States Navy Strategic Plan. August 1995.
4. Captain Brian Brannman, Programming Director, Assistant Sectary of Defense (Health Affairs). POM-98 Defense Agency/DoD Field Activity Issue Paper.
5. Interview between Lieutenant DeAnn Farr (N-122) and the author on 1 October 1996.
6. Section 711 of the National Defense Authorization Act for Fiscal Year 1991.
7. Lieutenant Commander Scott Foster, Head, Medical Finance, Chief of Naval Operations (N-931). Navy Medicine: Readiness is Our True North. 30 April 1995.
8. Interview between Ms. Marcy Moreau (N-1) and the author on 1 October 1996.
9. OPNAVINST 1000.16 series. Naval Manual of Navy Total Force Manpower Policies and Procedures. 1994.
10. Interview between Commander Shayne Brannman (PERS-211M3) and the author on 4 October 1996.
11. Farr, DeAnn, Analysis of U. S. Navy Medical Service Corps Health Care Administrator Direct and Inservice Procurement Accession Programs. Master's Thesis. Monterey, CA: Naval Postgraduate School, 1994.
12. Interview between Ms. Glenda McCune (PERS-212C) and the author on 2 October 1996.
13. LCDR Al Terkhorn (PERS-212C) Officer Strength Planning Brief 1996.
14. Interview between Lieutenant Commander Mike Jewett (MED-523) and the author on 30 September 1996.

15. Interview between Lieutenant Chris Olsen (PERS-212D) and the author on 2 October 1996.
16. Interview between Lieutenant Mark Wertz (CNRC) and the author on 1 October 1996.
17. Interview between Lieutenant Katy Hawkins (MED-51) and the author on 30 September 1996.
18. Interview between Lieutenant Commander James Hunter (PERS-212F) and the author on 4 October 1996.
19. DoD Guidelines for Promotion, provided by (PERS-212F) 1996.
20. Interview between Lieutenant Tim Weber (OPNAV-931) and the author on 4 October 1996.
21. Interview between Lieutenant Commander Lisa Barfield (PERS-122) and the author on 2 October 1996.
22. Interview between Lieutenant Commander Rich Franco (OO-MSD) and the author on 30 September 1996.
23. The Specialty Leaders Handbook for the Medical Service Corps.
24. Bureau of Medicine and Surgery Instruction 5420.12A.
25. Standard Operating Procedures for Accession Planning in the Navy Nurse Corps.
26. U. S. Navy, Bureau of Medicine and Surgery Strategic Plan, 1995.
27. Larson and Palmer. *Decision Making Context in the DON*; RAND Corporation, Santa Monica, Ca. 1994.
28. Goldstein, Irwin L. *Training in Organizations*, Brooks/Cole Publishing, Pacific Grove, Ca. 1994.
29. Medical Service Corps, Specialty Leader Handbook. Published 18 Oct. 1994.

30. Admiral Harold Koenig, Navy Surgeon General's 1996 testimony before Congress.
31. Commander Shayne Brannman, Medical Service Corps Officer Community Manager (PERS-211M3) Community Management Brief, November 1996.
32. FY97 MSC accession plan.
33. FY98 promotion board precept language to SECNAV 1420.1A.
34. THCSRR data from the Bureau of Medicine and Surgery (Code-OOMSC) as of 31 Aug. 96.
35. Rear Admiral H. E. Phillips, as stated in the *Medical Service Corps Professional Bulletin*, Dec. 95.

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