COMPARATIVE ANALYSIS OF NAVY AND MARINE CORPS PLANNING, PROGRAMMING, BUDGETING AND EXECUTION SYSTEMS FROM A MANPOWER PERSPECTIVE

by

John C. Barry
and
Paul L. Gillikin

March 2005

Thesis Co-Advisors: W. Hatch
and C. A. Simon
Tertiary Reader: S. Dooley

Approved for public release; distribution is unlimited
This study provides analysis, conclusions and recommendations to assist the Deputy Commandant (DC), Manpower and Reserve Affairs Department (M&RA) and DC, Programs and Resources Department (P&R) in structure and process decisions concerning Marine Corps Manpower budget execution. DC, M&RA is the owner of the Marine Human Resource Development Process (HRDP) and the Military Personnel Marine Corps (MPMC) appropriation sponsor, while the DC, P&R has budgetary (1517) authority for MPMC budget execution. In contrast, the Navy has both sponsorship and 1517 authority within one cell at N1. By comparing these two services' organizational factors and Planning, Programming, Budgeting, and Execution Systems (PPBES), relevant differences surface, conclusions are drawn, and recommendations offered for improvements. Recommendations include realignment of 1517 authority within MPMC execution, and the melding of the Programs and Budget Branch of Manpower Plans Division, M&RA with the Military Personnel Branch, Fiscal Division, P&R (RFM). This new office will be responsible for all facets of MPMC programming, budgeting, and execution.
COMPARATIVE ANALYSIS OF NAVY AND MARINE CORPS PLANNING, PROGRAMMING, BUDGETING AND EXECUTION SYSTEMS FROM A MANPOWER PERSPECTIVE

John C. Barry  
Captain, United States Marine Corps  
B.A., Marquette University, 1996

Paul L. Gillikin  
Captain, United States Marine Corps  
B.A., North Carolina State University, 1999

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL

March 2005

Authors: Paul L. Gillikin  
John C. Barry

Approved by: W. Hatch  
Thesis Co-Advisor  
C.A. Simon  
Thesis Co-Advisor  
S. Dooley  
Tertiary Reader  
Douglas A. Brook  
Dean, Graduate School of Business and Public Policy
ABSTRACT

This study provides analysis, conclusions and recommendations to assist the Deputy Commandant (DC), Manpower and Reserve Affairs Department (M&RA) and DC, Programs and Resources Department (P&R) in structure and process decisions concerning Marine Corps Manpower budget execution. DC, M&RA is the owner of the Marine Human Resource Development Process (HRDP) and the Military Personnel Marine Corps (MPMC) appropriation sponsor, while the DC, P&R has budgetary (1517) authority for MPMC budget execution. In contrast, the Navy has both sponsorship and 1517 authority within one cell at N1. By comparing these two services' organizational factors and Planning, Programming, Budgeting, and Execution Systems (PPBES), relevant differences surface, conclusions are drawn, and recommendations offered for improvements. Recommendations include realignment of 1517 authority within MPMC execution, and the melding of the Programs and Budget Branch of Manpower Plans Division, M&RA with the Military Personnel Branch, Fiscal Division, P&R (RFM). This new office will be responsible for all facets of MPMC programming, budgeting, and execution.
# TABLE OF CONTENTS

I. INTRODUCTION ........................................................................................................... 1  
   A. PURPOSE .......................................................................................... 1  
      1. Background ................................................................................. 1  
      2. Research Questions ................................................................. 2  
      3. Benefits of the Study ................................................................. 2  
   B. RESEARCH METHODS ......................................................................... 2  
      1. The Organizational System's Framework Approach .................. 2  
      2. Supporting Methods ............................................................... 5  
   C. OVERVIEW OF CHAPTERS ............................................................... 5  

II. THE UNITED STATES MARINE CORPS HUMAN RESOURCE DEVELOPMENT PROCESS ............................................................................................................. 7  
   A. OVERVIEW ......................................................................................... 7  
   B. REQUIREMENTS QUADRANT ......................................................... 8  
      1. Input .............................................................................................. 9  
         a. Environment ........................................................................... 9  
         b. Key Success Factors ............................................................... 10  
         c. System Direction ................................................................. 10  
      2. Throughput .................................................................................. 11  
         a. Tasks ........................................................................................ 11  
         b. People ................................................................................... 11  
         c. Structure ............................................................................... 14  
         d. Information Systems/Documents ........................................ 15  
         e. Process ................................................................................ 16  
      3. Outputs ....................................................................................... 18  
      4. Outcomes ................................................................................... 18  
   C. PROGRAMMING QUADRANT ............................................................. 19  
      1. Input ............................................................................................ 20  
         a. Environment .......................................................................... 20  
         b. Table of Organization .......................................................... 20  
         c. UNS / TOECR ........................................................................ 21  
         d. JDAL .................................................................................... 21  
         e. B-Billets ............................................................................... 21  
         f. MCO 5320.12 Precedence Levels for Manning and Staffing ..... 21  
            National Defense Authorization Act .................................. 22  
      2. Throughput .................................................................................. 22  
         a. Task ........................................................................................ 22  
         b. People ................................................................................... 22  
         c. Structure ............................................................................... 24  
         d. Information Systems / Documents ....................................... 25  

vii
## MANPOWER REQUIREMENTS: SUB-PROCESSES, PLAYERS, DOCUMENTS AND INFORMATION SYSTEMS

1. Manpower Requirements- Sub-Processes ........................................... 45
   a. Determination and Validation .................................................. 45
2. Manpower Requirements – Players ................................................. 45
3. Manpower Requirements – Documents .......................................... 46
4. Manpower Requirements - Information Systems ............................. 47
5. Manpower Requirements- End State .............................................. 47

## MANPOWER PROGRAMMING QUADRANT OVERVIEW: THE SINGLE MANPOWER SPONSOR AND PPBES

## MANPOWER PROGRAMMING: SUB-PROCESSES, PLAYERS, DOCUMENTS AND INFORMATION SYSTEMS

1. Manpower Programming- Sub-Processes ........................................ 49
   a. Authorization ............................................................................. 49
   b. End Strength ............................................................................. 49
   c. PPBES ...................................................................................... 50
   d. Another Look at the PPBES Timeline ....................................... 52
2. Manpower Programming- Players ................................................... 52
3. Manpower Programming- Documents .............................................. 53
   a. EPA/OPA ................................................................................... 53
   b. FYDP ......................................................................................... 53
   c. PRESBUD ................................................................................ 53
4. Manpower Programming- Information Systems .............................. 54

## PERSONNEL PLANNING QUADRANT OVERVIEW: DEMAND SIGNAL

## PERSONNEL PLANNING: SUB-PROCESSES, PLAYERS, DOCUMENTS AND INFORMATION SYSTEMS

1. Personnel Planning-Sub-Processes .............................................. 55
   a. Strength Planning ..................................................................... 55
   b. Community Management .......................................................... 55
2. Personnel Planning- Players .......................................................... 56
   a. N13 ......................................................................................... 56
   b. CNRC ....................................................................................... 56
   c. NETC ....................................................................................... 57
3. Personnel Planning- Documents ..................................................... 57
   a. Strength Plan and Accession Plan ............................................ 57
   b. School Plan ............................................................................. 57
4. Personnel Planning- Information Systems ...................................... 57

## PERSONNEL DISTRIBUTION QUADRANT OVERVIEW: DISTRIBUTION TO READINESS

## PERSONNEL DISTRIBUTION: SUB-PROCESSES, PLAYERS, DOCUMENTS AND INFORMATION SYSTEMS

1. Personnel Distribution-Sub-Processes ........................................ 59
   a. Allocation ................................................................................. 59
   b. Placement and Assignment ...................................................... 59
APPENDIX I. NAVY ORGANIZATION CHART ................................................................. 97
APPENDIX J. N1 ORGANIZATION CHART ................................................................. 99
APPENDIX K. N8 ORGANIZATION CHART ................................................................. 101
APPENDIX L. NAVY AND MARINE CORPS COUNTERPARTS ............................... 103
LIST OF REFERENCES .................................................................................................. 105
INITIAL DISTRIBUTION LIST .................................................................................... 107
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>Organizational System's Framework Model. (From: Prof. Nancy Roberts, Naval Postgraduate School)</td>
<td>4</td>
</tr>
<tr>
<td>Figure 2</td>
<td>HRDP System. (After: Training Block 3 - Process Orientation)</td>
<td>7</td>
</tr>
<tr>
<td>Figure 3</td>
<td>OSF Model - Requirements Quadrant</td>
<td>9</td>
</tr>
<tr>
<td>Figure 4</td>
<td>EFDS. (From: MCO 3900.15A)</td>
<td>17</td>
</tr>
<tr>
<td>Figure 5</td>
<td>OSF Model - Programming Quadrant</td>
<td>20</td>
</tr>
<tr>
<td>Figure 6</td>
<td>POM Flow. (From: Training Block 5a - Planning, Programming, and Budgeting)</td>
<td>26</td>
</tr>
<tr>
<td>Figure 7</td>
<td>PPBES. (From: Training Block 5a - Planning, Programming, and Budgeting)</td>
<td>29</td>
</tr>
<tr>
<td>Figure 8</td>
<td>OSF Model - Planning Quadrant</td>
<td>30</td>
</tr>
<tr>
<td>Figure 9</td>
<td>OSF Model - Execution Quadrant</td>
<td>36</td>
</tr>
<tr>
<td>Figure 10</td>
<td>MPT System Overview. (From: <a href="http://www.bupers.navy.mil">www.bupers.navy.mil</a>, 17 March 2004)</td>
<td>43</td>
</tr>
<tr>
<td>Figure 11</td>
<td>Manpower Requirements Quadrant OSF Model</td>
<td>44</td>
</tr>
<tr>
<td>Figure 12</td>
<td>ROC Element CCC 6.2. (From: <a href="http://www.bupers.navy.mil">www.bupers.navy.mil</a>, 17 March 2004)</td>
<td>46</td>
</tr>
<tr>
<td>Figure 13</td>
<td>End of Manpower Requirements Phase. (From: <a href="http://www.bupers.navy.mil">www.bupers.navy.mil</a>, 17 March 2004)</td>
<td>47</td>
</tr>
<tr>
<td>Figure 14</td>
<td>Manpower Programming Quadrant OSF Model</td>
<td>48</td>
</tr>
<tr>
<td>Figure 15</td>
<td>PPBES Timeline</td>
<td>52</td>
</tr>
<tr>
<td>Figure 16</td>
<td>Personnel Planning Quadrant OSF Model</td>
<td>54</td>
</tr>
<tr>
<td>Figure 17</td>
<td>End Strength Equation</td>
<td>55</td>
</tr>
<tr>
<td>Figure 18</td>
<td>Personnel Distribution Quadrant Overview</td>
<td>58</td>
</tr>
<tr>
<td>Figure 19</td>
<td>The HRDP Programming Quadrant OSF Model</td>
<td>64</td>
</tr>
<tr>
<td>Figure 20</td>
<td>The MPT System Programming Quadrant OSF Model</td>
<td>64</td>
</tr>
<tr>
<td>Figure 21</td>
<td>The HRDP PPBES OSF Model</td>
<td>65</td>
</tr>
<tr>
<td>Figure 22</td>
<td>The MPT System PPBES OSF Model</td>
<td>66</td>
</tr>
<tr>
<td>Figure 23</td>
<td>Manpower Budgetary Execution Comparison</td>
<td>68</td>
</tr>
<tr>
<td>Figure 24</td>
<td>New Budgetary Formulation and Execution Flow</td>
<td>72</td>
</tr>
<tr>
<td>Figure 25</td>
<td>Proposed Manpower Plans Division Organization</td>
<td>73</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 1. Roles of Community Managers. (From: www.bupers.navy.mil, 17 March 2004) ........................................................................................................56

Table 2. Number of Armed Forces Recruiting Stations. (From: www.bupers.navy.mil, 17 March 2004) ..................................................................................56
I. INTRODUCTION

Marine has come to signify all that is highest in military efficiency and soldierly virtue.

General John A. Lejeune, Thirteenth Commandant of the Marine Corps

A. PURPOSE

The quote that opens this study was taken directly from the Commandant's Planning Guidance issued by General M.W. Hagee as he began his tour as the 33rd Commandant of the Marine Corps. These words, spoken many years ago, are what still drives the Marines of today. Some would argue that effectiveness has taken its rung on the ladder above the efficiency General Lejeune spoke of during his tenure. Yet, it is this same spirit that has caused the Manpower and Reserve Affairs Department (M&RA) of Headquarters, Marine Corps (HQMC) to focus on higher levels of efficiency, effectiveness, and soldierly virtue within its Human Resource Development Process (HRDP). Those same motivating factors also spurned this study, to assess the need for a potential organizational change that could create a more effective HRDP for the Marine Corps.

1. Background

In an email dated January 8, 2004, Maj Douglas Edwards (the Military Personnel Marine Corps Budget Officer within M&RA) wrote:

... the USMC manages MilPers budget execution different from the Navy; DC (deputy commandant), M&RA is the MilPers appropriation sponsor but DC, P&R 'manages' (has 1517 authority) the checkbook (responsible for budget execution). The Navy has all of this under one hat (N1)... Bottom line, is that the 1517 authority [question] (should it be at P&R or M&RA?) is a real hot topic and would be real good to evaluate using the Navy as a 'model' to compare it with (Edwards).

Maj Edward's description of the seemingly tenuous separation of powers within the HRDP lays the groundwork for this thesis. This research will focus on organizational factors between the Marine Corps Combat Development Command (MCCDC), the Manpower and Reserve Affairs Department (M&RA), and the Programs and Resources
Department (P&R). Conclusions will be drawn and recommendations offered for improvements, including possible realignment of budgetary (1517) authority within Military Personnel Marine Corps (MPMC) budgeting and execution.

As Maj Edwards noted, the DC, M&RA is the owner of the Marine Human Resource Development Process (HRDP) and the appropriation sponsor, while the DC, P&R has 1517 authority for MPMC budget execution. M&RA is physically located at Quantico, Virginia and P&R is located at the Pentagon (Arlington, Virginia), approximately 30 miles away. In contrast, the Navy has both sponsorship and 1517 authority within one cell at N1. Comparing the two systems will describe relevant differences, and explore improvement possibilities such as geographical restructuring to streamline MPMC budget execution.

2. Research Questions
   
   * Primary: How should 1517 authority be structured to clarify responsibilities and improve overall program execution for the MPMC account?
   
   * Secondary: What are the current organizational framework factors differentiating MCCDC, M&RA, and P&R, and what are possible interventions to garner Marine Corps manpower budget process improvements?

3. Benefits of the Study

   This study provides analysis, conclusions and recommendations to assist DC, M&RA and DC, P&R in structure and process decisions concerning Marine Corps Manpower budget execution. An additional result of the study is that it provides a first-ever and sorely needed teaching reference document comparing Navy and Marine Corps Manpower systems for the Naval Postgraduate School, Graduate School of Business and Public Policy, Manpower Systems Analysis curriculum. This subsidiary outcome will directly benefit incoming Navy and Marine Corps Manpower Systems Analysis students for years to come.

B. RESEARCH METHODS

1. The Organizational System's Framework Approach

   The Organizational System's Framework (OSF) model (see Figure 1) was introduced by Professor Nancy Roberts of the Naval Postgraduate School. The OSF model is an excellent analytical tool for examining the internal and external aspects of an
organization. Without a solid grasp of the inputs, throughputs, and outputs of the subsystems within both the HRDP and MPT systems, it would not be possible to diagnose an issue (problem) accurately or provide a viable solution.

The roots of the OSF model derive from general systems theory. Although not an inclusive list, the major theoretical ideas affecting the discussion of both the MPT and HRDP systems are listed here:

- A system by definition is composed of interrelated parts or elements working together toward a common purpose. Every system has inputs, throughputs, and results.
- The whole is not just the sum of the parts; the system itself can be explained only as a totality.
- Systems can be considered as closed or open. Open systems exchange information, energy, or material with their environments, i.e., social and organizational systems.
- An open system can be viewed as a transformation model. In a dynamic relationship with its environment, an open system receives and transforms inputs, yielding intended and unintended results.
- A basic concept in systems thinking is that of hierarchical relationships among systems. A system is typically composed of subsystems of a lower order and is also part of a supra-system. Thus, there is a hierarchy of systems.
- Social systems have multiple goals or purposes, because they are composed of individuals and subunits with different values and objectives. (Kast, Rosenzweig, 450)

This research considers all areas of the OSF model, but focuses primarily on throughputs or organizational design features. Conclusions and recommendations are offered concerning centralization and decentralization of decision making authority, division of labor, and process integration (Roberts, 4).
Figure 1. Organizational Systems Framework. (From: Prof. Nancy Roberts, Naval Postgraduate School)
2. Supporting Methods

To research current practices within the Department of Defense (DOD), which is undergoing major reforms, semi-structured and unstructured interviews were conducted with action officers from Marine Corps HRDP organizations and Navy Manpower Personnel and Training (MPT) organizations. Primary sources of information included Major Edwards; Major Rob Barry, Total Force Structure Manpower Analyst for MCCDC; Maj Robin Gallant, Military Personnel Branch at P&R; Maj Joseph Zimmerman, former Officer Staffing Goal Model Manager for M&RA; Capt Luis Zamarripa, Manpower Plans and Policy Division at M&RA; Mr Al Sack, Whitney, Bradley, & Brown; Lieutenant Garth Devries of N10; CDR William Hatch (Ret), Manpower Systems Analysis Program Officer, Naval Postgraduate School; and Lieutenant Commander Reardon of N10.

Additionally, websites, such as www.hqmc.usmc.mil and the Navy's www.bupers.navy.mil, provided current organizational structure information.

Another primary source of input on the programming phases of both the MPT system and HRDP was the textbook, Budgeting and Financial Management for National Defense by L. R. Jones and Jerry L. McCaffery. Professor L. R. Jones' understanding of programming across DOD assisted in the framing of conclusions. Without his introduction to the personalities, power holders, and the politics that drives our Nation, a very important environmental input to each of these systems would have been under-represented.

C. OVERVIEW OF CHAPTERS

The remainder of the thesis is structured as follows:

- **Marine Corps Human Resource Development Process:** This chapter provides the OSF analysis of the Marine Corps HRDP system from identification of requirements, through programming, planning, and execution.

- **Navy Manpower, Personnel, and Training System:** This chapter provides the OSF analysis of the MPT system with a focus on the same processes as the HRDP chapter.
• **Compare and Contrast:** This chapter focuses on the execution step of the PPBES within the programming quadrants of both systems. The goal is to stress the importance of 1517 authority, its assignment within an OSF, and the repercussions of that assignment.

• **Conclusions and Recommendations:** This chapter frames the issue, defines possible alternatives, and offers recommendations.
II. THE UNITED STATES MARINE CORPS HUMAN RESOURCE DEVELOPMENT PROCESS

A. OVERVIEW

The purpose of this chapter is to utilize the Organizational Systems Framework (OSF) model to describe the United States Marine Corps' Human Resource Development Process (HRDP) as a social system. While not an OSF model, Figure 2 is a simplified illustration of the HRDP system adapted from *Training Block 3 - Process Orientation* by the Manpower and Reserve Affairs Department, Headquarters Marine Corps (M&RA). This chapter will take the four “quadrants” (known in systems literature as components or subsystems) presented in Figure 2 (requirements, programming, planning, and execution) and dissect their inputs, throughputs, and results drawn from systems theory. It may prove helpful while reading this chapter to refer back to Figure 2 as an aid to understanding how the interdependency of the four quadrants impacts the mission of the HRDP system.

![HRDP System Diagram](image)

Figure 2. HRDP System. (After: Training Block 3 - Process Orientation)
The mission of the HRDP system is to ensure both the operational commanders and the supporting establishment have the Marines required to accomplish their numerous tasks. As was illustrated in Figure 2, this system can be broken down into four major quadrants:

- **Requirements** - Determining the human resource needs of the warfighters
- **Programming** - Fitting “unconstrained” warfighter requirements into a fiscally constrained environment
- **Planning** - Ensuring the human resource requirements of the future are being properly sourced, grown, retained, and released
- **Execution** - A combination of properly distributing the available inventory based upon current requirements and then assigning those Marines to jobs that balance the needs of the Corps and needs of its Marines… the right Marine, in the right place, at the right time, with the right skills

Although the HRDP system encompasses civilian employees, reservists, and quality of life issues, the focus of this research will be the active duty military.

**B. REQUIREMENTS QUADRANT**

The requirements quadrant (see Figure 3) of the HRDP system is arguably the most important, because it represents a critical conversation between the operational commanders (e.g., Commander, Marine Forces Pacific), the supporting establishment, the service chief, and his staff (who double as the advocates for their respective warfighting communities -- the aviation community, the ground community, etc.). During this conversation, it is the responsibility of the operational commanders and the leaders of the supporting establishment to interpret their missions through the lens of their political, economic, social, technological, and geographic environments, and then transform this mission analysis into human resource requirements.
1. **Input**
   
   **a. Environment**
   
   While the environment is a major influence on any organizational system, the environmental factors that move the requirements system are the most heavily weighted of all the influencers affecting the four quadrants within the HRDP system. They flow from the heart of one of the main principles upon which this country was founded -- civilian control of the armed forces. A breakdown of these factors provides a better illustration:
   
   - **Political Trends** - Currently, the elected and appointed officials responsible for the oversight and operation of the armed forces are voicing a desire to see an increasingly “joint” military force. This causes each service chief to take a much more stringent look at the competencies their service contributes to the joint team's capabilities. Additionally, current foreign policy encourages each service chief to squeeze more warfighting capability out of increasingly scarce resources. Both of these trends directly reflect on manpower requirement decisions.
   
   - **Economic Trends** - The strength or weakness of the economy directly influences the number of Americans willing to join the military. A healthy economy raises the opportunity cost of foregoing a civilian career for one in the armed forces.
• Social Trends - Manpower requirement decisions hinge on the willingness and ability of society to answer the call to service. Operational commanders, leaders of the supporting establishment, and service chiefs need to work within the reality created by current societal mores. Failure to properly predict human behavior leads to degraded manpower plans.

• Technological Trends - Military manpower requirement decisions also find their roots in the technological trends of the day. For example, while there may be no substitute for a rifleman with his boots on the deck, technological advances allow the military occupational specialties that support that rifleman to transform from labor intensive requirements to capital based. As technology improves, so does a leader's propensity to make more labor - capital decisions.

The environmental factors mentioned here is a demonstration of how military manpower requirement decisions are forged by the civilian society they serve to protect. Should policy makers within the HRDP system fail to recognize these trends, the requirements system will be less responsive.

b. Key Success Factors

In order for the requirements quadrant to support the overarching HRDP system, interdependency must exist between the supporting establishment, combatant commanders, their service chief, and the civilian community. The Commandant and his staff (the advocates) interpret the strategic goals of the civilian leadership to provide the forces required by combatants to execute assigned operational missions. Concurrently, the operationally focused combatant commanders must accurately frame their requirements for their service chief (via the advocates) in order to set the Marine Corps up for success. When the Commandant petitions Congress for the manpower required, that petition needs to reflect a harmony between the needs of the American people and the needs of the warfighters -- not a contradiction of the two.

c. System Direction

To aid the Commandant, including staff members and his combatant commanders, in framing their manpower requirements, direction is provided via the President's National Security Policy. The President's policy drives the National Military Strategy, which is used to craft the Defense Planning Guidance. This combination of civilian and military pilotage allows the Marine Corps' service chief to write the Commandant's Planning Guidance (CPG). The CPG provides the mission, vision, and goals necessary for the requirements system to accomplish its tasks.
The tool the combatants use to provide direction to the manpower requirements system is the Universal Needs Statement (UNS). Through the use of the UNS and its corresponding Table of Organization and Equipment Change Request [TOECR- "Request to modify organization or equipment allowances submitted when changes in doctrine, concepts of employment, safety, mission, or organization support the requested change in allowances" (MCO 5311.1C, enclosure 2, 8)], the warfighters and the supporting establishment explain what the CPG equates to in terms of manpower requirements. Appendix A provides examples of both the UNS and TOECR. The combination of the CPG and the UNS should provide adequate direction to the manpower requirements quadrant.

2. Throughput
   a. Tasks
      The goal of the requirements quadrant is to identify the correct number and type of Marines to accomplish the Corps' missions.
   b. People
      There are a number of players involved in the requirements quadrant. A brief description of each follows:
      (1) Civilian Leadership. A description of the Executive, Legislative, and Judicial branches of the United States' government is not warranted here, but leaving them out of a list of highly influential players in the requirements quadrant would be remiss.
      (2) Commandant of the Marine Corps (CMC). As the service chief of the Marine Corps, the CMC is responsible for providing the structure required by his combatant commanders and supporting establishment to accomplish their many tasks. This structure includes Marine Corps wide doctrine, organization, training, material, personnel, facilities, leadership and education (otherwise known as DOTMLPF).
      (3) Combatant Commanders. The Commander, Marine Forces Atlantic (MARFORLANT) and the Commander, Marine Forces Pacific (MARFORPAC) derive the warfighting requirements (to include manpower and equipment) of the operating forces.
Advocates. As mentioned earlier, some of the CMC's staff members also double as community advocates. For example, not only is the Deputy Commandant (DC) for Plans, Policy, and Operations (PP&O) responsible for coordinating the development and execution of service plans and policies, but he is also the single voice to the CMC on matters pertaining to the requirements of the artillery, infantry, and armor communities. The other advocates are the DC, Aviation (Aviation Combat Element advocate), the DC, Installations & Logistics (Combat Service Support Element and Supporting Establishment advocate), and the DC, Combat Development (Command Element advocate). The advocates are the driving force behind the Marine Requirements Oversight Council (MROC).

The MROC is a sounding and screening board for all major force structure initiatives that arise within the requirements quadrant (the MROC also plays a major role within the programming quadrant). The council is chaired by the Assistant Commandant of the Marine Corps (ACMC), consists of all the deputy commandants (combat development; aviation; plans, policies, and operations; manpower and reserve affairs; installations and logistics), and the deputy commandant for programs and resources (DC, P&R) serves as the executive agent. An initiative will not cross the CMC's desk if it cannot survive the MROC. The role of the advocates within the requirements quadrant cannot be understated.

Total Force Structure Division (TFSD). TFSD resides within the office of the DC, Combat Development (see Appendix B) under the direct supervision of the Expeditionary Force Development Center (EFDC). Their mission is "to build capabilities-based units by integrating people and equipment into organizations that can make Marines and win battles" (TFSD Command Brief). TFSD is the organization that processes all the UNSs and TOECRs generated by either the operating forces or supporting establishment. Their coordination with the operating forces, supporting establishment, and advocates places TFSD in a pivotal role in the requirements quadrant.

Marine Corps Recruiting Command (MCRC) and Training and Education Command (TECOM). Although these are two separate commands, their input to the requirements quadrant is quite similar. MCRC's recruiting forces are directly exposed to the social trends affecting the willingness of young Americans to join the
Marine Corps. Lessons learned from these experiences are crucial to forming a requirement policy. Similarly, the manpower requirements of the operational forces or supporting establishment are untenable if TECOM cannot train them fast enough.

(7) DOTMLPF SMEs. The HRDP system is a subsystem or component of the Expeditionary Force Development System (EFDS). The goal of the EFDS is to ensure all initiatives are scrutinized by subject matter experts (SME) representing each facet of DOTMLPF. A cost-benefit analysis of a new initiative without approaching it from all seven DOTMLPF facets would be an inaccurate assessment.

(8) Public Affairs Office (PAO). Integrating the public affairs office (PAO) keeps stakeholders informed. Misuse of information in a politically charged environment can be disastrous, and the PAO is excellent at preventing that from happening. PAO is critical in ensuring that major muscle movements within the requirements quadrant are not a surprise to anyone.

(9) Office of Legislative Affairs (OLA). The OLA “articulates and justifies all Marine Corps requirements for Ground (PMC, R&D), Aviation (APN & R&D), Ammunition (PANMC) and Operations and Maintenance (O&M) to Congress, especially the House and Senate Authorization Committees Members and staff. He also schedules and supervises all program briefs for Members of Congress, professional staff and personal staff members. In addition, he prepares the Secretary of the Navy, Commandant of the Marine Corps and other general officers for congressional testimony and plans and conducts travel for professional and personal staff members to support Marine Corps procurement and readiness programs” (http://hqinet001.0qmc.usmc.mil/OLA/programs.htm).

(10) General and Executive Officer Symposiums (GOS / EOS). The GOS / EOS are annual events where the senior leadership of the Marine Corps joins together in order to force major operational or force structure issues out in the open. Events such as these are excellent forums for general and executive level officers to voice initiatives from all the different communities within the Corps and receive top-level feedback.

(11) Deputy Commandant for Programs and Resources (DC, P&R).
The principal staff member responsible to the Commandant of the Marine Corps for developing and defending the Marine Corps financial requirements, policies, and programs. The Deputy Commandant (DC) P&R owns the Marine Corps resource allocation process and serves as the principal adviser to the Commandant on all financial matters (http://hqinet001.hqmc.usmc.mil/p&r/main/mission.htm).

Although the DC, P&R (P&R's organizational chart is found in Appendix C) plays a major role in the programming quadrant, his role during the requirements quadrant is just as necessary. The success of any initiative has a great deal to do with keeping the DC, P&R informed, because he or she can try to find discretionary funds to free up well in advance of the actual programming step.

(12) Deputy Commandant for Manpower and Reserve Affairs (DC, M&RA) - DC, M&RA (the HRDP owner). Responsible to “direct, coordinate, and supervise manpower planning, programming, budgeting, policies, personnel research and information systems; manpower management and administration, human resources, and quality of life programs” (brief presented to “Action Officer Course - 2003”). Appendix D presents M&RA’s organizational structure.

c. Structure

The structure utilized to accomplish the task of framing accurate manpower requirements is two-fold. First, system direction is provided through a traditional hierarchical structure. Tree diagrams illustrating the Service chain of command and operational chain of command are instrumental in providing accurate depictions of how military direction is provided (one of which is provided in Appendix E). The President and the Office of the Secretary of Defense (OSD), acting as the genesis of this direction, pushes this guidance down through the Joint Chiefs of Staff (JCS) and the combatant commanders. Requirements, on the other hand, flow in the opposite direction.

While the office of the CMC resides within a hierarchical structure, the staff will fail their service chief and combatant commanders if they cannot operate using cross-functional teams. A hierarchy does not exist between these powerful players on paper (see Appendix F), nor should it exist in practice. It is critical that the advocates, in concert with the TFSD, understand that the success of the operational forces depends on
their ability to bargain, negotiate, and compromise. Should an advocate choose to place their needs above those of a fellow community or fail to understand the importance of another advocate's manpower requirements, then the requirements quadrant will be suboptimal.

As mentioned previously, not only do the advocates need to communicate amongst themselves, but they need to keep the DC, P&R informed of any major spending initiatives that may be approaching or that need turning off. Discussions like these may arise during a GOS or any number of social occasions, emails, or phone calls. If an initiative surprises the DC, P&R, it will encounter possible failure.

d. **Information Systems/Documents**

   (1) **Table of Manpower Requirements (T/MR).**

   The T/MR is an automated system which captures and displays approved Marine Corps T/O's, T/O mission statements, and other associated data. The current year plus six out years are depicted (MCO 5311.1C, enclosure 3, 8).

   A [T/O] describes the organizational manpower requirements in terms of grade, MOS, series, weapon, and billet title for civilian and military personnel. It is a basic document that describes, in billet line detail, the composition of every Marine Corps organization (MCO 5311.1C, enclosure 3, 8).

   (2) **Total Force Structure Management System (TFSMS).** The next generation of T/MR that combines both manpower and equipment data by unit in order to provide seamless changes to force structure updates affecting both.

   (3) **DOTMLPF DOCS.** Documenting the entire life-cycle of an initiative, from its birth through its scrutiny by the DOTMLPF SMEs, is critical. These DOTMLPF DOCS, such as point papers or concept briefings, become crucial when it comes time for an MROC, CMC, or congressional briefing. Leadership wants to see the hypothesis, research, and results that led to any initiative, especially when large amounts of tax dollars are involved.

   (4) **Marine Corps Order (MCO) 5311.1 Total Force Structure Process.** "This order establishes CG, MCCDC (DC, CD) as the total force structure
owner (TFSO) and redefines policies, procedures, and standards for the management of
the total force structure process (TFSP)” (MCO 5311.1C, 1).

(5) Marine Corps Bulletin (MCBul) 5400 Series. This series of
bulletins is a medium through which changes to force structure are disseminated.

(6) MCO 3900.15 Marine Corps Expeditionary Force
Development System (EFDS). MCO 3900.15 states, “The MROC, the advocates,
HQMC, MARFORs, and MCCDC employ the EFDS to develop future warfighting
capabilities in order to better organize, train, and equip Marine Forces to meet national
security objectives” (MCO 3900.15, 2) The order explains how the EFDS accomplishes
this task through a four phase approach (force capability development, requirement
development, prioritization and resourcing, and capability fielding and transition).

e. Process

The requirements quadrant is a continuing action within the HRDP
system. The HRDP system is one of eight subsystems within the EFDS. The EFDS (see
Figure 4) is structured around the six steps of the Marine Corps Planning Process:
Mission Analysis, Course of Action Development, Course of Action Wargame, Course of
Action Comparison/Decision, Orders Development, and Transition. The advocates for
each community within the Marine Corps are continuously analyzing their missions
concerning how best to combat the current threat. Naturally, a change in mission may
require a change in the amount of necessary manpower.
The EFDS, while continuous, begins its cycle with the release of the President’s National Security Strategy. From that document, the National Military Strategy is derived and is used to craft the Defense Planning Guidance (DPG). The DPG is what the Marine Corps ultimately uses to write its own guidance document – the Commandant’s Planning Guidance (CPG). Community advocates use the CPG to analyze whether or not their community is contributing towards the Commandant's vision.

During this stage in the planning, the advocates, in concert with the DC, CD, decide upon the Expeditionary Capabilities List (ECL) – those requirements necessary to execute the mission of their commander properly. Should the ECL point
towards structural changes, TOECRs are submitted to TFSD and “war-gamed” to determine their effects on all aspects of DOTMLPF. Once the TOECR is war-gamed, a decision is made whether or not to move forward with the request (into the Orders Development and Transition phases) or to deny it.

In order to visualize where the HRDP system fits within the conceptual framework of the Marine Corps as an “organism,” it is best to refer back to the hierarchical concept of the general systems theory. The EFDS, as the “supra-system,” encompasses the HRDP system. The HRDP system utilizes the Total Force Structure Process (TFSP) within its requirements quadrant to ensure that human resource and equipment requirements are coordinated. “The TFSP provides an optimal force structure for the Marine Corps through the effective integration of decision-making pertaining to active, reserve, and civilian billet requirements and equipment allowances. This holistic approach more efficiently ensures units’ abilities to perform their operational missions, both in the operating forces and the supporting establishment” (MCO 5311.1, 2). While the focus of this research is the analysis of human resource requirements, ignoring material requirements would be erroneous.

3. Outputs
   The output of the requirements quadrant should contain the validated manpower requirement of the Marine Corps. This output includes the T/O and MCBul 5400 series as media to transmit current requirements or changes to past requirements.

   Should changes to the T/O be necessary, a third output of the requirements quadrant may be necessary -- the UNS / TOECR. Although the UNS / TOECR is seen as primarily an input to this system, it must also be considered one of its products. The requirements quadrant will cease to generate UNS / TOECRs only when the Marine Corps is perfectly structured or when Marines cease learning from their experiences -- both very unlikely events.

4. Outcomes
   For the stakeholders of the requirements quadrant -- the military and civilian leadership, the general populace, and the warfighters throughout the world -- the implications of these outputs are twofold. First, the quadrant has either accurately or inaccurately created the structure necessary to fight and win America's battles. If it has
failed, then the Marine Corps will find it extremely difficult to accomplish its tasks. Secondly, the quadrant has provided the information required to petition the representatives of the American people for the tax dollars necessary to provide that structure. Erroneously harmonizing the requirements of the warfighter with the perceived requirement of the civilian leadership might mean not being able to marry the requirements with their resources.

Lastly, an outcome of the requirements quadrant may be changes to the processes or policies used in the system. Through their mistakes, the people involved are learning what parts of the requirements quadrant do and do not work. If processes are redundant and slow, they may be modified or dropped altogether. Policy analysis within the quadrant could produce findings that are consistent or contrary to past findings and may lead to fewer or better policies. By-products of any organizational system are intended and unintended consequences.

C. PROGRAMMING QUADRANT

The programming quadrant (see Figure 5) of the HRDP system injects fiscal constraints into a process, which, up to this point, has been relatively unconstrained. Within the programming quadrant, the seemingly unconstrained manpower requirement produced in the requirements quadrant is pitted against all Marine Corps initiatives and is forced to compete for finite resources. The process used within DOD for setting programmatic priorities within a fiscally constrained environment is called the Planning, Programming, Budgeting, and Execution System (PPBES). Discussion of PPBES will dominate this portion of the chapter (PPBES is the process that drives the throughput of this quadrant), but the inputs to the programming quadrant must be described first.
Figure 5. OSF Model - Programming Quadrant.

1. Input
   
   a. Environment
      
      As mentioned earlier in this chapter, no organizational system is without its environmental influencers. Its fiscal environment heavily influences this quadrant, specifically economic and social trends. If society feels that military spending should be overshadowed by other fiscal priorities, the programming environment becomes much more competitive both inter- and intra-service. Combatant commanders, advocates, and senior leadership are forced to make hard decisions between labor and capital; decisions they were not forced to make within the requirements quadrant.

   b. Table of Organization
      
      The output of the requirements quadrant provides the baseline upon which the programming quadrant needs to build. Although the T/O does not reflect the number of Marines budgeted to or requested during the Program Objective Memorandum (POM) process, it serves its purpose as the “voice of requirements” for the warfighters and supporting establishment.
c. **UNS / TOE CR**

Any large scale manpower initiatives generated via the UNS within the requirements system are placed against competing initiatives in the programming system.

d. **JDAL**

The Joint Duty Assignment List [a list of assignments to designated positions in a multi-service or multi-national command or activity that is involved in the integrated employment or support of forces of at least two of the three Military Departments (DODI 1300.20, enclosure 2, 7)] represents an externally generated manpower requirement placed upon the Marine Corps from the joint forces. Normally not identified during the Marines' requirements quadrant, the JDAL represents one more demand on scarce human resources that the programming quadrant is obligated to review.

e. **B-Billets**

The focus of the requirements quadrant is the identification of those billets necessary for the success of the operational forces and supporting establishment. These billeted requirements are referred to as A-Billets. Unfortunately, a lifetime of serving in A-Billets alone is usually disastrous for a career. Most successful Marines (those afforded the opportunity of command or the most senior enlisted billets) spend time in the world of recruiting, on the drill field, or in a Marine Security Guard detachment (MSG). These requirements are identified as B-Billets, and are just as important to the success of the Marine Corps as A-Billets. B-Billets act as yet another drain on the human resources of the Marine Corps and need to be accounted for during this constrained programming quadrant.

f. **MCO 5320.12 Precedence Levels for Manning and Staffing**

This order identifies exactly who wins the human resource tug-of-war between the numerous requirements placed on this finite set of resources. It explains that there are three precedence levels for staffing Marine Corps organizations:

- Excepted Commands - Manned and staffed at 100% of their requirement (T/O). These include such commands as recruiting districts, MSG battalions, and the JDAL.
**Priority Commands** - Manned at 95% of their T/O, and staffed at 100% of that manning level with grade and MOS substitutions allowed. Priority commands include joint and external commands (excluding JDAL), HQMC departments, MARFOR forward HQs, infantry battalions, and flying squadrons.

**Proportionate Share (Pro Share) Commands** - Pro share units absorb fluctuations in both authorized manning and personnel inventory. What happens to pro share commands was best described by Maj Joseph Zimmerman of Marine Corps Systems Command during his visit to the Naval Postgraduate School in August of 2004, “Every 'great idea' without compensation is paid for by pro share commands.”

The manning and staffing precedence outlined above is a major input to the creation of the output of the programming quadrant -- the Authorized Strength Report (ASR). The ASR will be described in more detail later.

### g. National Defense Authorization Act

Deliberations within both the House and Senate Armed Services Committees produce the NDAA. Once signed into law by the president, the NDAA authorizes the exact amount of tax dollars allotted to the military. A thorough explanation as to why Figure 5 illustrates the NDAA as both an input and output of the programming quadrant is forthcoming.

### 2. Throughput

#### a. Task

The overarching task facing the players within the programming quadrant is to find the best match between the unconstrained requirements and the fiscally constrained resources based upon their commander's intent. They also ensure the manpower requirements identified within the Marine Corps are properly balanced with those externally generated requirements. Lastly, programmers must ensure all authorized requirements are staffed in accordance with the staffing precedence.

#### b. People

This section introduces the major players in the programming system.

(1) TFSD. This is the lead organization in the planning step of PPBES. Through their work with the advocates and combatant commanders, TFSD produces the plan of what the Marine Corps needs in terms of manpower and equipment.
(2) Manpower Plans and Policy Division of Manpower and Reserve Affairs (MP). According to its website, MP is responsible for formulating Marine Corps force manpower plans, including mobilization plans. Determining total manpower needs; preparing plans, policies, programs, and instructions on manpower matters to implement the Commandant's policies and decisions. Determining the allocation, distribution and use of all Marine Corps manpower, military and civilian. Preparing manpower budget estimates and justification (https://lnweb1.manpower.usmc.mil/manpower/mi/mra_ofct.nsf/MP/Manpower+Plans+and+Policy+Division+-+Home).

MP plays important roles in the plans, programming, and budgeting steps of PPBES.

(3) Military Personnel Branch, Fiscal Division, P&R (RFM). According to the P&R website, RFM “is responsible for analysis, formulation, justification, presentation, and execution of the Manpower Personnel Marine Corps (MPMC), Reserve Personnel Marine Corps (RPMC), and the Marine Corps' portion of claims under the Operation and Maintenance, Navy appropriations” (http://hqinet001.hqmc.usmc.mil/p&r/fiscal/rfm.htm). The RFM / M&RA team are the key players in the budgeting and execution steps of PPBES.

(4) Programs Division, P&R (RPD). According to the P&R website, the mission of RPD “is to optimize allocation of limited financial resources in support of Marine Corps acquisition programs by supervising the Marine Corps Program Objective Memorandum (POM) development and coordinating its submission within the Department of the Navy” (http://hqinet001.hqmc.usmc.mil/p&r/programs/rpd.htm).

(5) Program Evaluation Group (PEG). This is the first layer of the POM hierarchy within the programming step of PPBES. The PEG is comprised of majors and lieutenant colonels from all the advocacies, and is tasked with prioritizing all the initiatives by their benefit to the Corps. These SMEs make the first “cut” on what initiatives proceed to the next level.

(6) Program Working Group (PWG). Chaired by the Program Development Officer from RPD, the PWG is made up of senior SMEs (mostly lieutenant colonels). This group applies costs (first introduction of fiscal constraints) to the benefits
outlined by the PEG. The PWG re-ranks the list of initiatives based upon this cost / benefit analysis and submits the new “order of buy” list to the next level of the hierarchy.

(7) Program Review Group (PRG). Chaired by DC, P&R, the PRG is a collection of the advocates, senior executive service members, and other three-star general level leadership who provide flag level assessment of the remaining programs and initiatives. Any remaining problems or issues that cannot be resolved at the PRG level are forwarded to the MROC for resolution.

(8) Marine Requirements Oversight Council (MROC). The MROC is chaired by the Assistant Commandant of the Marine Corps (ACMC), and is composed exclusively of the advocates. This is the final chop of the POM before any unresolved issues are presented to the CMC for decision.

(9) Commandant of the Marine Corps (CMC). The Commandant finally resolves any outstanding issues and approves any policy change recommendations. He forwards the POM to the Secretary of the Navy for final approval.

(10) Civilian Leadership. In order to maintain civilian oversight of the military, the house and senate make the final decision on passage of the POM. Once the NDAA is signed into law, conceptual tables of organization generated within the requirements system finally have the legal and financial ability to become actual Marines.

c. Structure

The POM process within PPBES is hierarchical for good reason. The CMC is a very busy individual who does not have the time to give justice to every initiative presented to the PEG. Initiatives are forced to pass through the gauntlet of the POM process because there are many requirements yet few resources.

Conversely, TFSD, RPD, RFM, and MP must work as a team during programming. If initiatives are bubbling up at TFSD that for which MP did not plan, then it is quite likely that RFM does not know about them either. Communication within the programming system is critical. Manpower initiatives get into the POM process via the manpower PEG. The manpower PEG is sponsored by MP on behalf of DC, M&RA. A manpower initiative must be considered by the manpower PEG before it can compete for funds in the POM.
d. Information Systems/Documents

(1) Marine Corps Total Force System (MCTFS). "The mission of the Marine Corps Total Force System is to support all Marines by providing an integrated personnel and pay system which incorporates a single, logical database consisting of all Active, Reserve, and Retiree records (except Retiree pay)" (http://www.hqmc.usmc.mil/mi.nsf/578c27a4b60ec9ff8525629e004d9307/1d52f02e36ce b1928525648800611e4c?OpenDocument). Through MCTFS, every personnel office in the Marine Corps feeds its troop data into a centralized data base. M&RA and RFM pull information from MCTFS to track exactly how many Marines are being paid and by what amounts. This is key for trend building and helps predict over/under-spending.

(2) Standard Accounting, Budgeting, and Reporting System (SABRS). This system interfaces with MCTFS and the Defense Finance and Accounting Service (DFAS) to ensure that every Marine with a record in MCTFS is being paid. RFM utilizes SABRS to reconcile the manpower plans from MP division with what is actually being executed. SABRS allows RFM to manage the checkbook while DFAS actually pays the bills.

e. Process

PPBES is the key process used within the programming quadrant. A summary of PPBES follows:

- "PPBES - How DoD identifies and prioritizes requirements, determines which ones to fund, and how much [funding must be allocated]
- Planning - What we need to do in the future
- Programming - The programs we need in order to accomplish the plans, and how much they cost
  - The Program Objective Memorandum, or POM, is the result
  - POM identifies which programs are approved [for consideration] and for how much
- Budgeting - How we plan to spend the money we request from Congress (the details)
- Execution - How we spend the money we actually get" (Training Block 5a - Planning, Programming, and Budgeting)

More specifically, it is possible to describe PPBES at work within the programming quadrant as:
Planning. As mentioned earlier, TFSD and MP are integral to the first step in PPBES. A combination of the requirements and planning quadrants' outputs provides the “plans” necessary to initiate PPBE. These plans come in the form of the T/O and any force structure plans providing guidance as to how to reach the T/O.

(2) Programming. In the programming step of PPBES, the initiatives developed during planning are translated into resource requirements within the six-year Future Years Defense Program (FYDP). The programming step is done within a moderately constrained environment with the focus still on what is truly needed, and not just what is affordable.

For example (see Figure 6), if a TOEOR was validated during the planning step and injected into the programming step as an initiative, it is reviewed by the PEG.
The PEGs are permanent, voting bodies tasked with prioritizing and assigning relative benefit to competitive program initiatives. There are six PEGs: Manpower, Operation and Maintenance, Investment, Family Housing, Military Construction, and Blue-in-Support-of-Green (Miller, 15).

After they have completed their task, each PEG transmits their prioritized list to the PWG.

The PWG “consolidates, assesses, and prioritizes the recommendations from the PEGs. The complete recommended POM, along with any issues, is presented to the PRG for evaluation and adjustment prior to submission to the Commandant” (Miller, 16).

“The responsibilities of the PRG include reviewing the program developed by the PWG before it is briefed to the Commandant, to assess warfighting capabilities and verify compliance with programming guidance” (Miller, 17). These findings are then passed onto the MROC for one last sanity check before being presented to the CMC.

The completed Marine POM is presented to the Secretary of the Navy for inclusion in the DON POM, which is then presented to the Secretary of Defense along with the other service POMs for inclusion into the FYDP. The output of the programming step of the PPBES for the Manpower community is the average strength (in work years) number which is used for budgeting.

(3) Budgeting. The National Defense Authorization Act (NDAA) legislatively sets the end strength number resulting from the programming step. Without the NDAA, M&RA has no legal guidelines or framework with which to start budgeting to “buy” the correct number of Marines. With the NDAA in hand, M&RA goes to work to transform the manpower plan into the FY Budget Estimate Submission (BES).

MP, working in conjunction with Reserve Affairs Division (RA), produces a budget based on the end strength constraints they are provided and submits the Manpower Budget to RFM for review. P&R consolidates all the budget submissions from all four USMC Appropriations ‘Areas’: Military Manpower, Investment (Procurement, RDT&E), Operation and Maintenance, and Infrastructure. This consolidated budget is then presented to the Office of Budget (FMB) within the Secretary
of the Navy’s Office. It is reviewed and then forwarded as a part of the Navy’s Budget to
the Office of the Secretary of Defense (OSD) and the Office of Management and Budget
(OMB) where it becomes a part of the President’s Budget (PRESBUD). The PRESBUD
is then scrutinized by Congress, adjustments are made as necessary, and then
appropriations are approved.

Once the president has signed an appropriations bill into law and after the
start of the fiscal year, the Treasury Department issues an appropriation
warrant to the OMB. This warrant establishes the amount of funds
authorized to be withdrawn from Treasury accounts for each bill (Jones,
McCaffery, 203).

The execution phase has begun.

(4) Execution. Budget execution entails much more than simply
incurring outlays of all the money appropriated by Congress. The budget is constantly
being tracked, periodically reviewed (mid-year), accounted for, and audited. These
duties fall squarely on the head of P&R Finance Division.

MP submits monthly FY manpower plan updates to RFM. The
data used for manpower plan execution is reconciled by the respective active officer /
enlisted endstrength planner to ensure it is as accurate as possible. These plans are
monetized by RFM and compared to SABRS. Variances between the monetized
manpower plan (what the cost should be) and SABRS (what it is) are partly due to
SABRS accounting / reporting problems (reporting delays, data entry errors, manual
transactions, etc.). “That’s why,” according to Major Robin Gallant of RFM, “people
always say that MCTFS is running hot (spending too much compared to the Manpower
Plans).”

Should this entire process sound somewhat confusing, do not feel
alone. In fact, many of these actions are happening simultaneously, which causes even
more confusion and havoc. Figure 7 illustrates an excellent depiction of what a snapshot
in time within PPBES looks like.
3. Outputs

The physical outputs of the programming quadrant are twofold. First, once the civilian leadership approves the POM, the NDAA is signed, which states the authorized endstrength of the Marine Corps. Then, once the endstrength number is provided, it is transformed into funded billets via the Authorized Strength Report (ASR). The ASR places the force structure requirement (T/O) next to actual expenditures (NDAA). These authorized billets are divided by rank, military occupational specialty, and monitored command code (MCC). Without the NDAA, the execution and planning quadrants are bereft of one of their most important inputs.

4. Outcomes

Consequentially, fiscally constrained guidance is provided for all the major stakeholders within the planning and execution quadrants.
D. PLANNING QUADRANT

Do not confuse the planning quadrant of the HRDP (see Figure 8) with the “planning step” of PPBES. Planning within PPBES is concerned with “what do we need?” while the goal of the planning quadrant within the HRDP system is to answer “how do we grow and shape what we need?” The planning quadrant's players need to articulate exactly how to transform requirements into actual Marines.

![Planning Quadrant Diagram](image)

Figure 8. OSF Model - Planning Quadrant.

1. **Input**

   a. **Authorized Strength Report**

      The ASR is the key input to the planning quadrant. The DC, CD has identified the requirement through his work with the warfighters and supporting establishment; the product of his labor is the ASR. He now hands that product to DC, M&RA whose responsibility it is to explain to CMC how to bring this requirement to fruition, if it is realizable, and at what cost. The ASR provides the planning quadrant the fiscally constrained window in which it must plan.
b. **Inventory Costs**

The additional fiscal constraints mentioned here refer to the amount of money required to manage the plans created in this system. The planners cannot focus exclusively on the endstrength number resident in the ASR, they need to build flexible plans throughout the entire fiscal year so as not to overspend. Capt Luis Zamarripa of the Manpower Plans and Policy division within M&RA explains:

Even though our plans are aimed at creating an ideal 'future' inventory according to the Grade Adjusted Recapitulation (GAR), we must also consider what is happening in the 'present' inventory and how much that costs. For example, our accession plan is developed according to what we need to off-set the number of Marines getting out; we must plan for those accessions based on our forecast of how many Marines will get out this year as well as what is needed to build our future inventory. We are then given money to support our current inventory throughout the year based on our predictions at the beginning of the year... what if our predictions are wrong? We run the risk of spending more (or less) money than what was authorized at the beginning of the year, so our plans may be adjusted during the year so that we don't over/under execute (Zamarripa).

c. **Title 10 U.S.C.**

Title 10 of United States Code sets federal regulations on the number of officers and senior enlisted (E-8, E-9) within all the armed services. These are additional legislative constraints, which planners must adhere to in the course of their duties.

d. **Training Input Plan (TIP)**

The Training Input Plan is produced annually on or about 15 February and identifies all formal training requirements for a five-year time span. The Deputy Commandant for Manpower and Reserve Affairs (DC, M&RA), Commander, Marine Forces Reserve, and Occupational Field Sponsors all provide requirements for this plan. The plan serves as the cornerstone for out-year budget plans, and as the basis for allocating funds for centrally controlled programs (TECOMBUL 5214, enclosure 1, 6).

"The TIP provides the schoolhouse, HQMC, and MCCDC the ability to conduct long term planning, programming, and budgeting actions" (MCO 1553.2, enclosure 5, 1).

e. **Environment**

The economic and social forces that sway the requirements quadrant cannot be ignored here either. Planners within this quadrant need to consider the strength
of the economy and its effects on retention and accession when creating manpower plans. A strong economy may mean a drop in accession and could require a retention policy change. Additionally, as Maj Zimmerman mentions, "[it] can't be understated that if you increase active duty retention you decrease the flow of people into the Inactive Ready Reserve (IRR) which the reserves use as one of their main recruiting sources to meet their own endstrength needs" (Zimmerman).

Furthermore, a war-time environment is radically different than that of peace-time. Active or ensuing conflict may necessitate policy changes that directly affect the planning quadrant in different ways. For example, adjustments to plans and policies may occur due to the influx of patriotic youngsters into the armed forces, while simultaneous plans may be necessary to adjust for the negative effects a war may have on accessions.

2. Throughput
   a. Task

   The mission of the planning quadrant is to grow and shape the required manpower inventory through the creation of plans and policies.

   b. People

      (1) TECOM. The Commanding General, Training and Education Command (CG, TECOM)

      is responsible for validating training requirements; developing collective and individual training standards; and overseeing unit-level training policy, formal school training, and professional military education. Only the CG, TECOM will task Marine Corps formal schools and detachments to develop training courses (MCO 1553.2, 3).

      TECOM's role in the growing and shaping of inventory should now be clear. Without interaction between MP and TECOM, the training pipeline that creates the Marines needed to fill requirements would be misaligned and unable to produce the proper output.

      (2) MP. MP was introduced during the description of the programming quadrant. This organization is the hub of force shaping plans and policies in the Marine Corps.
(3) Personnel Management Division of M&RA (MM). According to its website, MM “is responsible for the administration, retention, distribution, appointment, evaluation, awarding, promotion, retirement, discharge, separation, and service records of commissioned officers, warrant officers, and enlisted personnel of the Marine Corps and Marine Corps Reserves” (https://lnweb1.manpower.usmc.mil/manpower/mi/mra_ofcnt.nsf/PMD/Personnel+Management+Division+Home).

As Maj Zimmerman so aptly states, coordination between the planners and executors is crucial for creating viable plans: “...coordination occurs in the TBS classification plan, overstaff reporting that go into the manning controls, and significant coordination between MPP-20 (enlisted plans) and MMEA (enlisted assignments branch) occurs on almost everything” (Zimmerman).

(4) Marine Corps Recruiting Command (MCRC). This organization plays an important role in the formulation of force shaping policy in the Marine Corps. MCRC provides key indicators to MP as to whether or not the created plans are actually executable. They know how many recruits can realistically be accessed and subsequently trained in support of the requirements levied by the combatant commanders and advocates. Without input from MCRC, MP would most likely create some very unrealistic force shaping goals.

(5) TFSD. This group must remain in constant communication with MP division, because it is in their best interest to ensure the formulated plans coincide with what the desires of the advocates and combatant commanders. If things are not going well, advocates should be informed in order make possible concessions between themselves should a force structure goal be unattainable.

(6) Advocates. (see paragraph 5)

(7) The Basic School (TBS). The staff of TBS (a six month period of instruction attended by every second lieutenant commissioned into the Marine Corps) assists in military occupational specialty (MOS) distribution for all entry level officers. The planners at MP create these distribution plans based on the graduation rate of each TBS class and amount of available MOS schooling. The TBS staff bases its
distribution of these available MOSs on the preferences of the second lieutenants and the needs of the Marine Corps. Interaction between TBS, MM, MP, TFSD, and TECOM is essential in order to create this officer distribution plan.

(8) Occupational Field Sponsors. Each MOS community (occupational field - or occ field) in the Marine Corps has a representative residing somewhere at HQMC (normally within an advocate's organization) who is responsible for monitoring the development of the Marines in that occ field. It is essential that each occ field sponsor ensure that distribution plans created in MP reflect the desired force structure goals within their communities. If this is not the case, then the occ field sponsor is forced to communicate with TECOM, MP, and his advocate to ensure a bad trend does not start or continue.

c. Structure

As with most divisions within HQMC, MP lies within a hierarchical structure beneath DC, M&RA. However, at the action officer level, a team structure is forced to exist in order to formulate accurate, executable plans. As the example mentioned earlier, creating a distribution plan for all the second lieutenants entering the Marine Corps is impossible to accomplish without the teamwork of MP, MM, the occ field sponsors, TECOM, TFSD, and TBS. Without the representation of each one of these stakeholders, second lieutenants would be arriving at the wrong job, at the wrong place, at the wrong time.

d. Information Systems/Documents

(1) Total Force Data Warehouse (TFDW). One of the best ways to formulate a plan for the future is to analyze events of the past. TFDW is a database created just for this purpose. It allows analysts within any HRDP organization to query historical Marine manpower data, economic indicators, training, and recruiting information in order to create future plans.

(2) Training Requirements and Resources Management System (TRRMS). TRRMS produces the TIP, which is the “primary source of data for developing the POM and future budget submissions for formal training” (Training Block 11 - HRDP Information Systems).

(3) MCTFS. Provides the monthly snapshot for TFDW.
(4) Officer Planning Utility System (OPUS). This system is a series of smaller programs used in officer promotion and inventory planning.

(5) Total Force Projection Model (TFPM). This model produces the Grade Adjusted Recapitulation (see Processes).

e. Processes

In order to tell MCRC how many civilians to recruit, and inform TECOM how many school seats to prepare, and provide budgeters an estimate of how much manpower is going to cost, the personnel within MP division employ the help of matrix and Markov-type forecasting models. The main model associated with the planning quadrant is the Total Force Projection Model (TFPM). The TFPM utilizes the ASR to develop the target (ideal) inventory -- the GAR. The GAR provides planners the numerical information used to calculate the number of accessions, promotions, and losses necessary to populate the Marine Corps in accordance with the strength authorized by the civilian leadership of this country.

3. Outputs

The outputs of the planning quadrant are the numerous plans (see Figure 8) required to grow and shape the ideal inventory. Of note are manning controls entitled T2P2 (Transients, Trainees, Patients, and Prisoners). MP uses historical data to project an estimated number of T2P2 personnel in order for the Marine Corps to “pay its operating overhead” -- the cost of managing personnel. T2P2 billets are subtracted from the endstrength number prior to the creation of the ASR (see Figure 2), but then re-inserted through the TFPM. This way, the GAR reflects the amount of Marines that may be missing due to T2P2 and the planners within MP can adjust for these projected “losses.”

4. Outcomes

The plans created here have forced an integration of the warfighter's requirements, the fiscal realities of the programming quadrant, and the manpower production capabilities of MCRC and TECOM. The consequence of this integration should afford the senior leadership of the Marine Corps the decision making tools required to formulate sound, justifiable manpower policy. Good manpower policy should create an effective fighting force.
E. EXECUTION QUADRANT

The OSF model for the execution quadrant (see Figure 9) reflects a division of labor between two distinct subsystems -- distribution and assignment. The processes contained within these subsystems will be explored in greater detail later, but a simple introduction is warranted here. Distribution describes the process of matching the "spaces" (billetts created during the requirements process and authorized in the programming process) with "faces" (the actual human resource inventory of the Marine Corps). The assignment process transforms distribution into reality by attempting to balance the needs of the Marine Corps with the needs of the Marines.

![Execution Quadrant Diagram]

Figure 9. OSF Model - Execution Quadrant.

1. Input (Each Input Has the Affected Subsystem in Parenthesis)
   a. Environment (Distribution and Assignment)

The same environmental factors that affected the shaping of the Marine Corps' manpower requirement and that influenced the fiscal constraints placed on those requirements also affect the execution quadrant. These economic, political, social, and
technological trends forcing the military and civilian leadership within (and external to) the Marine Corps to either grow or reduce requirements, also affect attrition, retention, and accession decisions of Marines and potential recruits.

b. Authorized Strength Report (ASR) (Distribution)

An in-depth description of the ASR was provided during the programming quadrant portion of this chapter, but it needs to be mentioned here as the primary input to the distribution subsystem within the execution quadrant.

c. Assignable Inventory (Distribution)

These are the actual Marines available to fill the constrained requirement (ASR). This is the first time actual “faces” enter the HRDP system.

d. Target Date (Distribution)

The target date identifies which Marines are available for moving. When the staffing goal model is created, a target date is identified. Based on this date, the model eliminates all candidates whose estimated departure date (from their current duty stations) lies outside of the target date window.

e. Substitution Rules / Dictionaries (Distribution)

The staffing goal models utilized in the distribution subsystem use a set of substitution rules to operate. The collection of all the rules for a particular model is its dictionary. These dictionaries outline all the parameters a model will utilize to make the “best” distribution decisions possible. Manpower policies and directives, as well as historical data are used in the creation of these parameters by the staffing goal model managers.

f. MCO 5320.12 Staffing Precedence (Distribution)

Although this order is also used in creating the ASR, it is critical in ensuring the algorithm that “best matches” the spaces (needs of the Corps) with the faces (assignable inventory) runs correctly. If the spaces are staffed in the wrong precedence, the Marine Corps could be facing serious problems.

g. Staffing Goals (Assignment)

Combining the ASR, assignable inventory, target dates, substitution rules / dictionaries, and staffing precedence produces the algorithms used by the staffing goal
According to Maj Joseph Zimmerman of Marine Corps Systems Command,

the principal function of the SGM is to generate 'reasonable' staffing goals which can be achieved by a monitor (a monitor is a personnel placement officer responsible for assignment of either officers or enlisted within a specific or numerous occupational fields) and expected by a commander. Staffing goals ARE NOT the assignment of specific Marines to specific billets; and they ARE flexible (brief, 17 August 04).

These staffing goals are used by the monitors in the assignment subsystem (visualize staffing goals as an output of the distribution subsystem). Without the staffing goals, it would be nearly impossible for the monitors to assign the right Marine to the right place at the right time with the right skills.

h. **Preferences and Eligibility (Assignment)**

Unfortunately, the staffing goals only represent the best match of spaces with faces based on the needs of the Corps. Beginning with preferences and eligibility, the next three inputs take into account the needs of the Marine. Within his or her respective community, the monitor begins to scrub the staffing goals to improve the balance between the requirements of the organization and those of its people by integrating first, the personal preferences of the Marines, and then whether or not that Marine is actually eligible for this preference. Most theorists agree that an employee is most productive in a job that is preferred vice one that is assigned. While this is not always possible in the Marine Corps, monitors strive to make it happen.

i. **Career Progression (Assignment)**

Where each Marine resides within their respective career path is also a consideration for the monitors. Managing preference and eligibility with career progression is another way to polish the staffing goal.

j. **Overseas Control Date (Assignment)**

According to Marine Administrative Message (MARADMIN) 481/03, “The primary purpose of the OCD is as a personnel management tool; to prevent the involuntary assignment of a Marine to a dependent-restricted tour (i.e., permanent change of station assignment) for a period of 24 months from the time a new OCD is assigned.” In the assignment subsystem, tough decisions arise where equally qualified Marines want
the same job in the same location at the same time. In these instances, the overseas control date (OCD) may be the deciding factor for the monitor.

2. Throughput
   a. Task

   If the requirement quadrant is the most important component of the HRDP system, then the execution quadrant (matching the assignable inventory to the fiscally constrained requirement while balancing the needs of both the organization and its people) is the most difficult. A nearly impossible task to execute perfectly, this quadrant does the best it can with the resources it has. The most important of these resources is its people.

   b. People

   (1) TFSD. In a role critical to this quadrant, TFSD is responsible for the creation, maintenance, and refinement of the ASR. Similar to the coordination between the “plans” and “operations” staff members of a combat unit, a continuous dialogue must exist between those who oversee the formulation of the manpower requirement (TFSD) and those who are responsible for its staffing (MM).

   (2) MM. This organization not only runs and maintains the SGM, but is also staffed with monitors (known as detailers in the Navy) who are responsible for ensuring that its output is feasible and executable via the assignment subsystem. When it is time for Marines to make major career moves they talk to a monitor from MM.

   (3) Major Subordinate Commands' G-1s. As mentioned during the programming quadrant, the ASR is only able to distinguish down to the MCC level. Many MCCs in the Marine Corps have numerous battalions or squadrons within. In other words, often times the G-1 (personnel / administrative shop) of that MCC bears much of the burden of the execution quadrant. MM will take those Marines only as far as their MCCs (according to their commander's intent) while the G-1 will result in their placement in the battalions or squadrons that need them the most (according to their commander's intent).

   c. Structure

   A discussion of commander's intent leads nicely into describing the two distinct structures under which MM and the G-1s work. MM works under the hierarchy
of the service chain (which includes the Secretary of the Navy and the Commandant of the Marine Corps). By definition, the service chain exists to equip, man, and support the combatant commanders. In contrast, the G-1s answer to the operational hierarchy of the combatant commanders. Thus, on occasion, G-1s will place the “faces” in different “spaces” than the service chain intended based on operational requirements.

Although the MM and G-1 relationship is not exactly adversarial, the MM and TFSD relationship must be more team-like. The SGM is driven by the ASR, so the SGM manager within MM must talk with TFSD while crafting the algorithm for the SGM. If the SGM and ASR do not marry up properly, unrealistic staffing goals will be created, which creates more work for both the monitors and the SGM manager.

d. Information Systems/Documents

(1) MCTFS. Introduced during the programming quadrant, MCTFS provides the data utilized by TFDW.

(2) Operational Data Store Enterprise (ODSE). “The Operational Data Store Enterprise provides the current, integrated view of manpower and personnel information in an Oracle database” (Training Block 11 - HRDP Information Systems). The enlisted assignments branch of MM (MMEA) uses ODSE to create the current inventory extract, which when matched with the ASR creates the staffing goal.

(3) Monitor Assignment Support System (MASS). “The Monitor Assignment Support System is used to track, assign, and issue orders to Marines” (Training Block 11 - HRDP Information Systems). As a part of MASS, Web Orders is a program used to deliver orders/assignment data electronically to all the consolidated administration centers throughout the Marine Corps.

MASS contains both ODSE data and slate data (slate data mirrors the MCTFS/ODSE data). Unit diary clerks throughout the Corps are primarily responsible for entry in MCTFS while monitors are responsible for slate data. As mentioned above, when the G-1 puts someone where HQMC did not assign them, slate data provides that visibility and allows the monitor to concur or non-concur. Thus, this provides the monitor with what was supposed to happen, and what really happened. MMOA uses slate data from MASS to create its inventory extract, which when matched
with the ASR, generates staffing goals. MMEA wants to begin using MASS slate data during this FY (Zimmerman).

(4) TFDW. “The Total Force Data Warehouse provides an integrated, historical view of manpower and personnel information and transactions” (Training Block 11 - HRDP Information Systems).

(5) Staffing Goal Model (SGM). As mentioned earlier, the mission of the SGM (or the inventory assignment process) is “to make the 'best' distribution of current assignable inventory to meet the Marine Corps authorized strength requirement in accordance with current Marine Corps staffing precedence” (Brief, 17 August 2004). The SGM is guided by dictionaries. These dictionaries provide the eligibility requirements that are used by the staffing algorithm in order to first, maximize the number of ASR billets filled, and secondly, ensure that each Marine matched to an ASR billet utilizes the most preferred level of substitution criteria (Brief, 17 August 2004).

(6) INFOPAC. Staffing goals are provided to the Fleet Marine Force upon request through this information system.

(7) Email / Phone. Due to the amount of one-on-one communication between the Marines and their monitors within the assignment subsystem, email and phone are two very important media utilized for passing information.

(8) Marine On Line (MOL).

... is an enterprise wide initiative that will move USMC pay and personnel administration to a predominantly self-service, virtually paperless, web-based environment. [It will be a] centralized repository of personnel information and business processes that facilitates leadership and management oversight, and a cost-effective, standardized way to communicate with every member of the Marine Corps Team (Training Block 11 - HRDP Information Systems).

e. Processes

The execution quadrant flows directly from the programming quadrant (see Figure 2). The programming quadrant's output (ASR) is fed into the SGM along with the manager's dictionaries. The “Big T Billets” illustrated in Figure 2 are included
by the manager through his dictionaries in order to extract professional military education and special education program type accessions from the assignable inventory first, before any valid ASR billets are distributed. The SGM is run, the staffing goals are published, and the monitors utilize these staffing goals to match their occupational field's faces to assignable spaces. The execution quadrant then produces its outputs.

3. Outputs

Once matches are made, orders are written and published (the output of the assignment subsystem). The staffing goals themselves, as outputs of the distribution subsystem, are disbursed as reports to the monitors (CSR/OSR/XView) or via INFOPAC to the Fleet Marine Force.

4. Outcomes

The consequences of the execution quadrant are twofold. First, optimized matching of requirements to available inventory should create a force that is capable of making Marines and winning the nation's battles. Secondly, being able to match a Marine with a job that he or she is both capable of and motivated to do should lead to retention and job satisfaction. Retention decreases accession costs and builds human capital, and job satisfaction is critical for attracting more employees.

F. SUMMARY

While the programming quadrant of the HRDP system will be the focus of the remainder of this research, an understanding of the interactivity between the requirements, programming, planning, and execution quadrants is essential in order to understand how the HRDP system is to succeed. After absorbing the intricacies of this chapter, the reader can appreciate how the separation of powers within the HRDP system may lead to some coordination and accountability issues. For example, the HRDP system owner (DC, M&RA) is not solely accountable for the outlay of funds during the execution of manpower plans and policies. Chapter IV will present the concept of fiscal responsibility (budget - 1517 authority) in more detail and how it is delegated differently within the Navy's equivalent to the HRDP system. A more in depth analysis of the Navy's HRDP system equivalent (the MPT system) resides in Chapter III.
III. NAVY MANPOWER, PERSONNEL AND TRAINING SYSTEM

The Chief of Naval Operations (CNO) builds platforms to accomplish missions assigned to the Department of the Navy as a part of the National Military Strategy (NMS) in support of the greater National Security Strategy (Hatch, 34). The Manpower, Personnel & Training (MPT) system provides guidance to planners to justify the Military Personnel Navy (MPN) appropriation to Congress. Ultimately, the MPT system translates the National Security Strategy to program and fund the correct number of sailors with the right qualifications and experience to specific assignments in preparation for war and support of peacetime personnel readiness levels. The MPT system can be seen as having four individual processes: manpower requirements, manpower programming, personnel planning, and personnel distribution. Each quadrant is identified as having four components: sub-processes, specific players, documents, and...
information systems. This study will use the Organizational Systems Framework (OSF) model to analyze the MPT system.

B. MANPOWER REQUIREMENTS QUADRANT OVERVIEW: BEGINNING OF MPT

![Manpower Management System Diagram]

Figure 11. Manpower Requirements Quadrant OSF Model.

Under CNO’s guidance, Navy missions are assigned to individual Resource Sponsors to execute the greater National Military Strategy and National Security Strategy through the Required Operational Capability/Projected Operational Environments (ROC/POE) documents used to execute various platform design capabilities in anticipated wartime environments. The Navy Manpower Analysis Center (NAVMAC) measures workload for capabilities of equipment aboard ships, submarines, and aircraft based on wartime readiness conditions I and III. Their workload assessment is written into Ships Manpower Documents (SMD), Squadron Manpower Documents (SQMD), and Fleet Manpower Documents (FMD). NAVMAC identifies the workload at the minimum
skill, pay grade and quantity required to accomplish 100 percent of the assigned Naval mission in an unconstrained manpower environment.

C. MANPOWER REQUIREMENTS: SUB-PROCESSES, PLAYERS, DOCUMENTS AND INFORMATION SYSTEMS

1. Manpower Requirements- Sub-Processes
   
   a. Determination and Validation

   New systems and platforms are determined using a zero-based methodology, while validation is generally used to measure workload on previously existing systems and platforms. The Resource Sponsors write and maintain specific ROC/POEs to delineate how a platform’s design capabilities are to be executed. NAVMAC is tasked to capture hourly workload based on readiness levels as delineated in the ROC/POE. This workload is reflected in manpower documents SMD, SQMD, and FMD, by platform work center, division, and department utilizing expected operational capabilities in an unconstrained manpower environment. Similarly, workload for shore facilities are captured from the Mission Function Task (MFT) statement and reflected in the SMR.

2. Manpower Requirements – Players

   The major manpower requirement players are Resource Sponsors, NAVMAC and Claimants (see Appendices G and H). Resource Sponsors are responsible for developing and maintaining platforms that execute assigned Navy mission requirements. A few examples of Resource Sponsors are surface warfare (N76), expeditionary warfare (N75), aviation warfare (N78), and logistics (N4).

   NAVMAC measures workload through industrial standards by a platform’s design capability. The industrial standards convert workload into hours of productive work by skill and pay grade. The resulting hours of workload are converted to the number of requirements for a specific platform class. These requirements are ultimately used for accessions, training, promotion plans, and personnel appropriation justifications to Congress. NAVMAC assesses each platform type approximately every two years or when deemed necessary. They “are also committed to ensuring future Navy war fighters have the right jobs identified by studying human-machine interfaces and new systems and equipment for both existing and new classes of ships, submarines, and squadrons”
To do this, NAVMAC determines how work is required by rate and rating to operate a station and at what readiness condition in accordance with platform specific ROC/POEs.

Claimants authorize manpower requirements through TFMMS. The Claimants administratively represent platform type commanders, such as: air, surface, and subsurface. For shore commands, Claimants are responsible to administer a similar process. Authorization is the process by which MPN appropriations are put in place to support previously programmed space requirements and identified workload in accordance with manpower goals, policies, and initiatives (Hatch, 40).

3. Manpower Requirements – Documents

Manpower planners use ROC/POEs to assess workload requirements at various conditions of readiness. “ROCs are reported under readiness conditions having major significance in [ultimately] determining the unit’s total manpower requirements” (OPNAVINST 3501.311). The POE describes platform readiness conditions I and III. Condition I is a battle ready situation, in which “the maximum expected continuous crew endurance” is 24 hours (OPNAVINST 3501.311). Condition III is based on a deployed/increased tension level, with a minimum expected crew endurance of 60 days and eight hours of rest allocated per sailor per 24 hours (OPNAVINST 3501.311).

![Figure 12. ROC Element CCC 6.2. (From: www.bupers.navy.mil, 17 March 2004)](image)

Figure 12. ROC Element CCC 6.2. (From: www.bupers.navy.mil, 17 March 2004)

Each ROC delineates the capacity to which each capability will be executed in a macro sense. Figure 12 shows how ROC element CCC 6.2 is executed at readiness conditions III, IV, and V under a “L” or limited capability. The limiting capability is to
work one contact. Industrial and occupational standards require one signal team, which consists of two sailors per watch. Since the CNO has established that sailors stand no more than two, four hour watches in a 24-hour period under readiness condition III, the requirement is six signalmen per day.

Once the workload is assessed and requirements have been determined, the results are maintained in manpower requirement documents (SMD, SQMD and FMD). These documents are the inputs by which Claimants begin the authorization process. Ultimately, authorizations are used by manpower and personnel planners in developing the Baseline Assessment Memorandum (BAM) and program guidance to project manpower requirements across the Future Year Defense Plan (FYDP).

4. Manpower Requirements - Information Systems

Total Force Manpower Management System (TFMMS) is the “single, authoritative data base for total manpower requirements, authorizations and end strength” (Hatch, 54). TFMMS supplies historical, current, and future manpower information to manpower planners.

5. Manpower Requirements- End State

![Diagram of Manpower Requirements Phase]

Figure 13. End of Manpower Requirements Phase. (From: www.bupers.navy.mil, 17 March 2004)
Figure 13 shows how the Manpower Requirements phase is the entering argument to personnel planning.

D. MANPOWER PROGRAMMING QUADRANT OVERVIEW: THE SINGLE MANPOWER SPONSOR AND PPBES

Figure 14. Manpower Programming Quadrant OSF Model.

Following Manpower Requirements, which is the quantitative and qualitative determination and validation of workload, Manpower Programming identifies necessary current appropriations and projects future requirements across the FYDP. Manpower Programming is the entering argument to designing the POM, which is eventually submitted to OSD. In 1994, CNO Admiral Mike Boorda centralized the responsibility, accountability and control of manpower planning by designating a Single Manpower Sponsor, N12, Total Force Manpower Management Division (see Appendices I, J and K). N12, under the Chief of Naval Personnel, oversees the submission of the BAM as part of the Naval Budget and late re-programming between Resource Sponsors, Claimants, N8, N10 and N13. N8 is overall responsible for Navy PPBES and the submission of the Naval Budget.
E. MANPOWER PROGRAMMING: SUB-PROCESSES, PLAYERS, DOCUMENTS AND INFORMATION SYSTEMS

1. Manpower Programming- Sub-Processes

   a. Authorization

   An Authorization is a manpower requirement supported by Resource Sponsor funding and corresponding end strength (Hatch, 53). Outside the current fiscal year, requirements are programmed across the FYDP by Claimants and are referred to as future requirements by manpower planners. Once a requirement is authorized by the Claimants, it is referred to as a billet by manpower planners. Billets are the primer for programming officer and enlisted end strength as part of the Baseline Assessment Memorandum (BAM), and are maintained in the TFMMS Billet File for use by personnel planners (Hatch, 53).

   b. End Strength

   End Strength as defined in OPNAVINST 1000.16J "is the number of officer and enlisted requirements which can be authorized (funded) based on approved budgets. End Strength is set forth for each activity in the FYDP". As of the 9/11 event, Congress changed the End Strength limits to two percent above authorizations and zero below. End Strength is programmed across the FYDP. The POM is the mechanism used to estimate and program End Strength requirements. Previously reviewed End Strength is validated during the following three processes: POM, summer review and PRESBUD. The End Strength portion of the Naval Budget is submitted to OSD to become part of the PRESBUD. After the Naval Budget is submitted, OSD reviews and returns their budget appraisal in the form of Program Budget Decisions (PBD) to the Navy, which makes End Strength official. From the POM, PBIS (information system) stores budget information and allows Manpower users to retrieve data at which time End Strength can be programmed into TFMMS (central Manpower information system). During the summer, the Navy Comptroller distributes refinements for the reprogramming of End Strength (Hatch, 70). MPN appropriation rebuttals are submitted continuously following the submittal of the Naval Budget to OSD. They are sent through N12, and are referred to as reclama (Jones, 259-260).
c. PPBES

The PPBES process consists of Planning, Programming, Budgeting and Execution of the budget. It is a DOD-wide continuous cycle in which “the ultimate objective... is to provide the best mix of forces, equipment and support attainable within fiscal constraints” (Hatch, 79). This is an interesting point in the MPT System, now planners and budgeters must connect mission to capabilities and forces, within a personnel resource constrained environment.

Programming consists of the connection between strategic objectives and funding. The process concludes at N8, which consequently places final analysis in one organization. The Navy uses the process to determine what capabilities they require, how much of the capability they can afford to fund and what adjustments must be made to attain those capabilities (www.bupers.navy.mil). This translates into what the Navy calls “End to End Capability,” which is determined “as a function of quantity (ability to provide specific numbers of military and civilian personnel to meet requirements) and quality (ability to provide specific skills, grades & experience levels to meet requirements)” (www.bupers.navy.mil). The result is the Integrated Warfare Architecture (IWAR) and CNO Program Analysis Memorandum (CPAM). The IWAR merges Sea Power 21, threats, and capabilities (seven years in the future) from across the warfare communities to provide cost-effectiveness analysis on various capabilities (Hatch, 85).

The goal of programming includes:

- pairing available resources with valid requirements (ROC/POE)
- reorganize planned Manpower requirements to the resources that will supply them
- build a sensible Navy program (POM/PR) for OSD
- defend POM submission through various reviews (100).

Programming looks six years out, and weighs goals and limitations (capabilities and funding), costs (personnel, operational time, missions), and the IWAR and CPAM (99). The end result of the programming phase is the POM. The POM is a
biennial document, produced every two years during the programming phase, and only during even numbered years. Its purpose is to predict DOD resource requirements and illustrate program objectives to SECDEF.

The budgeting phase is a near term aim by Claimants (under SECNAV control) using the POM to generate actual costs (personnel, operational time, missions) and balance it with the best price and available funds. The goal is to defend requests to OSD among the competing services. The budgeting process formulates the PRESBUD (Hatch, 102). The POM may be adjusted during this period by Congressional revisions, a change in the PDM, or a modification in OSD & OMB fiscal guidance (www.bupers.navy.mil).

Execution is the final phase of the PPBES. Once Congress enacts the DOD Appropriations Bill and the President signs it into law, DON can then incur obligations and make payments (Jones, 264). The Execution phase is typically used to correct predictions from the planning phase. It is here that reprogramming occurs, which allows for under funded programs to receive some of the CNO’s reserve. Transfer Authority can also be obtained, in which money from outside the Navy is brought over vis-à-vis Omnibus Reprogramming. According to a former Navy Captain and long time Navy Manpower authority, he stated that generally manpower accounts are forecasted lower because Congress only scrutinizes “expensive toys” [Navy large capital projects]. By producing a number lower than required, the Navy can come back and ask Congress for extra funding because Congress will always fund manpower accounts.
Another Look at the PPBES Timeline

Figure 15. PPBES Timeline.

Figure 15 is based on information obtained from pages 258 to 264 of Budgeting and Financial Management for National Defense by Jerry L. McCaffery and Lawrence R. Jones of the US Naval Postgraduate School in Monterey, California.

2. Manpower Programming- Players

The main players for the Manpower Programming have been discussed in Manpower Programming Sub-Processes section under PPBES. The main players are N12, N10, and N8 (see Appendices I, J and K). N12 is known as the Single Manpower Sponsor, or the Total Force Programming and Manpower Division. N12 acts as a single point of contact for Resource Sponsors and Claimants. N10 is the MPN Financial
Management Division, where all budget analysis and spending is conducted on behalf of N1 for MPN and RPN authorizations/appropriations. The Director of N10 is a Senior Executive Service position with 1517 responsibility whose 1517 authority was delegated from N1 to N10, and makes the Director solely responsible to Congress and the President for MPN and RPN expenditures. N8 is the Resources, Requirements and Assessments Division. The Deputy of N8 is chiefly responsible for the PPBES for the Navy. N8 holds the PPBES Managers: N80 (Programming), N81 (Assessment) and N82 (Fiscal). As the manager, N8 acts as a liaison between SECDEF/SECNAV, Claimants, N10, and N12. Once the BAM is coordinated between N10 and N12, N12 submits it to N8.

3. **Manpower Programming- Documents**

   a. **EPA/OPA**

   The Enlisted Program Authorizations (EPA) and Officer Program Authorizations (OPA) is a document issued annually and validated every four months to reflect current and projected requirements for enlisted and officer authorizations in TFMMS. They quantitatively and qualitatively identify rate and designator of projected enlisted and officer requirements by fiscal year across the FYDP. The information compromised in the EPA/OPA reflects manpower planners’ decisions regarding number of Navy accessions, personnel to train, and predicted promotion and retention plans (Hatch, 72).

   b. **FYDP**

   The Future Years Defense Program (FYDP) is an annual DOD published program that highlights approved plans of budgeting and reprogramming seven years out (www.bupers.navy.mil). It differs from DON’s FYDP that includes current and budget year information along with five years in the future. The DOD FYDP includes the current and budget years, a five year horizon of plans and one past year of plans.

   c. **PRESBUD**

   Following the Budgeting Phase, the Navy provides OSD and OMB with their submission to the PRESBUD. DON’s portion will be compiled into the DOD Budget, which will later become the PRESBUD and go before Congress. According to Constitutional Law, the PRESBUD is not a law but a mere suggestion to Congress who possesses all budgetary authority for the federal government.
4. Manpower Programming- Information Systems

The Manpower Programming information systems consist of TFMMS, WINPAT, and NHBS. TFMMS and WINPAT were discussed in the section on Manpower Programming- Sub-Process: PPBES.

F. PERSONNEL PLANNING QUADRANT OVERVIEW: DEMAND SIGNAL

![Personnel Planning Quadrant OSF Model](image)

Figure 16. Personnel Planning Quadrant OSF Model.

In this quadrant, Personnel Planners are responsible for developing Strength, Accession, School, and Advancement and Promotion Plans. Strength Planners and Community Managers collaborate to answer a projected ‘demand signal’ following Manpower Requirements and Programming phases while working within projected End Strength and Manpower appropriations. Strength Planners and Community Managers have a multitude of tasks, of which one is to predict losses and gains across the FYDP.
Personnel Planning: Sub-processes, Players, Documents and Information Systems

1. Personnel Planning-Sub-Processes

   a. Strength Planning

   "Strength planners predict, plan and manage the Navy’s total gains and losses for a given fiscal year in order to reach a Congressionally mandated End Strength while staying within budget (MPN)" (Hatch, 108). End Strength totals are listed by pay grade (Hatch, 111). Figure 17 shows the End Strength equation used by Strength Planners to manage End Strength:

   \[ BS - L + G = ES \]
   \[ \text{Beginning Strength (1 OCT) - Losses + Gains = End Strength (30 SEP)} \]

   Figure 17. End Strength Equation.

   Forecasting losses is done by looking at attrition, retention and retirement on a monthly basis by pay grade. Attrition occurs when a sailor does not fulfill an enlistment contract, while retention is a sailor’s reenlistment choice. Retirement happens when a member leaves after serving twenty or more years, is medically separated with a disability, or elects early retirement.

   Planners make decisions with the aid of models. The Annualized Cost of Leaving (ACOL) Model is used to predict losses associated with the effect of civilian pay and the economy on retention. The results of the ACOL Model is used in the Selective Reenlistment Bonus Model (SRB) to forecast the number of enlisted members to be retained at different bonus levels, and predicts the cost to the Navy (www.bupers.navy.mil).

   Predicting gains is done monthly by pay grade in order to obtain End Strength at the end of the fiscal year. The variables include accessions into the Navy (boot camp and officer training), lateral transfers from other services, and the Naval Reserve.

   b. Community Management

   A Community Manager’s job is to predict future community inventory from accession to retirement based on current inventory in order to shape the workforce.
In general, Officer and Enlisted Community Managers develop compensation policy, accessions, advancement and promotion plans, and A & C school training plans.

Community Manager’s Role

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compensation Policy</td>
<td>Incentives, SRBs</td>
</tr>
<tr>
<td>Accession Planning</td>
<td>Recruiting quotas (Skipper)</td>
</tr>
<tr>
<td>Advancement Planning</td>
<td>Promotions by community &amp; pay-grade</td>
</tr>
<tr>
<td>A and C School Plans</td>
<td>Quota planning</td>
</tr>
</tbody>
</table>

Table 1. Roles of Community Managers. (From: www.bupers.navy.mil, 17 March 2004)

2. Personnel Planning- Players

The key players in Personnel Planning are Military Personnel Plans and Policy (N13), Commander, Naval Education and Training Command (NETC) and Commander, Naval Recruiting Command (CNRC).

a. N13

“N13 and his staff develop and issue military personnel plans and policies, monitor adherence to ensure attainment of fiscal and end strength objectives, and plan and direct the career management and progression of Regular Navy personnel” (www.bupers.navy.mil). Their information directly affects CNRC and NETC goals.

b. CNRC

N13 produces and provides CNRC the Accession Implementation Plan and Rating Goals for the quantitative and qualitative mix of recruits by fiscal year. Table 2 represents the number of recruiting stations maintained by the services as of August 1999 (www.bupers.navy.mil).

Recruiting Stations

<table>
<thead>
<tr>
<th>Branch</th>
<th>Number of Stations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>1656</td>
</tr>
<tr>
<td>Air Force</td>
<td>916</td>
</tr>
<tr>
<td>Marines</td>
<td>1387</td>
</tr>
<tr>
<td>Navy</td>
<td>1325</td>
</tr>
</tbody>
</table>

Table 2. Number of Armed Forces Recruiting Stations. (From: www.bupers.navy.mil, 17 March 2004)
c. **NETC**

NETC is responsible for training A & C schools personnel.NETC may have as many as 43,800 students enrolled in NETC controlled courses at any one time (www.bupers.navy.mil).

3. **Personnel Planning- Documents**

   a. **Strength Plan and Accession Plan**

   Strength Plans were previously discussed in sufficient detail in Personnel Planning sub-processes. Accession Plans use the Skipper Model to predict the correct amount of accessions to predict recruiting goals and future inventory requirements.

   b. **School Plan**

   A & C School Plans are evaluated yearly and examined on a month-to-month basis to minimize the difference between authorizations and projected inventory (Hatch, 119-120). School Plans are tracked by pay grade and rating, gender, school capacity and length, instructor to student ratio, and attrition rates (Hatch, 120).

4. **Personnel Planning- Information Systems**

   The Personnel Planning phase uses multiple information systems to track the personnel inventory and school quotas. The systems include: Strength Planning Accession Navy (SPAN), Personalized Recruiting for Immediate and Delayed Enlistment (PRIDE), Navy Training Reservation System (NTRS), Navy Training Quota Management System (NTQMS), and Navy Integrated Training Resource and Administration System (NITRAS).

   Personnel planners use SPAN to monitor monthly strength by pay grade and rate. NTQMS uses historical data to book A & C school quotas by historical attendance rates. PRIDE (recruits) and NTRS (fleet) calculate the number of recruits/students needed. Detailers (Navy career monitors) can then log into NITRAS to check available school quotas (bupers.navy.mil).
Figure 18. Personnel Distribution Quadrant Overview.

BUPERS defines the Personnel Distribution process as: Putting the right person, in the right place, at the right time—but it is not complete until individual sailors are assigned to jobs that fully utilize their acquired occupational skills. Personnel distribution is the process whereby personnel managers direct the movement of individuals to fill command vacancies (bupers.navy.mil).

The process begins by identifying sailors who are nine months from their Projected Rotation Date (PRD). This projection separates non-distributable inventory from distributable inventory (Transients, in Training, Patients and Prisoners or non-distributable inventory). Personnel meeting the assignment criteria are known as the distributable inventory. Personnel are then allocated to the four Manning Control Authorities (MCAs): COMLANTFLT, COMPACFLT, BUPERS, and COMNAVRESFOR.
I. PERSONNEL DISTRIBUTION: SUB-PROCESSES, PLAYERS, DOCUMENTS AND INFORMATION SYSTEMS

1. Personnel Distribution-Sub-Processes

   a. Allocation

   Allocation consists of distributing sailors and officers among the four MCAs. The allocation is executed by Navy Personnel Command (NPC), comparing data from TFMMS, Enlisted Master File (EMF), and Officer Master File (OMF). The result of the allocation phase is a prioritized list of projected available billets and distributable inventory of sailors. The results of the allocation process is the input to placement and assignment. The result of assignment and placement is published as the Enlisted Distribution Verification Report (EDVR), otherwise known as the Navy Manning Plan (NMP).

   b. Placement and Assignment

   Placement is a highly labor intensive process in which command advocates search for the right sailor, with the right skills, for the right command and at the right time (Hatch, 131). This is also known as looking out for the command’s requirements (interests).

   Assignment considers the sailor’s preference, and puts a “face” in a “space.” The act of assigning sailors to billets is done by Assignment Officers (Detailers).

2. Personnel Distribution-Players

   a. NPC

   Navy Personnel Command, also known as BUPERS, is directly responsible for the Allocation Phase of Personnel Distribution. NPC is also home to Assignment and Placement Officers.

   b. EPMAC

   Enlisted Placement Management Center (EPMAC) produce the EDVR monthly, assigns all GENDETs and has oversight of enlisted assignments.

   c. MCAs

   As stated previously, the four MCAs are BUPERS (Millington, TN), COMLANTFLT (Norfolk, VA), COMPACFLT (Pearl Harbor, HI), and
COMNAVRESFOR (New Orleans, LA). The MCAs are responsible for “the quality, quantity and priority for assignment of personnel to all billets” (bupers.navy.mil).

3. Personnel Distribution—Documents

The main report from the Personnel Distribution Quadrant is the EDVR. It is published monthly by EPMAC, and it is used for “prioritized placement of limited faces to spaces” and reflects projected enlisted losses and gains (Hatch, 171).

4. Personnel Distribution—Information Systems

Personnel Distribution information systems include: Total Force Manpower Management System (TFMMS), Enlisted Master File (EMF), Enlisted Distribution Projection System (EDPROJ), Enlisted Assignment Information System (EAIS), Enlisted Personnel Requisition System (EPRES), and Jobs Advertising Selection System (JASS).

a. TFMMS and EMF

Personnel planners use TFMMS (Billet qualities) and EMF (sailor qualities) to retrieve data to begin the distribution process. In the Personnel Distribution Quadrant, the systems are used to give information on billet and sailor qualities. This, in turn, is used to ascertain the “distributable inventory” and allocate them in prioritized order to the four MCAs.

b. EDPROJ

EDPROJ is used as part of the allocation process. It measures current strength versus current billets, and projected strength versus projected billets (bupers.navy.mil). The results are passed to EPMAC to develop the Navy Manning Plan (NMP).

c. EPRES and EAIS

These are used during the assignment phase, in which requisitions are generated in EPRES and viewed by Assignment Officers via EAIS. The Assignment Officer then fills the projected vacancies with a sailor who possesses the requisite skills. The assigned sailor is sent orders through OPM.
d. **JASS**

JASS is a form of classifieds (job availabilities), in which a sailor can attempt to negotiate with his Assignment Officer for a projected opening job via the command career counselor. Once a job is agreed upon and assigned, the sailor is sent orders.

**J. SUMMARY**

The Navy MPT system is not a sequential system that operates in a specific order, nor is it easy to understand it fully. While multiple tasks exist, different information systems, documents and commands enter, exit and provide feedback to the dynamic hierarchy of systems. To a manpower novice or veteran, this system is complex and inefficient. However, the MPT system has been used successfully over the decades to manage Navy human capital. Today, it provides the fleet with over 365,000 trained, active-duty sailors. The MPT system supports the Navy’s requirement for high personnel readiness while attracting, training, developing and retaining the right amount of sailors. This system is critical in providing a global presence and dominance of the world’s sea lanes in support of accomplishing the Navy’s prescribed mission.
THIS PAGE INTENTIONALLY LEFT BLANK
IV. COMPARE AND CONTRAST

A. OVERVIEW

NAVMC 2664 Financial Guidebook for Commanders begins by describing the importance of fiscal responsibility,

Warfighting is our business. Although mission accomplishment is the commander’s ultimate litmus test, failure is a virtual certainty without effectively managed resources. The availability, proper use of and controls over funds directly impact every aspect of Command (NAVMC 2664 1).

To prevent misuse or overspending and to optimize the responsibility and implementation of fiscal resources, it can be deduced that the proper controls and structure need to be in place for the execution of the manpower budget.

As this chapter will illustrate, the Navy MPT and Marine Corps HRDP programming subsystems are surprisingly similar. They both utilize PPBES as the process to relate fiscal constraints with prioritized goals. Additionally, as this chapter will show, until the execution step, both PPBESs are nearly mirror images of each other. The purpose of presenting these programming quadrants side by side is to provide a perspective that may help answer why the Navy and Marine Corps chose to execute their manpower budgets differently, and whether or not executing like the Navy would improve the Marine Corps PPBES process.

To help answer these questions, this chapter will begin with a broad comparison of the Navy and Marine Corps programming quadrants and PPBES process. Then, the chapter will focus on the execution step of the PPBES process and the role of 1517 authority. Lastly, a graphical interpretation of the manpower budget submission and execution process will be presented, and will show the different levels of budget responsibility in the Navy and Marine Corps.

B. NAVY AND MARINE CORPS MANPOWER PROGRAMMING QUADRANTS

Figures 19 and 20 illustrate the obvious similarities of the MPT and HRDP manpower programming quadrants. They are both subject to similar environmental and
organizational inputs. The results of their outputs and outcomes are nearly identical, but there are some minute differences in throughputs (specifically their processes). The remainder of the chapter will concentrate on those variations.

Figure 19. The HRDP Programming Quadrant OSF Model.

Figure 20. The MPT System Programming Quadrant OSF Model.
C. INSIDE THE PROGRAMMING QUADRANT - THE PPBES

The heart of both programming quadrants is the sub-process used -- PPBES. The first three steps (planning, programming, and budgeting) are nearly identical within both the Navy and Marine Corps systems, as shown in Figures 21 and 22. The major difference lies within the execution step, and is the focus of the next section of the chapter.

Figure 21. The HRDP PPBES OSF Model.
D. WITHIN THE PPBE SYSTEMS - EXECUTION

1. DefiningExecution

The DOD PPBES is generally directed and monitored in same manner for all the Services. The only deviations from the norm are typically Service specific. For all Services, execution cannot begin until manpower programs are authorized by Congress (NDAA or Continuing Resolution) and signed into law by the President. Another point to keep in mind, budgeting does not stop simply because execution has began. Manpower accountants continually monitor average strength throughout the year towards the goal of matching Congressionally authorized end strength.

2. Importance of “1517 Authority”

a. 1517 Authority Defined

Title 31 U.S.C., Section 1517, titled Prohibitive Obligations and Expenditures, defines the reporting responsibility for officers and government officials who are accountable for spending federal funds. Section 1517 is one part of the Anti-Deficiency Act and is commonly known as 1517 authority. It enforces accountability at the level of command with operating budget responsibility, requiring them to report overspending or deviation from authorized spending amounts directly to Congress and
the President. This authority assigns direct reporting responsibility to Congress and the President and sole accountability for overspending. The importance of this authority cannot be underestimated because of the impact on an officer or employee’s career. Penalties include written reprimand and suspension without pay, and if found guilty of malicious or careless overspending, the punishment can range from fines to imprisonment.

b. 1517 Authority Delegation within MPT and HRDP

Earlier in the P&R overview of Chapter II, it is stated that each appropriation category has its own branch under the Finance Division at P&R. In this case, RFM accounts for all manpower spending throughout budget execution. This is different from the system the Navy uses, where budget formulation and execution are in the same office. The Navy’s Federal Senior Executive at N1O monitors the budgetary formulation and execution of the MPN account for the Chief of Naval Personnel (CNP). CNP empowered the authority and responsibility for spending to the N1O position. This has proved to be very efficient and effective so far, and in accordance with many of the bills that President Bush’s administration has proposed, such as the “Freedom to Manage Act of 2001” and the “Managerial Flexibility Act of 2001.” Current private sector business practices are also re-structuring their organizations to allow for more control and authority at lower level leadership positions. Therefore, the decentralization that occurred with CNP’s office is not uncommon to either the business world or the US government.

The separation of execution and responsibility poses philosophical and operational concerns for many Marine leaders. According to Major Robin Gallant, a senior officer within the Military Personnel Branch, Fiscal Division, P&R (RFM), this proves to be an interesting arrangement because

there are no incentives for the spenders (M&RA) to stay within budget. Especially due to the way Title 10 is actually worded where they cannot go under end strength, but they are allowed to go two percent over.

Clearly, there is a separation of powers here that may not be well placed. By looking at the anecdotal evidence provided by Major Gallant and the improvements made at N1, it
seems that organizational development is needed to enhance Marine Corps manpower budget execution.

3. Comparative Analysis of Navy MPT and Marine Corps HRDP Execution

As illustrated in Figure 23, the formulation and submission of the Navy and Marine Corps manpower budgets are similar within the PPBES processes (see Appendix L for an illustration of HQMC - CNO counterparts). However, the similarities end with the budgetary execution side. Within the Navy MPT system, the budgetary authority (1517) continues to move down to the same level of hierarchy responsible for formulating the policies, plans, and budgets. In contrast, within the HRDP, the budgetary authority remains one rung higher on the hierarchical ladder than in the Navy. Although the MP division is responsible for the formulation of the plans, policies, and budget that drive the HRDP, they do not hold budgetary authority during execution. This may violate the spirit of NAVMC 2664 where fiscal responsibility is inherent in command.

Figure 23. Manpower Budgetary Execution Comparison.
E. SUMMARY

Public and private sector trends are leading towards greater decentralization where decisions are made lower in the organizational hierarchy. The Navy, keen to the efficiency of decentralized responsibility, has placed both manpower budget formulation and execution authority in the same office. This chapter highlights the similarities between the Services and their PPBES processes, indicating the possibility for the Marine Corps to adopt decentralized manpower budget execution. A conclusion will be drawn that if DC, M&RA is responsible for executing manpower plans, then 1517 authority should be realigned accordingly.
V. CONCLUSIONS AND RECOMMENDATIONS

A. INTRODUCTION

The purpose of this study was to examine how budgetary (1517) authority could be structured to align responsibilities and improve overall program execution for the Military Personnel Marine Corps (MPMC) account. The thesis analyzed and compared the Marine Corps Combat Development Command (MCCDC), the Manpower and Reserve Affairs Department (M&RA), and the Programs and Resources Department (P&R) using systems theory as a descriptive and prescriptive foundation. Specifically, an Organizational Systems Framework (OSF) was used to analyze the Navy Manpower, Personnel, and Training (MPT) System and the Marine Corps Human Resource Development Process (HRDP) system to search for structural and process improvements.

B. CONCLUSIONS AND RECOMMENDATIONS

1. Conclusion 1

The Marine Corps budgetary (1517) authority is inappropriately aligned separating manpower execution decisions from fiscal responsibilities.

Recommendation: Structure budgetary authority for the MPMC account within M&RA vice P&R to improve HRDP system business practices. The point is to restructure responsibility for planning and executing human resource policy and financial control under the same roof (see Figure 24). The effective modeling of the Freedom to Manage Act and current private sector trends by the Navy's N-1 organization provides an operational example applicable to the Marine Corps. Figure 24 shows that when M&RA assumes RFM's (Military Personnel Branch, Fiscal Division, P&R) responsibilities, process controls would be realigned more effectively with the system owner.
The functionality of RFM being accepted by M&RA does not require any physical movement of equipment or personnel. RFM's current location at the Pentagon allows for coordination with higher headquarters (FMB) during budget execution. The main idea is that the operational functions previously identified with RFM would now be under the supervision of the director of MP Division, M&RA vice the director of Fiscal Division, P&R (see Figure 25). The new office, entitled Programs, Budget, and Financial Control, could retain the current responsibilities of the programs and budget officers from MP division, but also could envelop the responsibilities of RFM.
Figure 25. Proposed Manpower Plans Division Organization.

2. Conclusion 2

The amount of responsibility placed upon the new office of Programs, Budget, and Financial Control surpasses the rank currently assigned to either the head of RFM or Programs and Budget.

**Recommendation:** Assign a SES to head the new office of Programs, Budget, and Financial Control. Unlike the Navy's N10 (Financial Management Division), RFM is currently led by an active duty Marine colonel (while P&R's Table of Organization actually lists a Government Service - 15 as the requirement), not a SES. It is an incredible responsibility to formulate and execute 60 percent of the total obligational authority for the Marine Corps. Appointing a SES to this new billet would be a positive move towards stability and continuity in an office responsible for a $10 billion budget. Instead of an officer rotating through the position every few years, a SES would provide uninterrupted service and would be able to learn the intricacies of the position. Furthermore, a SES would help in matters external to M&RA, in terms of interaction with FMB and Congress. It would also provide a Marine Corps colonel for use in another relevant position.
The recommendation of combining the two offices is not a small organizational change. It will require combining the personnel, culture and work processes of two different groups. Therefore, the first SES appointed to the new position would be the ideal leader for the change process. The first appointee should be well versed in governmental budgeting and accounting, but also in team effectiveness and consensus building.

Due to realignment of the two offices and increased responsibility for the leadership of MP Division, a SES should be appointed to the Deputy Director, MP Division. Once again, it is important to have continuity in this position, especially as the staff leader and close assistant to the Director, MP Division. While the Director position is filled by a Major General who maintains the Marine face for the division, a SES would be better suited as his/her deputy because their continuous service would allow them to become more familiar with the entire system and its processes. As Director positions change every few years, the permanency of a SES deputy would be conducive to seamless transitions.
APPENDIX A. UNIVERSAL NEEDS STATEMENT (UNS) AND TABLE OF ORGANIZATION AND EQUIPMENT CHANGE REQUEST (TOECR)

A. UNS

All Universal Need Statements are entered into a web-based format for tracking purposes. The link for the Combat Development Tracking System (CDTS) web site is https://www.cdts.marinecorps.mil. Please ensure the letter “s” is included in the URL (https). For access to the web site, or if further information is required regarding this processing and status of your submission, please contact the Capabilities and Assessment Branch (CAB) CDTS representative.

Personnel assigned to CAB, phone numbers and e-mail addresses can be found under http://www.hqmc.usmc.mil/ by clicking on the CAB link. Information about the EFDS may be found by clicking on the EFDS link.

The UNS development path is depicted below. Please see page 5 for further submission instructions.

NAVMC 11475 (Oct 02)
UNIVERSAL NEED STATEMENT (UNS)
Part 1a of 5 - Originator's Request

Name (Last, First, Initial) | Barry, John, C
Rank/Grade | Capt/C3
Phone | 647-1580
Fax NA
Email | jcbarrvf4npseoa

Type of Need (select one that best describes the need)
- ADD a new capability that does not exist
- IMPROVE or FIX an existing capability
- REMOVE an existing capability

Description of Need

Within the 7208 / 7242 community, it has long been a belief that enlisted Marines (7242s) have more than adequate capability to perform as Air Support Control Officers. Currently, the positions that Air Support Control Officers hold within the Direct Air Support Center are: Senior Air Director, Tactical Air Director, and Helicopter Director. We are asking the advocates to recommend that the positions of Tactical Air Director and Helicopter Director be changed from officer billets to enlisted billets. This need was identified during numerous real world and training environments.

When Needed

- URGENT
- 6 Months
- 1 Year
- 2 Years
- 5 Years
- 10 Years
- Other (state)

Rationale

The five year window will be required in order to create enough new 7242s to fill up the new Senior 7242s into their new billets as Air Support Controllers. The schoolhouse will also need to revamp the officer training curriculum to focus on graduating combat ready Senior Air Directors vica the generic Air Support Control Officer graduate of the past. The five year window will also allow for the re-distribution of old 7208s.
**UNIVERSAL NEED STATEMENT (UNS)**

**Part 1a of 5 - Originator's Request**

**Describe mission or task to be accomplished that is related to the need.**

| The task being asked of these Marines is as follows: Procedural control of aircraft, both fixed and rotary wing; ordnance recognition and target assignment based on their knowledge of aviation ordnance; threat recognition of all types of anti-aircraft weapons, and the enemy ground threat weaponry / vehicles; knowledge of ground to ground and ground to air and air to air communications architecture and the manipulation of that architecture in order to eliminate the enemy; prioritization of aviation assets due to commander's intent, ordnance to threat matching, and medical necessity in the case of casesvac; in depth understanding of map reading ability |

**How does the need improve your ability to perform the mission or task?**

| Fewer officers in the Squadron will open up more advancement and promotion opportunities in the enlisted 7242 community, which in turn will increase morale within the enlisted community and provide retention incentives to 7242s across the Marine Corps due to the high profile and high responsibility position being opened to them. |

**If the need is not satisfied, how will it affect your ability to perform the mission or task?**

<p>| If not satisfied, the mission will continue to be accomplished, yet the retention rates of both 7208s and 7242s will continue to be extremely low. Low retention rates increase the needs for high accession and training costs which could be reduced should this measure be accepted and endorsed by the advocate. |</p>
<table>
<thead>
<tr>
<th>Approval Authority – Regimental Level or as appropriate (Battalion, Squadron, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Command</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Mailing Address</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Date Received</strong></td>
</tr>
<tr>
<td>Approval Authority Comments (optional)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Approval Authority – MEF Level or as appropriate (Division, Wing, Service Support Group, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Command</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Mailing Address</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Date Received</strong></td>
</tr>
<tr>
<td>Approval Authority Comments (optional)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Approval Authority – MAR FOR Level or as appropriate*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Command</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Mailing Address</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Date Received</strong></td>
</tr>
<tr>
<td>Approval Authority Comments (optional)</td>
</tr>
</tbody>
</table>

General Officer's Signature Block
1. Issues should be forwarded to CG MCCDC via respective chains of command.

2. Issues require one General Officer's signature (at any level i.e. MARFOR, MEF, Div/Wing/FSSG, etc.) to be processed. MARFOR endorsement may be Chief of Staff (COS). Endorsement may be Executive Assistant (EA) for Division within HQMC. **An UNS will not be accepted by MCCDC without the proper endorsement.**

3. A disk copy should be forwarded through the chain of command along with the hard copy in case changes need to be made.

4. Additionally, please forward an electronic copy to the Capabilities and Assessments Branch (CAB), EFDC, MCCDC. CAB will store this copy as a “warning order” until they receive the hard copy (routed through your chain of command) with a General Officer’s signature.

5. Upon receipt of the hard copy, the UNS will be entered into the Combat Development Tracking System (CDTS) and staffed for appropriate review. CAB will also send an “e-mail acknowledgement” to the originator. This e-mail will include an assigned CDTS Title and Identity Number for tracking purposes on the CDTS web site. Information concerning the routing process of the UNS can be viewed on the first page of this form.

6. The link for the Combat Development Tracking System (CDTS) web site is [https://www.cdts.marcorsyscom.usmc.mil](https://www.cdts.marcorsyscom.usmc.mil). Please ensure the letter “s” is included in the URL (https). For access to the web site, or if further information is required regarding this processing and status of your submission, please contact the Capabilities and Assessment Branch (CAB) CDTS representative.

7. Current personnel assigned to the CAB phone numbers, E-mail addresses may be found under [http://www.mccdc.usmc.mil](http://www.mccdc.usmc.mil) by clicking on the Capabilities Assessment Branch link.
B. TOECR

**T/O & E CHANGE REQUEST**

**NAVMC 11355 (1-00)**

**SN: 0109-LF-071-0000 Ref MCO P5111.1C**

**Complete a Separate Change Request for EACH T/O & E**

**Data: 040802**

**T/O & E TO BE MODIFIED (List both T/O and T/E Number)**

**8660**

**UNIT IDENTIFICATION CODE (UIC) OF UNIT**

**00830**

**ACTIVITY ADDRESS CODE (AAC) OF UNIT**

**Does this change impact unit mission? No**

*If yes, explain below.* (Provide brief narrative of change and attach revised mission statement to this request.)

**Does this change impact billet requirements? Yes**

*If yes, complete below.* (List current billet line detail information, then proposed detailed changes per codes listed in the T/MR user's manual. Identify compensation by T/O and line number only. Repeat for every line change desired. Information may be attached as a spreadsheet, modified electronic copy of the T/O, or inserted into this area of the form. At a minimum, the following elements must be included.)

<table>
<thead>
<tr>
<th>LNBR</th>
<th>BILLET DESCRIPTION</th>
<th>GRADE</th>
<th>MOS</th>
<th>BILLET STATUS</th>
<th>QTY</th>
<th>MCC</th>
<th>RUC</th>
<th>COMPENSATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>23-35</td>
<td>Air Support Ctrl Off</td>
<td>O1-O2</td>
<td>7288</td>
<td>Active</td>
<td>12</td>
<td>1EG</td>
<td>90830</td>
<td>8660 42-54</td>
</tr>
</tbody>
</table>

**Does this change impact equipment allowances? No**

*If yes, explain below.* (Repeat the item description and all information required below for each item.)

**ITEM DESCRIPTION:** (Repeat the item description and all information provided below for each item.)

<table>
<thead>
<tr>
<th>TAMCN</th>
<th>NSN</th>
<th>NOMENCLATURE</th>
<th>AUTHORIZED</th>
<th>ON-HAND</th>
<th>RECOMMENDED</th>
</tr>
</thead>
</table>

**JUSTIFICATION:**

*Justification must be detailed enough to specify the change to unit doctrine, mission, organization, concept of employment, or demonstrated deficiency of present T/O & E necessitating change request. Each billet or item change must be addressed in the narrative.)*

Within the 7208 / 7242 community, it has long been a belief that enlisted Marines (7242s) have more than adequate capability to perform as Air Support Control Officers. Currently, the positions that Air Support Control Officers hold within the Direct Air Support Center are: Senior Air Director, Tactical Air Director, and Helicopter Director. We are asking the advocates to recommend that the positions of Tactical Air Director and Helicopter Director be changed from officer billets to enlisted billets. This need was identified during numerous real world and training environments. The task being asked of these Marines is as follows: Procedural control of aircraft, both fixed and rotary wing; ordnance recognition and target assignment based on their knowledge of aviation ordnance; threat recognition of all types of anti-aircraft weapons, and the enemy ground threat weaponry / vehicles; knowledge of ground to ground and ground to air and air to air communications architecture and the manipulation of that architecture in order to eliminate the enemy; prioritization of aviation assets due to commander’s intent, ordnance to threat matching, and medical necessity in the case of casevac; in depth understanding of map reading ability.
Fewer officers in the Squadron will open up more advancement and promotion opportunities in the enlisted 7242 community, which in turn will increase morale within the enlisted community and provide retention incentives to 7242s across the Marine Corps due to the high profile and high responsibility position being opened to them.

If not satisfied, the mission will continue to be accomplished, yet the retention rates of both 7208s and 7242s will continue to be extremely low. Low retention rates increase the needs for high accession and training costs which could be reduced should this measure be accepted and endorsed by the advocate.
APPENDIX D. M&RA ORGANIZATION

LiGen Parks
DC/M&RA

Mr. Rhodes
ADCM&RA

MajGen Huck
Pers Management

MajGen Bergman
Reserve Affairs

BGen Ghormley
Plans and Policy

Mr. Downs
Pers/Family Readiness

Col Bennett
Info Supt Div

Mr. Jenkins
PM Division

87
APPENDIX E. SERVICE CHAIN OF COMMAND AND OPERATIONAL CHAIN OF COMMAND

Command Relationships

(Formerly known as) NATIONAL COMMAND AUTHORITIES

PRESIDENT
SECRETARY OF DEFENSE
SECRETARY OF THE NAVY
COMMANDANT OF THE MARINE CORPS
MARINE CORPS COMPONENT COMMANDER
MAGTF COMMANDER

ADCON vs. OPCON
THIS PAGE INTENTIONALLY LEFT BLANK
APPENDIX F. CMC ORGANIZATIONAL CHART
Resource Sponsors

| RS Code & Organization |  
|------------------------|---|
| 00 Undistributed       |  
| 000 ** No Resource Sponsor Identified |  
| 00N N00N Director of Naval Nuclear Propulsion Program |  
| 091 N091 Director of Navy T&E Technology Req |  
| 093 N093 Director of Naval Medicine/Surgeon General |  
| 095 N095 Director of Naval Reserve |  
| 096 N096 Oceanographer of the Navy |  
| 097 N097 Dir of Religious Ministries/Chief Chaplains |  
| 09B N09B Assistant Vice Chief of Naval Operations |  
| 1 N1 DCNO (Manpower and Personnel) |  
| 2 N2 Director of Naval Intelligence |  
| 3/5 N3/N5 DCNO (Plans, Policy, & Operations) |  
| 4 N4 DCNO (Logistics) 6 N6 Director, Space & Electronic Warfare |  
| 60 CINCLANTFLT |  
| 7 N7 Director of Naval Training |  
| 70 CINCPACFLT 75 N75 Director, Expeditionary Warfare |  
| 76 N76 Director, Surface Warfare |  
| 77 N77 Director, Submarine Warfare |  
| 78 N78 Director, Air Warfare |  
| 79 N79 Director of Naval Training |  
| 8 N8 DCNO (Resources, Warfare Requirements & Assmt) |  
| 80 N80 Director of Programming |  
| 81 N81 Director of Assessments |  
| 82 N82 Director of Fiscal Management |  
| 83 N83 Director, CINC Liaison |  
| 85 N85 Director, Expeditionary Warfare |  
| 86 N86 Director, Surface Warfare |  
| 87 N87 Director, Submarine Warfare |  
| 88 N88 Director, Air Warfare |  
| 89 N89 Director, Special Programs |  
| MC Commandant of the Marine Corps (USMC) |
### Manpower Claimants

<table>
<thead>
<tr>
<th>Claimant</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief of Naval Operations (CNO) Assistant for Field Support (CNO) (N09bF)</td>
<td>11</td>
</tr>
<tr>
<td>Assistant for Administration, Office of Under Secretary of the Navy (SECNAV) (AAUSN)</td>
<td>12</td>
</tr>
<tr>
<td>Chief of Naval Research (CNR)</td>
<td>14</td>
</tr>
<tr>
<td>Office of Naval Intelligence (ONI)</td>
<td>15</td>
</tr>
<tr>
<td>Chief, Bureau of Medicine and Surgery (BUMED)</td>
<td>18</td>
</tr>
<tr>
<td>Commander, Naval Air Systems Command (COMNAVAIRSYSCOM)</td>
<td>19</td>
</tr>
<tr>
<td>Chief of Naval Personnel (CHNAVPERS PERS 02)</td>
<td>22</td>
</tr>
<tr>
<td>Commander, Naval Supply Systems Command (COMNAVSUPSYSCOM)</td>
<td>23</td>
</tr>
<tr>
<td>Commander, Naval Sea Systems Command (COMNAVSEASYSCOM)</td>
<td>24</td>
</tr>
<tr>
<td>Commander, Naval Facilities Engineering Command (COMNAVFACENGCOM)</td>
<td>25</td>
</tr>
<tr>
<td>Commandant of the Marine Corps (CMC)</td>
<td>27</td>
</tr>
<tr>
<td>Director, Strategic Systems Programs (CM3) (DIRSSP)</td>
<td>30</td>
</tr>
<tr>
<td>Commander, Military Sealift Command (COMSC)</td>
<td>33</td>
</tr>
<tr>
<td>Commander, Space and Naval Warfare Systems Command (COMSPAWARSYS6COM)</td>
<td>39</td>
</tr>
<tr>
<td>Commander in Chief, U.S. Atlantic Fleet (CINCLANTFLT)</td>
<td>60</td>
</tr>
<tr>
<td>Commander in Chief, U.S. Naval Forces, Europe (CINCUSNAVEUR)</td>
<td>61</td>
</tr>
<tr>
<td>Chief of Naval Education and Training (CNET)</td>
<td>62</td>
</tr>
<tr>
<td>Commander, Naval Computer and Telecommunications Command (COMNAVCMTLCOMM)</td>
<td>63</td>
</tr>
<tr>
<td>Commander, Naval Meteorology and Oceanography Command (COMNAVMETOCOM)</td>
<td>65</td>
</tr>
<tr>
<td>Commander, Naval Security Group Command (COMNAVSECGRU)</td>
<td>69</td>
</tr>
<tr>
<td>Commander in Chief, U.S. Pacific Fleet (CINCPCFLT)</td>
<td>70</td>
</tr>
<tr>
<td>Commander, Naval Reserve Force (CMNAVRESFOR)</td>
<td>72</td>
</tr>
<tr>
<td>Commander, Naval Special Warfare Command (COMNAVSPECWARCOM)</td>
<td>74</td>
</tr>
</tbody>
</table>
APPENDIX I. NAVY ORGANIZATION CHART

Navy Organization Chart
APPENDIX J. N1 ORGANIZATION CHART

N1 Organization Chart

N1
Chief of Naval Personnel

N10
MPN Financial Management Division

N11
Civilian Community Management Division

N12
Total Force Programming, Manpower and Information Resource Mgmt Division

N13
Military Personnel Plans and Policy
N8 Organization Chart
APPENDIX L. NAVY AND MARINE CORPS COUNTERPARTS

Navy – Marine Corps Counterparts

N1----------------------M&RA
N2----------------------DIR, INTEL
N3/N5-------------------PP&O
N4---------------------MCCDC, DC I&L
N6----------------------DIR C4
N7---------------------P&R, MCCDC
N8----------------------P&R
N78---------------------DC AVN
N09B(DNS)----------------DMCS
LIST OF REFERENCES


Department of Defense Instruction 1300.20 DOD Joint Officer Management Program Procedures.


Hatch, Commander Bill, The Manpower, Personnel, and Training Course MN2111 ([Monterey]: [Graduate School Of Business & Public Policy, Naval Postgraduate School].


Marine Corps Order 1553.2 Management of Marine Corps Formal Schools and Training Detachments.

Marine Corps Order 3900.15 Marine Corps Expeditionary Force Development System (EFDS).

Marine Corps Order 5311.1 Total Force Structure Process (TFSP).

Marine Corps Order 5320.12 Precedence Levels for Manning and Staffing.


Mutty, Captain John, personal interview, November-December 2004.

OPNAVINST 1000.16J Determination and Documentation of Total Force Manpower Requirements.

Reardon, Lieutenant Commander, personal interview, 18 March 2004.


Training and Education Command Bulletin 5214 *Training and Education Command (TECOM) Recurring Reports*.

United States Marine Corps, Headquarters website, 20 March 2004  

United States Marine Corps, Marine Corps Combat Development Command website, 20 March 2004  

United States Marine Corps, Marine Corps Combat Development Command website, 20 March 2004  

United States Navy, Bureau of Personnel website, 17 March 2004  

United States Navy, FY 2005 Budget of the Department of the Navy, 18 March 2004  

United States Navy, Naval Manpower Analysis Center website, 17 March 2004  
<www.navmac.navy.mil>.

Whitney, Bradley & Brown, Incorporated, *Manpower, Personnel & Training* ([Vienna, VA]).

Zamarrita, Captain Luis, personal interview, 28 October 2004.

INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center  
   Ft. Belvoir, Virginia

2. Dudley Knox Library  
   Naval Postgraduate School  
   Monterey, California

3. Naval Postgraduate School  
   Academic Associate, Manpower Systems Analysis  
   Monterey, California

4. Professor Cary Simon  
   Naval Postgraduate School  
   Monterey, California

5. Commander Bill Hatch, Code GP/Hh  
   Naval Postgraduate School  
   Monterey, California

6. LtCol Susan Dooley, USMC (Ret.)  
   Naval Postgraduate School  
   Monterey, California

7. Ms. Jo Decker  
   Bureau of Navy Personnel (Pers N10)  
   Department of the Navy  
   Washington, DC

8. Marine Corps Representative  
   Naval Postgraduate School  
   Monterey, California

9. Director, Training and Education, MCCDC, Code C46  
   Quantico, Virginia

10. Director, Marine Corps Research Center, MCCDC, Code C40RC  
    Quantico, Virginia

11. Marine Corps Tactical Systems Support Activity (Attn: Operations Officer)  
    Camp Pendleton, California
12. Professor Richard Doyle  
    Naval Postgraduate School  
    Monterey, California

13. Professor Lawrence Jones  
    Naval Postgraduate School  
    Monterey, California

14. Captain John Mutty, USN (Ret)  
    Naval Postgraduate School  
    Monterey, California