



**NAVAL
POSTGRADUATE
SCHOOL**

MONTEREY, CALIFORNIA

THESIS

**LEADING FACTORS DETERMINING LATERAL
TRANSFER SUCCESS**

by

Ryan T. Dailey

March 2013

Thesis Advisor:
Thesis Co-Advisor:

Dina Shatnawi
Bill Hatch

Approved for public release; distribution unlimited

THIS PAGE INTENTIONALLY LEFT BLANK

REPORT DOCUMENTATION PAGE			<i>Form Approved OMB No. 0704-0188</i>	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE March 2013	3. REPORT TYPE AND DATES COVERED Master's Thesis	
4. TITLE AND SUBTITLE LEADING FACTORS DETERMINING LATERAL TRANSFER SUCCESS			5. FUNDING NUMBERS	
6. AUTHOR(S) Ryan T. Dailey			8. PERFORMING ORGANIZATION REPORT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A			11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government. IRB Protocol number NPS.2013.0030-IR-EP5-A.	
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution unlimited			12b. DISTRIBUTION CODE A	
13. ABSTRACT (maximum 200 words) This study examines the characteristics of officers applying to and being selected by lateral transfer boards using biannual redesignation data from November 2010 through November 2012. The lateral transfer board reviews approximately 500 applicants each year. The majority of the Restricted Line designators rely on lateral transfer boards as their primary means of accessing new officers, where the average applicant is an O-3, male, and is a surface warfare officer (1110). Although the applicants are moderately different at each board, the aggregate selection rate is 40 percent. A probit analysis suggests that officers who are most likely to be successful at redesignating are Hispanic and O-4, as well as Limited Duty Officers. The regression results indicate that there is no gender difference in selection but senior pay grades are selected at a higher rate, where Information Professional and Foreign Area Officer communities currently have the greatest demand for officers at the lateral transfer boards. Additionally, Surface Warfare provides the greatest supply of applicants on average, but holding all else equal, an officer is less likely to be selected if he or she applies as a surface warfare officer.				
14. SUBJECT TERMS Lateral Transfer, Redesignation, Accessions, Designators, Force Structure, Manpower, End-Strength			15. NUMBER OF PAGES 83	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UU	

THIS PAGE INTENTIONALLY LEFT BLANK

Approved for public release; distribution unlimited

LEADING FACTORS DETERMINING LATERAL TRANSFER SUCCESS

Ryan T. Dailey
Lieutenant, United States Navy
B.S., San Diego State University, 2007

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

**NAVAL POSTGRADUATE SCHOOL
March 2013**

Author: Ryan T. Dailey

Approved by: Dina Shatnawi
Thesis Advisor

Bill Hatch
Thesis Co-Advisor

Bill Gates
Dean, Graduate School of Business and Public Policy

THIS PAGE INTENTIONALLY LEFT BLANK

ABSTRACT

This study examines the characteristics of officers applying to and being selected by lateral transfer boards using biannual redesignation data from November 2010 through November 2012. The lateral transfer board reviews approximately 500 applicants each year. The majority of the Restricted Line designators rely on lateral transfer boards as their primary means of accessing new officers, where the average applicant is an O-3, male, and is a surface warfare officer (1110). Although the applicants are moderately different at each board, the aggregate selection rate is 40 percent. A probit analysis suggests that officers who are most likely to be successful at redesignating are Hispanic and O-4, as well as Limited Duty Officers. The regression results indicate that there is no gender difference in selection but senior pay grades are selected at a higher rate, where Information Professional and Foreign Area Officer communities currently have the greatest demand for officers at the lateral transfer boards. Additionally, Surface Warfare provides the greatest supply of applicants on average, but holding all else equal, an officer is less likely to be selected if he or she applies as a surface warfare officer.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

I.	INTRODUCTION.....	1
A.	LATERAL TRANSFER OVERVIEW	2
B.	PURPOSE.....	3
C.	SCOPE AND METHODOLOGY	3
D.	RESEARCH QUESTIONS.....	3
E.	ORGANIZATION OF THESIS	4
II.	BACKGROUND	5
	1. Officer Community Structure	5
	2. Unrestricted Line Officers	6
	3. Restricted Line Officers	7
	4. Staff Corps Officers	8
	5. Limited Duty Officers.....	8
B.	REQUIREMENTS FOR LATERAL TRANSFER	10
C.	LATERAL TRANSFER APPLICATION AND SELECTION PROCESS	11
	1. Lateral Transfer Application Packages	11
	2. Selection Process	12
D.	MOTIVATIONS FOR LATERAL TRANSFER.....	13
	1. Personal.....	13
	<i>a. Quality of Work Life and Morale</i>	<i>14</i>
	<i>b. Leadership</i>	<i>15</i>
	2. Professional/Organizational.....	16
	<i>a. Person-Job Fit.....</i>	<i>16</i>
	<i>b. Career Opportunities.....</i>	<i>17</i>
	3. Summary.....	17
III.	LITERATURE REVIEW	19
A.	OVERVIEW.....	19
B.	LITERATURE REVIEW	19
	1. Accession Possibilities.....	19
	2. Retention and Career Progression	20
	3. Organizational Impacts	23
C.	SUMMARY	25
IV.	DATA, METHODOLOGY AND RESULTS	27
A.	INTRODUCTION.....	27
B.	DATA DESCRIPTION	27
C.	VARIABLE DESCRIPTIONS AND DESCRIPTIVE STATISTICS.....	28
	1. Gender.....	28
	2. Designators	29
	3. Rank	30
	4. Race	32
	5. Alternate Designator.....	33

6.	Time as an Officer.....	34
D.	SUPPLY AND DEMAND ANALYSIS	35
1.	Quota Supply (OUT).....	35
2.	Quota Demand (IN)	39
E.	PROBIT MODEL	42
F.	VARIABLE DEFINITION	43
G.	HYPOTHESIS.....	44
H.	PROBIT RESULTS.....	45
1.	Gender.....	45
2.	Rank	46
3.	Time as Officer	47
4.	Board Date.....	48
5.	Applying Designator	49
6.	Alternate Designator.....	51
7.	Race	51
8.	Current Designator	53
V.	SUMMARY, CONCLUSION AND DISCUSSION.....	55
A.	SUMMARY	55
B.	CONCLUSIONS AND RECOMMENDATIONS.....	56
1.	Research Question 1: What Are the Characteristics and Trends of Officers who Apply for Lateral Transfer?	56
a.	<i>Conclusion</i>	56
b.	<i>Recommendation</i>	57
2.	Research Question 2: Can One Predict the Likelihood that an Officer is Chosen for Lateral-Transfer Based on Observable Characteristics and if so, which Factors Contribute Most to the Selection Process?	57
a.	<i>Conclusion</i>	57
b.	<i>Recommendation</i>	58
3.	Research Question 3: Which Officer Designators Provide the Most and Fewest Lateral Transfers Applicants as Well as which Designators are the Most Desirable and Most Available? ..	58
a.	<i>Conclusion</i>	58
b.	<i>Recommendation</i>	59
C.	FURTHER RESEARCH.....	59
	LIST OF REFERENCES	61
	INITIAL DISTRIBUTION LIST	65

LIST OF FIGURES

Figure 1.	Percentage of sea/shore MPN (From OPA, 2012).....	6
Figure 2.	Applied vs. selected, all boards, November 2010 through November 2012 ...	28
Figure 3.	Applicants by race, November 2010 through November 2012	32
Figure 4.	Applicants selected by race, November 2010 through November 2012	33
Figure 5.	Applicants by year group, all boards, November 2010 through November 2012.....	35

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF TABLES

Table 1.	URL Designators and Inventory (From OPA, 2012).....	7
Table 2.	RL Designators (From OPA, 2012).....	7
Table 3.	Staff Corps Designators (From OPA, 2012).....	8
Table 4.	LDO Designators (From OPA, 2012).....	10
Table 5.	Frequency and percentage of requests by community.....	29
Table 6.	Selection by rank of applicants, November 2010.....	30
Table 7.	Selection by rank of applicants, June 2011.....	30
Table 8.	Selection by rank of applicants, November 2011.....	30
Table 9.	Selection by rank of applicants, June 2012.....	31
Table 10.	Selection by rank of applicants, November 2012.....	31
Table 11.	Selection by rank of applicants, November 2010 through November 2012....	31
Table 12.	Quota supply by community, November 2010–November 2012.....	36
Table 13.	Success rate by community, November 2010.....	37
Table 14.	Success rate by community, June 2011.....	37
Table 15.	Success rate by community, November 2011.....	37
Table 16.	Success rate by community, June 2012.....	38
Table 17.	Success rate by community, November 2012.....	38
Table 18.	Success rate by community, November 2010 through November 2012.....	38
Table 19.	Quota Demand in, November 2010.....	39
Table 20.	Quota Demand in, June 2011.....	40
Table 21.	Quota Demand in, November 2011.....	40
Table 22.	Quota Demand in, June 2012.....	41
Table 23.	Quota Demand in, November 2012.....	41
Table 24.	Probit Results (Gender).....	46
Table 25.	Probit Results (Rank).....	47
Table 26.	Probit Results (Time as Officer).....	48
Table 27.	Probit Results (Board Date).....	49
Table 28.	Probit Results (Requested Designator).....	51
Table 29.	Probit results (Alternate Designator).....	51
Table 30.	Probit Results (Race).....	52
Table 31.	Probit Results (Current Designator).....	54

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF ACRONYMS AND ABBREVIATIONS

AEDO	Aerospace Engineering Duty Officer
AMDO	Aviation Maintenance Duty Officer
APC	Academic Profile Code
CAN	Center for Naval Analysis
CAPT	Captain (O6)
CDR	Commander (O5)
CNO	Chief of Naval Operations
DCNO	Deputy Chief of Naval Operations
DMDC	Defense Management Data Center
EDO	Engineering Duty Officer
ENS	Ensign (O1)
EOD	Explosive Ordnance Disposal
FAO	Foreign Area Officer
FITREP	Fitness Report
GENAV	General Aviation
HR	Human Resources
INTEL	Intelligence
IP	Information Professional
IW	Information Warfare
JAG	Judge Advocate General
LCDR	Lieutenant Commander (O4)
LDO	Limited Duty officer
LOGIT	Logistic Regression
LT	Lieutenant (O3)
LTJG	Lieutenant Junior Grade (O2)
MILPERSMAN	Military Personnel Manual
NAVPERSCOM (NPC)	Navy Personnel Command

NFO	Naval Flight Officer
NPS	Naval Postgraduate School
NROTC	Naval Reserve Officer Training Corps
OCEANO	Oceanography Officer
OCM	Officer Community Manager
OCS	Officer Candidate School
OMF	Officer Master File
OPNAVINST	Chief of Naval Operations Instruction
OSR	Officer Summary Report
PAO	Public Affairs Officer
PRD	Planned Rotation Date
PROBIT	Probability Regression
PSR	Performance Summary Report
RL	Restricted Line
SECNAVINST	Secretary of the Navy Instruction
SUB	Submarine Officer
SWO	Surface Warfare Officer
URL	Unrestricted Officer

ACKNOWLEDGMENTS

I would like to acknowledge several people. First and foremost, the unwavering support from friends, family and loved ones gave me strength in the times of adversity. Their constant encouragement allowed me to maintain focus and a clear perspective.

I appreciate my advisor's time and effort. As a professor, Dina Shatnawi developed my interest in multivariate analysis and provided me the foundation to work with the STATA software. As a thesis advisor, she was instrumental in the final probit model and guided me to present the material as an Econometrician. She taught me to be more cohesive and provided valuable life lessons.

As a professor, Bill Hatch educated me on the value of manpower analysis and inspired me to think critically about force structure, helping develop this area of research. As a thesis advisor, he provided critical recommendations, corrections, and support. His experience, guidance, and advice helped make this process more manageable and efficient.

I could not have conducted this research without the data provided by Linda Coffield at PERS 803, the guidance from Rikki Panis during the Institutional Review Board, or support and advice from Susan Hawthorne in the Thesis Processing Office.

THIS PAGE INTENTIONALLY LEFT BLANK

I. INTRODUCTION

Retaining the best officers is essential to mission readiness and appropriate force structure. A useful tool to stabilize and fill manpower shortages is the lateral transfer/redesignation process. It redistributes the current available human capital to alleviate deficiencies and supports the Navy's goal of placing the right person in the right job. Leveraging the current manpower optimizes cost savings and reduces training time by minimizing the need to access new officers.

Previous studies (Cook & Mooney, 2004) have indicated that the Restricted Line (RL) and Staff Corps (SC) communities access their officer inventory mainly from the lateral transfer process. Despite a select few, officers that are commissioned through the Naval Academy or Naval Reserve Officer Training Corps (NROTC) are required to join the ranks of the URL communities. This leaves the RL and SC communities to be heavily dependent on the lateral transfer process to acquire their manpower inventory. Therefore, it is necessary to better understand the criteria necessary to lateral transfer so that there is more structure and guidance for military officers to transfer in the future. For example, warfare qualified officers especially Surface Warfare Officers are better performers, retain longer once redesignated and are more likely to be promoted, indicating that these officers should have the highest selection rates (Monroe & Cymrot, 2004). Review of the characteristics of applicants to the lateral transfer board compared to those selected will provide insight on the Navy's return on investment. In particular, this study examines the characteristics of officers applying to and being selected by lateral transfer boards. Analyzing the characteristics that provide the highest likelihood of selection is important because previous research suggests that applicants that do not get selected for lateral transfer are twice as likely to leave the Navy (Ryan, 2007). These officers are motivated to stay in the Navy but are not satisfied with their current community. Therefore, if not selected for the designator of their choice they tend to leave the Navy to find alternate career opportunities that provide higher morale and job satisfaction.

These officers who apply to the lateral transfer board are highly experienced, trained, and productive members of the Navy, who are motivated to serve long careers

(Wilcove, 1991, Cook & Mooney, 2004). Their extensive fleet and operational knowledge cannot be easily duplicated. Failing to place these officers in appropriate billets that best utilize their skills and abilities has been shown to have negative effects such as manpower shortages, knowledge gaps and retention problems. Monroe and Cymrot (2004) find that any restriction on Unrestricted Line (URL) lateral transfers will decrease the warfare experience, productivity, and promotion rates in the Restricted Line (RL) communities. The Navy can benefit from better understanding the transfer structure and propose changes such that officers can be better utilized to meet end strength requirements in the RL communities, especially at the O3 level as opposed to separating. As a result, this study will examine the outcomes of the lateral transfer board and identify leading factors that determine lateral transfer success.

A. LATERAL TRANSFER OVERVIEW

The term lateral transfer refers to the movement of a person or persons from one department to another within the same organization. These shifts typically maintain an individual's rank, level, and/or pay status but changes their job, tasks, title, and/or responsibilities. Specifically, within the Navy this refers to a change of designator. These designators are a four digit code assigned to an officer upon commission. It indicates the specific occupation specialty an officer performs as well as which community an officer belongs to. These communities are categorized as the Unrestricted Line (URL), Restricted Line (RL), Staff Corps (SC) or Limited Duty Officer (LDO) community.

Redesignation occurs through two main channels. The first is a transparent change of designator due to completion of a training pipeline and earning a warfare qualification. This however keeps an officer in their parent community. The second is to redesignate across communities. Here an applicant believes their skills and abilities are better suited and can be better utilized to fit within a different community. They apply to a redesignation board that meets twice a year which reviews and selects applicants based on the needs of the Navy. In particular, the vast majority of applicants apply to leave the URL communities to transition into the RL communities.

The lateral transfer board is governed by Chief of Naval Operations Instruction (OPNAVINST) 1210.5, which states that the main purpose of the lateral transfer process is “to provide flexibility in the manning of officer communities.” This administrative board is made up of a variety of senior officers and represents specific communities. With approximately 250 officers that apply to each biannual board, only 40% of officers are selected, making it necessary to understand the factors that encourage selection.

B. PURPOSE

The purpose of this study is to identify the common factors that lead to a Naval officer being selected for lateral transfer into the community that he or she desires. The analysis will be conducted by estimating the effects of personal demographics and individual level job characteristics on the probability of selection. Reviewing the results will provide insight on the characteristics of applicants as well as the factors that increase the likelihood of selection.

C. SCOPE AND METHODOLOGY

The scope of this thesis will include a review of the data provided by Naval Personnel Command (NPC/PERS) 802/803 which includes the results of the biannual lateral transfer boards between November 2010 and November 2012. Descriptive statistics of the data are presented to determine whether patterns of selection are observed and to describe the characteristics of applicants and selection trends. A Probit model will be used to estimate the likelihood that an officer is selected for a lateral transfer based on observable characteristics such as race, gender, rank, time as officer, desired designator, parent community, and whether an officer applied to alternate designator. Analysis of the Probit results will identify the extent to which these variables are determining factors for selection success.

D. RESEARCH QUESTIONS

This study will focus on three main research questions:

- What are the characteristics and trends of officers who apply for lateral transfer?

- Can one predict the likelihood that an officer is chosen for lateral-transfer based on observable characteristics and if so, which factors contribute most to the selection process?
- Which officer designators provide the most and fewest lateral transfers applicants as well as which designators are the most desirable and most available?

E. ORGANIZATION OF THESIS

The thesis is divided into five sections. The first section presents an extensive review of the lateral transfer process to provide background information on its history and purpose. In particular, Chapter II describes the current officer structure and defines the designators used in this study as well as provides a detailed overview of the requirements and process to lateral transfer. It concludes with a description of the content included in a redesignation package as well as a detailed look at personal and organizational motivations influencing lateral transfers. Chapter III provides a literature review of previous studies that examine the lateral transfer process on different outcomes such as retention and accession. Chapter IV describes the sample data that was obtained for the November 2010–November 2012 lateral transfer boards, provides summary statistics, and describes the variables used in the probit model. This section also presents the estimation results from the probit model to analyze the factors that increase the probability of being selected for lateral transfer. Chapter V presents a summary of findings, qualitative conclusions based on the regression results, and potential future areas of research.

II. BACKGROUND

The lateral movement of regular and reserve officers on active duty is administered by Chief of Naval Operations Instruction (OPNAVINST) 1210.5, which specifies the purpose of lateral transfer is “to provide flexibility in the manning of officer communities.” This chapter describes the Navy community structure, the requirements for submitting a lateral transfer package, the selection process, and the reasons individuals seek lateral transfer.

1. Officer Community Structure

Every Naval officer is assigned a designator code indicating their specific occupational specialty and community subcategory: the Unrestricted Line (URL), Restricted Line (RL), Staff Corps officers and Limited Duty Officers (LDO). Unrestricted Line officers work in the operational commands that deploy around the world on air, ground and sea missions. Only URL officers can command operational units. Restricted Line and Staff Corps officers support operational commands in tasks such as logistics and administration. Staff corps officers have very specific skill sets like medicine or law. Limited Duty officers are commissioned from the enlisted ranks to directly supervise enlisted personnel within their specialty. Because they are not eligible for command and have shorter careers in the officer corps, Limited Duty officers seldom achieve high ranks.

The force structure of officers as of August 2012 is shown in Figure 1. The information in this figure is consistent with the typical manpower of Naval Officers. The URL community contains the largest number of personnel, comprising 39 percent. The second largest category is the Staff Corps designators, which represents 36 percent of personnel in the Navy, most of which are in the medical community. LDOs typically account approximately for 10 percent of total Naval officers filling specific technical billets, and RL designators account for 15 percent of Naval officers. Previous research found that lateral transfers make up an average of 60 percent of these designators (Monroe & Cymrot, 2004).

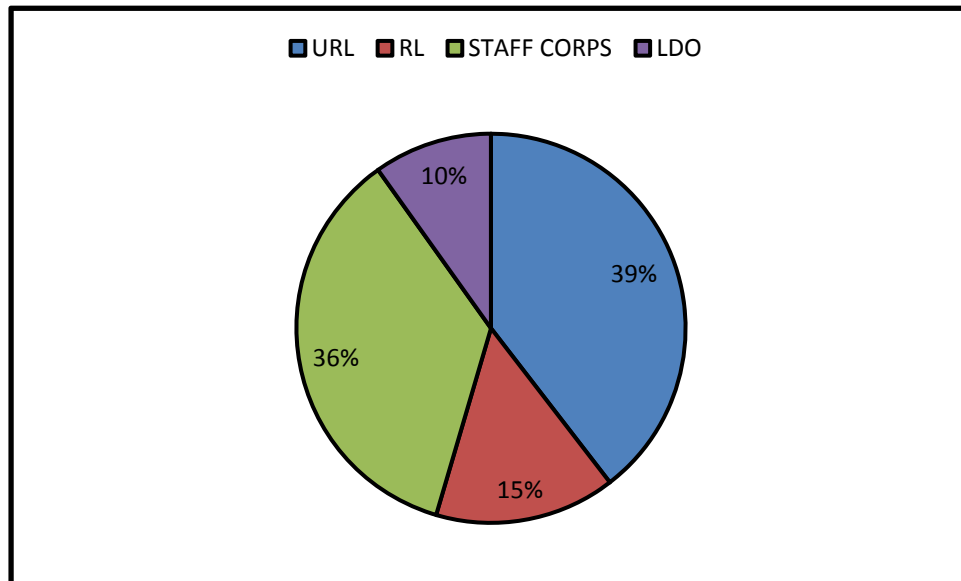


Figure 1. Percentage of sea/shore MPN (From OPA, 2012)

2. Unrestricted Line Officers

The Unrestricted Line includes the Surface Warfare, Aviation, Submarine, and Special Operations/Warfare communities. Officers from the Naval Academy and Naval Reserve Officer Training Corps (NROTC) programs are generally commissioned into a URL community, in order to fulfill both the needs of the Navy and the conditions of their scholarships.

An officer's length of service obligation depends on the community. Surface Warfare officers have an active duty obligation of four years, while aviators incur an eight year obligation that begins after they complete flight school. Submarine officers must serve five years, where Special Operations/Warfare (SEAL and EOD) officers serve four. The URL officer designators and inventory are shown in Table 1. Pilots make up the majority of the URL, followed by SWOs. Therefore, it is not surprising that SWOs make up the largest number of applicants at the lateral transfer board. This may suggest that SWOs may be the easiest candidate to redesignate due to shorter service obligated, more diverse operational knowledge and continuous replacements from direct accessions.

Designator Code	Community	Current Inventory
1110	SWO	3542
1120	SUB	1949
1130	SEAL	652
1140	EOD	256
1310	PILOT	4439
1320	NFO	1442

Table 1. URL Designators and Inventory (From OPA, 2012)

3. Restricted Line Officers

The Restricted Line community, listed in Table 2, is made up of Engineering Duty Officer (EDO), Human Resources (HR), Information Warfare (IW), Information Professional (IP), Intelligence (INTEL), Oceanography (OCEANO), Public Affairs (PAO), Aerospace Engineering Duty Officer (AEDO), Aviation Maintenance Duty Officer (AMDO) and Foreign Area Officer (FAO).

Designator	Community	Current Inventory
1200	HR	414
1440	EDO	670
1510	AEDO	319
1650	PAO	230
17X0	FAO	408
1800	OCEANO	289
1810	IW	923
1820	IP	460
1830	INTEL	1486

Table 2. RL Designators (From OPA, 2012)

Because the Navy commissions the majority of officers into the URL, the lateral transfer process is used to fill the RL and SC inventory. Thus, changes in URL force-shaping policies impact the availability of officers at the lateral transfer board, which in turn significantly influences the RL manpower end strength inventories. For example, during the 1990s, the Navy restricted accessions to downsize by terminating officers who

failed in a training pipeline, even if the failure was for medical reasons. In response, the URL communities significantly limited lateral transfers. With the inflow of personnel after 2001, the URL lightened restrictions on lateral transfers. The HR community was established in the same year, and the result was a flood of applicants for redesignation. At first this left the RL senior ranks starved for personnel while the ranks of LCDR and below were over manned. Today, however, the situation is reversed. In the long term, the policy change depleted the RL junior ranks and created an excess of senior ranking officers. Policies to increase retention in one community by restricting the number of lateral transfers from the URL will negatively impact the inventory in the RL (Cook & Mooney, 2004).

4. Staff Corps Officers

The Staff Corps includes specialties in medicine, dentistry, law, supply, and civil engineering. It is likely that few officers apply for lateral transfer because Staff Corps work is so specialized. Those hoping to become a Navy doctor, nurse or lawyer generally enter commissioning programs that allow them to transition directly into these jobs. The Staff Corps designations reviewed by the lateral transfer boards discussed in this thesis are shown in Table 3. The only requests to the lateral transfer boards in the data were for the Medical Service, Supply, and Civil Engineering Corps. As believed, the vast majority of RL officers belong to medical service.

Designator	Community	Current Inventory
2300	Medical Service	7247
3100	Supply	1909
5100	Civil Engineering	1137

Table 3. Staff Corps Designators (From OPA, 2012)

5. Limited Duty Officers

Limited Duty Officers are prior enlisted service members who earn a commission in their enlisted occupational specialty. Applicants for LDO are selected by a special

board that screens for candidates with exemplary technical, management, and leadership skills as well as superior accountability and responsibility. Unlike URL officers, LDOs need only a high school diploma.

Successful candidates attend LDO Officer Indoctrination School and are assigned a designator code above 6000 representing their field of technical expertise. They usually fill billets as departmental assistants responsible for insuring adherence to standard operating procedures and serving as a link between the officers and enlisted personnel. With 3816 personnel, the LDO community comprises about ten percent of Navy officers. The LDO designators are shown in Table 4.

Designator	Community
6120	Surface Operations
6130	Surface Engineering
6150	Special Warfare
6160	Surface Ordnance
6180	Surface Electrical
6290	Undersea Communication
6310	Aviation Deck
6320	Aviation Operations
6330	Aviation Maintenance
6332	Aviation Maintenance
6420	Information Dominance Information Systems
6421	Information Dominance Information Systems
6422	Information Dominance Information Systems
6440	Information Dominance Cryptology
6442	Information Dominance Cryptology
6450	Information Dominance Intelligence
6452	Information Dominance Intelligence
6460	Information Dominance Oceanography
6462	Information Dominance Oceanography
6480	Explosive Ordnance Disposal
6490	Security
6492	Security
6510	Supply

Table 4. LDO Designators (From OPA, 2012)

B. REQUIREMENTS FOR LATERAL TRANSFER

A 2005 Naval Instruction issued by the Chief of Naval Operations (CNO) specifies the requirements for active duty and regular reserve officers seeking lateral transfer (OPNAVINST 1210.5, 2005). Applicants must have at least a bachelor's degree and two years active duty service as a commissioned officer. No officer may request redesignation until he or she is within a year of fulfilling any obligation incurred by special or incentive bonuses or functional training. (Medical community officers must be within six months of completing their service obligation before applying.) Successful candidates for lateral transfer will be obligated to serve two or more years on active duty.

Officers in the URL must attain their warfare qualification before applying to the lateral transfer board. In the Surface Warfare community, officers under orders to department head school must complete the schooling and a department head tour before applying for lateral transfer. There are similar requirements for officers specializing in nuclear power and submarine officers. In addition, lateral transfer applicants must meet requirements specified by the receiving community, such as background checks for the intelligence community.

Ensigns and captains seldom apply to the lateral transfer board. Ensigns generally serve on operational status with diverse responsibilities and little time to investigate the career paths of other communities or build a lateral transfer package. Because they lack experience, they are unlikely to obtain the letters of recommendation required for success at the board. In addition, ensigns lack the breadth of knowledge to make major career decisions.

In contrast, after long careers in one field, only those captains with very specific skills are likely to seek transfer. Captains usually want to command within their own field as it is difficult to be an effective senior leader in a new community, where inexperience relative to their subordinates may cause status ambiguity. Furthermore, because promotions are based in part on sustained superior performance within an organization, a senior officer who transfers from another community late in his career is at a disadvantage.

C. LATERAL TRANSFER APPLICATION AND SELECTION PROCESS

1. Lateral Transfer Application Packages

Various circumstances, like attaining warfare qualification and completing other professional requirements, result in routine, immediate changes to one's designator (MILPERSMAN Article 1210-010, 2002). All other designator changes require application and review by the lateral transfer boards. The CNO announces board dates 60 days prior, publicizing which communities will be accepting candidates.

Applicants may request to lateral transfer to one or two communities. Discussions with prior applicants as well as with those who have served as board

members reveal two schools of thought on the implications of requesting an alternate designator. Some believe that specifying an alternate designator increases the likelihood of a successful transfer because two communities will evaluate the person's skills. They also think that seeking transfer to an additional community demonstrates the applicant's flexibility, breadth of interest and support for the Navy. However, others contend that an alternate designator gives a negative impression of an applicant's motives. They believe that including a second option implies that the individual's main goal is to leave their current community. The applicant may appear more concerned with finding an easier job than enthused about joining a new community. If the primary and secondary community choices are dissimilar, it may appear that the applicant's determination is wavering, potentially indicating a weak leader. By applying for an alternate designator, the officer may be seen as lacking in motivation, loyalty, decisiveness, clarity of purpose, and commitment. The validity of these views is examined further in Chapter IV.

Along with community-specific materials, application packets for lateral transfer include a commanding officer's endorsement and letters of recommendations from senior officers. After the packet is submitted, PERS-802 and 803 add documentation from the individual's personal record to provide an objective overview that board members evaluate to determine which officers best fit the criteria of the gaining community.

2. Selection Process

Charged with selecting the best officers to mold the future of the Navy, board members are expected to consider applicants' merits without prejudice, partiality, or outside influence. Lateral transfer boards include at least five officers in the grade of O-4 or above. All the lateral transfer boards discussed in this thesis had between 35 and 40 voting members and an O6 senior member. The board president, appointed by the Deputy Chief of Naval Operations (DCNO) for Manpower, Personnel, Training and Education (N1), serves as the facilitator and administrator. Board presidents may not restrict board members, influence their findings or alter their recommendations.

Quotas and restrictions on how many people may leave and enter a particular community are a central feature of the lateral transfer process. The numbers of transfers

permitted depends on the community's current manpower, end strength inventory, and future projections of necessity. Board members serve as representatives for their own communities and use their job-specific selection criteria to review and rank the applicants. After the recommendations are aggregated, the board submits a formal report to the DCNO for approval. Designator changes are made within 60 days, and new billets assigned typically within six months.

D. MOTIVATIONS FOR LATERAL TRANSFER

A recent presentation by ADM Greenart, the CNO, identified personnel as a major concern, noting that unforeseen and unbudgeted mission requirements have put manning at an all-time low while operational tempo is at an all-time high (CNO, NPS, 1 February 2013). To maintain readiness and confront growing challenges, Greenart suggests that the Navy must more effectively utilize and develop the current force structure and align the knowledge skills and abilities with specific job requirements, especially in officer communities. Excessive turnover means losing people with experience and knowledge. Recruiting and training new officers is time-consuming, costly, and may have negative implications for the future inventory of senior leaders.

The literature on retention focuses on the factors that force officers to separate from the Navy such as quality of life, job satisfaction, morale, and leadership. The same reasons officers choose to leave the Navy are also motives for seeking to redesignate (Ryan, 2007). Less than one percent of Naval officers apply to the lateral transfer board each year. This section explores the motives that lead officers to redesignate instead of leaving the Navy.

1. Personal

A recent study by Whittam (2009) indicates that Naval officers are the most dissatisfied among all military officers. This is most likely due to how the Navy assigns occupational specialties. Other services outside the Navy provide their officers greater access to jobs when they are commissioned, whereas officers from the Naval Academy and NROTC are required to join the URL communities. This mandate to join the URL communities after first commissioned leaves the individual with job conflicts,

specifically lower morale and role ambiguity. This is due in main part because the officer is thrust into an occupational specialty that he or she does not understand and/or is not interested in. Combined with perceptions of lower quality of work life and leadership within the URL, JOs are more likely to leave their current community (Ryan, 2007).

a. Quality of Work Life and Morale

Quality of work life significantly affects productivity. As the saying goes, “A happy sailor is a productive sailor.” The term “quality of work life” refers to satisfaction with day-to-day operations, including shipboard life, command climate, family separation, personal time, work environment and morale. Those with a positive experience of work life are more likely to be engaged, productive, and committed to an organization (Olmsted & Underhill, 2003). Quality of work life significantly influences intentions to remain in or leave the Navy (Ryan, 2007). Therefore, if an officer is not content with his or her current specialty, previous studies have shown that the officer will look for a community that is more suited for his or her personal desires.

Morale is a key element of quality of work life. Ryan (2007) reports that low morale in the URL communities causes officers to redesignate. In 2007, 84 percent of junior officers reported having low or very low command morale (Ryan, 2007). According to Whittam (2009), showed declining morale among officers where the percentage of officers with high morale had dropped since 2005 while the percentage of those with low morale in the URL commands increased. Junior officers (JO) in the URL community had the lowest command morale. Many JOs felt that their poor morale was a result of their assignment and hoped to continue their careers in a different community (Whittam, 2009).

The numbers of hours worked have also been shown to significantly impact the quality of work life. For example, 94 percent of officers in sea billets report working more than 40 hours per week while in homeport, compared to 55 percent of officers who were on onshore duty and/or other communities (Whittam, 2009). Officers that work fewer hours are more motivated to stay in the Navy (Ryan, 2007).

b. Leadership

How the URL communities perceive leadership is a growing concern due to the correlation between the perceived quality of leadership and officer turnover intentions (Lefrere, 2001). Although the majority of commanding officers report full operational readiness with no manpower shortage, junior officers in the SWO community are often expected to correct manning deficiencies on top of their normal duties, a finding corroborated by recent research suggesting that URL command leadership demands excessive work hours, especially in port (Lefrere, 2001). Officers believe that a CO's desire to pass inspections and qualification drills, rather than operational commitments, are the main reason for increased workloads (Ryan, 2007). Commanding officers are expected to increase productivity and hesitate to report deficiencies for fear of losing their positions in an environment dominated by a zero defect mentality. These pressures encourage micromanagement without mentorship, reduce motivation, and strain the crew. As a result, trust in command leadership is diminished and the desire to get out of the URL community is increased.

Recent surveys indicate that URL JOs perceive their direct supervisors as helpful but have low opinions of higher command leadership. In 2006, only 24 percent of officers believed that the Navy has their best interest in mind (QOL, 2006). By 2009, positive assessments of the quality of leadership by JOs had declined from 75 percent to 59 percent (Whittam, 2009). If more officers believe that their command leadership does not have their best interests in mind, the likelihood that a JO will decide to leave the community increases.

The availability of resources (material and parts needed to complete a mission) plays a significant role in officers' opinions of senior leadership as well as their satisfaction with URL communities. Working without adequate resources negatively affects the quality of work life. In 2009, 55 percent of officers leaving the SWO community were dissatisfied with their access to critical supplies and needed parts (Whitam, 2009). They indicated that senior leaders as well as a restrictive supply system failed to provide the tools necessary for success.

2. Professional/Organizational

The decision to seek a transfer involves classic push-pull forces—the “push” of wanting to leave one community, and the “pull” to join another. Extensive research documents why officers desire to leave their communities including dissatisfaction with their current community, low morale, perceptions of poor leadership, command climate, extensive hours and lack of personal/family time (Wilcove, Burch, Conroy, & Bruce 1991, Ryan, 2007, Whittam, 2009).

However requests for lateral transfer are also influenced by professional motives. Individuals dissatisfied with their current community may be highly motivated to remain in the Navy, but wish to use their skills, knowledge, and experience in another community. An officer assigned to the occupation of his choice is nearly 14 percent more likely to stay in the Navy (Wilcove, Burch, Conroy, & Bruce 1991).

a. Person-Job Fit

One might argue that individuals whose skills and abilities are better aligned with a different community can better serve the Navy if allowed to lateral transfer. A lateral transfer can give the officer a better sense of his role and accomplishments, leading to stronger motivation, better performance, improved morale and greater effectiveness. The right person-job fit could potentially maximize the Navy’s return on investment.

According to the Chief of Naval Personnel (CNP), “The Navy must create a human capital investment strategy capable of placing the right people with the right skills, at the right time and place, and at the best value, to execute its global missions.” However, recent studies show that Navy officers do not feel that the Navy is good at utilizing and aligning people’s skills and abilities to the job. A high percentage of officers feel they have job security, but a majority of URL officers find little room for personal growth or sense of accomplishment (Whittam, 2009). Only 34 percent of officers believe that the Navy is retaining the best qualified personnel, and only 39 percent anticipate that Navy manning policies will be consistent and fair (Whittam, 2009). When asked about the future of Navy manpower, only 39 percent of officers believe that it will be utilized

effectively (Whittam, 2009). This research suggests that officers believe job assignments are poorly aligned with individuals' personal qualifications, abilities and skills. Such perceived mismatches motivate many officers to request lateral transfer.

b. Career Opportunities

Career opportunities play a significant role in the decision to stay in one's current community or transfer into another. The number of officers intending to remain in their current job at the end of their service obligation has decreased, with even greater decrease in the number of junior officers planning to stay for the long term (Whittam, 2009). Personnel recognize better career opportunities in other communities and claim that they would be more inclined to serve a full Naval career if allowed to lateral transfer (Ryan, 2007).

Often, officers discouraged with the career progression in their current community are enthused about the potential for advancement in other communities. For example, only half of URL junior officers report that they receive appropriate mentorship and career guidance in their current community (Whittam, 2009). The same percentage feels that the evaluation system in their community is not adequate for future promotions (Whittam, 2009). Therefore, those who dislike their current community and who wish to remain in the Navy believe their best options can be found in another community.

Another aspect of growing concern in career development is one's next duty station. There is a downward trend in satisfaction with the detailing process. Only 44 percent of junior officers approve of how the Navy distributes personnel with regard to both person-job fit and location (Whittam, 2009). However, many other communities, and especially the RL, have more desirable locations and more flexible detailing policies. Strict URL policies create problems for retention when officers seek better career opportunities in other communities or as civilians.

3. Summary

Officers seek lateral transfer for many reasons. Motivation to leave a community—the push factors—are mainly personal, including low morale, poor quality

of work life, and negative assessment of leadership. Officers in the URL communities, and especially SWO JOs, are overworked and lack the resources to succeed. Their morale is low and they are less likely to plan a career in their current community.

Professional concerns, including current job satisfaction, personal development and upward mobility, also motivate the desire for redesignation. An officer dissatisfied with his community who wants to remain in the Navy may recognize that his skills and abilities are better aligned with a different community and seek better career opportunities and job satisfaction outside of the URL. Studies show that if allowed to lateral transfer, these officers are more likely to serve long term. With a better understanding of and more interest in their occupational specialty, officers are likely to perform better, be more effective, and have higher morale. Emphasizing the best person-job fit will help achieve the CNO's direction and optimize Navy manpower and capitalize on the current inventory to alleviate inventory deficiencies.

III. LITERATURE REVIEW

A. OVERVIEW

Previous studies that examine the lateral transfer process focus on how the outcomes of the redesignation board influence force structure, inventories and manpower capital of the Navy. Recently, there have been four studies examining the lateral transfer process, by Center for Naval Analysis (CNA) and Naval Postgraduate School (NPS). The research focuses on issues of accession possibilities, retention and the effects that the lateral transfer process has on end strength inventory and manpower qualifications.

B. LITERATURE REVIEW

1. Accession Possibilities

Moore and Reese (1997) examine the effect that lateral transfer decisions have on retention. In particular, they set out to define appropriate accession policies as it relates to the lateral transfer process. The reason this line of research is important is because it is costly to recruit and train new officers to fill particular billet gaps in addition to being excessively time consuming to fill time critical deficiencies. Therefore, it seems inefficient to rely on direct accessions to solely fill these high demand positions. Moore and Reese (1997) address the question of whether training failures could be quality officers in another community. Specifically, they utilize observations of retention and promotion rates to proxy quality in the Unrestricted Line (URL) communities.

Using data obtained from the Officer Longitudinal File, Moore and Reese tracked historical trends of officers in the major URL communities from year groups 1975 through 1995 who were not currently training in their initial accession community using information on qualification status, race, gender, and commissioning source. Using multivariate regressions, Moore and Reese (1997) conclude that 25 percent of people fail to complete a training pipeline and therefore do not receive a warfare qualification in their initial accession source (Moore & Reese, 1997). Examining the 25 percent who fail to qualify, 58 percent were selected to lateral transfer (Moore & Reese, 1997). However,

the officers who redesignate are less likely to remain in service than officers who completed qualification from their initial accession source.

Moore and Reese found that the URL continually has enough excess officer manpower to fill RL billet requirements. However, two-thirds of the officers who applied for lateral transfer from the URL were rejected (Moore & Reese, 1997). Thus, the problem appears to be one of matching URL applicants to forecast RL vacancies. Recognizing that officers who are not warfare qualified are more likely to separate, it is critical to examine further research indicating the retention and career progression of redesignated officers.

2. Retention and Career Progression

Cook and Mooney (2004) examine the effect that lateral transfer decisions have on career progression. In particular, they review several aspects to determine how well the lateral transfer process meets force shaping goals to sustain personnel authorizations as well as promotion opportunities. The reason this line of research is important is because the Navy needs to select the right officer characteristic to maximize the return on investment. The Navy desires to retain only the highest performers with the best abilities that are motivated to serve long careers. However, in a subjective world there are many ways to categorize ability, skills and motivation. Cook and Mooney (2004) attempt to observe the impacts of lateral transfers on retention, experience, and level of qualifications in the gaining community from officers who were successfully redesignated. They seek to identify the characteristics of lateral transfers that may lead to a longer, more productive career path after redesignation.

Cook and Mooney utilize a Logit analysis that focuses on the characteristics of officers who have laterally transferred and the impact on career performance. Their data was obtained through the OMF and promotion board selections for 1987 through 1991 year groups and merged with the Loss Data File to examine the effect on retention and promotion to O-4.

Cook and Mooney (2004) find that inventory is appropriate to meet community end strength requirements with the help of the lateral transfer process. They conclude that

the method for distributing individuals should be improved, suggesting that restrictions on lateral transfers should be minimized to save cost and transition the right individual for each billet. According to Cook and Mooney,

The lateral transfer and redesignation process should be seen as a force shaping tool to redistribute qualified officers at the junior and mid-grade levels. It improves retention by allowing officers to transfer across communities. It also improves the Navy force efficiencies by increasing return of investment by retaining proven performers. Additionally officers who are allowed to transfer tend to have greater job satisfaction which tends to improve retention.

Cook and Mooney (2004) found that females have a 7.6 percent higher transfer rate than males. According to their analysis, 14 percent of those who attrite from a training pipeline are selected for lateral transfer while only 5.5 percent of fully qualified officers are selected. This means that training failures are more likely to be redesignated into another community. However, as found by Moore and Reese (1997), these officers are less likely to have motivation to serve long term in the Navy in addition to having decreased longevity to be promoted. Therefore, they agree with Moore and Reese and indicate that the lateral transfer process should better align the current officer characteristics with billet deficiencies. They add to this sentiment and conclude that “any restrictions on the ability to supply Surface Warfare Officers to the lateral transfer board would negatively affect career progression in the RL and select Staff Communities.”

Monroe and Cymrot (2004) found corroborating evidence that the lateral transfer process has a large impact on the RL and SC communities. In particular, they examine the tradeoffs associated with the RL and Staff Corps communities force structure using direct accessions or lateral transfers (Monroe & Cymrot, 2004). To identify tradeoffs Monroe and Cymrot (2004) evaluate the costs and benefits of reducing SWO accessions. Questions were raised to determine the impact that this reduction would create on the lateral transfer process and potential community health including end strength in the RL and Staff Corps communities.

This line of research is important because an excess of officer inventory in a particular community is expensive and could have negative outcomes on training and

mission readiness. However, restrictive manning policies have a direct negative effect on the RL and SC communities. Therefore, it is necessary to try to identify the point that maximizes utility between not holding excessive manpower while at the same time manning the RL and SC communities effectively.

To assess the implications of cutting SWO accessions, the authors of this CNA study devised a simulation model that tracked officer flow to the department head level. The model includes calculations for total personnel cost, inventories at specific career levels, average years of experience in the SWO, RL and Staff Corps communities. The study also evaluates end strength as compared to the Officer Programmed Authorizations (OPA), and percentage of RL and Staff Corps officers who were warfare qualified. Monroe and Cymrot (2004) utilize their model to estimate three potential changes to accessions policies. The first is maintaining the status quo of 780 SWO accessions per year. The second scenario limits the number of officers brought into the SWO community annually to the minimum of 620 needed to meet operational requirements as of November 2003. The third scenario is an intermediate case, which allows for 700 accessions per year.

Using historical data from the Navy officer database between FY86 and FY02, Monroe and Cymrot find that on average, 365 officers redesignate from the URL community to the RL communities. Most come from either SWO or aviation (however, training attrites account for the majority of those from aviation). They also find that in FY03, the RL included an average of 60 percent of lateral transferred officers. This finding shows that the redesignation process is a critical force shaping tool.

Looking at the RL and Staff Corps communities between 1986 and 2002, Monroe and Cymrot (2004) find a low percentage of lateral transfers who are warfare qualified within each community. Leaving aside the AEDO and EDO community, 50 percent or fewer of the RL and Staff Corps officers are warfare qualified. The authors find that among lateral transfer officers, warfare qualified personnel are more likely to remain in the Navy. They note,

[W]arfare qualification in RL/Staff communities is important because RL/Staff communities support the URL; therefore URL experience is

thought to increase RL/Staff productivity. Reflecting either real differences in productivity or preferences by promotion boards, warfare qualified laterals retain longer and advance farther than other RL/Staff officers and therefore are critical in filling RL/Staff control pay grades.

In support of this observation, they note that warfare qualified officers are 90 percent likely to complete 108 months of service, compared with a rate of 50 percent among their non-warfare qualified counterparts. Of these remaining officers, those who are laterally transferred with a warfare qualification are more likely to promote to the O-5 level. Monroe and Cymrot attribute this to the idea that officers with warfare qualification are higher quality, more motivated, more productive, and overall better performers, suggesting that qualified officers should be selected for lateral transfer at a higher rate.

Their simulation model shows that reducing SWO accessions from 780 to 700 would save 46 million dollars and a reduction to 620 personnel per year would save 91 million dollars. However, such cuts would reduce the warfare qualified officers in the RL and Staff Corps by four percentage points and reduce the seniority and retention of these communities, resulting in declining productivity and experience. This cut would also restrict the availability of lateral transfers by 35 percent, meaning that direct accession into the RL and Staff Corps communities would need to increase by 47 percent.

3. Organizational Impacts

Ryan (2007) examines the overall effect that a lateral transferred officer has on officer communities. Ryan (2007) analyses this by first understanding the motivations for an individual to request lateral transfer from a community. Next, Ryan determines the attitudes of current Officer Community Managers (OCMs) toward the lateral transfer process. Finally, he evaluates the differences in retention between successful and unsuccessful applicants for lateral transfer.

The reason this line of research is important is because it is imperative that the Navy has the right selection criteria for applicants at the lateral transfer boards. As other studies have shown, redesignating the wrong kinds of individuals is expensive and time consuming to retrain new officers. Also by failing to select the optimal candidate, the Navy develops high opportunity costs because those officers who are not redesignated

will decide to separate from the Navy. In these cases, the Navy is missing out on quality individuals that poses skills, abilities and experience that could benefit other communities. Therefore, it is potentially inefficient to mismatch quality applicants.

Using Navy-wide surveys Ryan (2007) concludes that motivation to request lateral transfer is due to dissatisfactions with one's current community which are the same reasons to separate from the military. The results reveal that "job satisfaction, shipboard life, work/personal time balance and family separation, morale and leadership" are the factors that consistently and significantly impact retention. He also found that "restricting the ability to lateral transfer or redesignate for the URL officers negatively affects retention and forces officers to leave the Navy instead of allowing them the opportunity to pursue a Navy career in another designator."

Ryan (2007) also conducted interviews with several OCMs to gather their attitudes toward the lateral transfer process and the applicants. The analysis of opinions indicates that the lateral transfer process has numerous implications on the communities. The aviation OCM recognizes little negative impact on the aviation community because the applicants seldom have the career longevity due to failure to screen for the department head level. The Surface Community does not have a positive view of the lateral transfer process and would like to minimize support due to ongoing retention concerns. The Submarine OCM looks at the process as a constructive tool allowing quality individuals to continue their careers in other fields which will benefit of the Navy.

The remaining OCM interviews represent the RL communities and had two main concerns. The first is that the RL is overly dependent on the lateral transfer system to access individual necessity. This leaves the RL significantly affected by the changing policies, guidance and personnel quotas of each board. The other dissatisfaction is the mismatch between fleet specific job characteristics and a selectee's skills and abilities.

Ryan (2007) concludes with a quantitative analysis to estimate the effects of lateral transfers on retention, using a bivariate Logit regression using lateral transfer data from 1996 through 2006 merged with the Active Duty Military Officer Cohort Personnel Master File. He concludes that officers denied lateral transferred leave the Navy at

significantly higher rates than those selected. For example, between 1996 and 2006, 51 percent of applicants were rejected. Of those selected for lateral transfer, 24 percent left the Navy, compared with 48 percent of those who were not selected. This shows that unsuccessful applicants to the lateral transfer board are twice as likely to leave the Navy.

C. SUMMARY

These four studies analyze a variety of aspects related to lateral transfer. Overall, they focus on issues relevant to retention and accessions as well as impacts on end strength. Moore and Reese (1997) discover that training failures who are able to lateral transfer are more likely to leave the Navy than warfare qualified officers, which is corroborated by Cook and Mooney (2004) who also find that officers without a warfare qualification are twice as likely to be selected for lateral transfer. Monroe and Cymrot (2004) further validate that warfare officers are better quality and retained longer. They recommend that warfare qualified officers should be redesignated at a higher rate than their unqualified counterparts and that the URL should adopt more flexible policies toward redesignation.

The literature points to a need for a continuous examination of the lateral transfer outcomes to determine if current optimization and utilization of human resources provides the Navy with a maximum return on investment. Ryan's (2007) finding that unsuccessful applicants for lateral transfer are twice as likely to get out of the military suggests that the Navy is losing experienced officers who would otherwise benefit a gaining community. Therefore, it is necessary to examine the characteristics of officers that are being selected for lateral transfer to determine potential impacts on the future force structure of the Navy.

THIS PAGE INTENTIONALLY LEFT BLANK

IV. DATA, METHODOLOGY AND RESULTS

A. INTRODUCTION

This chapter describes the data used to study the factors that contribute to selection for redesignation. The variables used in this study are described and summary statistics are presented. In particular, this section exams changes in application rates, selection trends over time and across communities, race and gender. This section also displays the empirical methodology used to estimate the likelihood an officer is chosen for lateral transfer after controlling for personal and occupational specific characteristics.

B. DATA DESCRIPTION

The data used in this study was provided by Naval Personnel Command (NPC/PERS) Departments 802 and 803, which oversees the redesignation board and maintains individual-level data on applicants to the biannual lateral transfer board. The data includes information on officer demographics, as well as occupational specific qualifications. The original data file contains information on 1400 applicants who applied to the lateral transfer board between November 2010 and November 2012. The highest and lowest ranks (ensign and captain) were dropped from the sample due to the small number of observations (nine individuals total in those two ranks). The final data file contains 1391 records across five lateral transfer boards representing officers between the ranks of Lieutenant Junior Grade (LTJG) and Commander (CDR). Of the 1391 applicants, 558 officers were selected for lateral transfer. The number of applicants and number selected for lateral transfer for each board between November 2010 and November 2012 is shown in Figure 2.

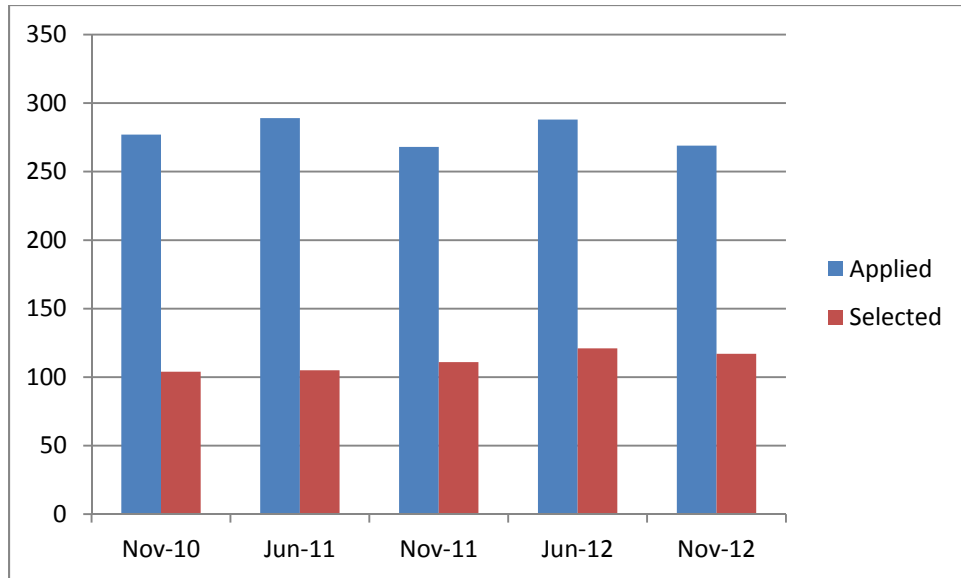


Figure 2. Applied vs. selected, all boards, November 2010 through November 2012

C. VARIABLE DESCRIPTIONS AND DESCRIPTIVE STATISTICS

The Navy allows officers to request a lateral transfer any time during their career as long as they meet the policy requirements of the governing instructions. The policy requirements produce a diverse pool of lateral transfer applicants who vary by gender, ethnicity, rank, job background and years of experience. The variables used in the analysis are described as follows:

1. Gender

Gender is included in the analysis to determine if there are any differences that exist between male and female application rates as well as their selection rates. The sample includes 1168 male and 223 female candidates. The difference in the proportion of male and female applicants is consistent with the gender differences of officers in the Navy as a whole. According to NPC, women make up approximately 16 percent of total Navy officer accessions (NPC, 2013). This proportion is representative in the sample data used for this study. A tabulation of those selected for redesignation shows, 469 were male and 89 were female, however men and women are selected equally as a percentage.

2. Designators

The applicant's current designator is included to determine if an officer is more likely to be selected based on his or her parent community. These designators are aggregated by the URL communities, and include the core communities of Surface Warfare Officer (SWO), Submarine Officers (SUB), Naval Aviators (PILOT), Naval Flight Officer (NFO), General Aviation (GENAV) (pilots who are no longer in a flying status), Limited Duty Officer (LDO), and others. These categories comprise the bulk of officers who apply for redesignation. As noted in Chapter II, without regard to marginal acceptability, officers are required to join the URL when they first get commissioned. After completing their initial service obligation they may request lateral transfer.

One might expect that an applicant's parent community significantly impacts the likelihood of selection. For example, the GENAV are fully qualified pilots or NFOs taken out of flight status due to medical reasons, poor performance, or resignation for personal reasons. Many qualified pilots and NFOs believe that if they relinquish their flying status, it will be easier for them to transfer or that they are more likely to be retained because the Navy has invested an exorbitant amount of resources in training them and is trying to maximize its return on investment.

The breakdown of applicants by community is shown in Table 5.

Community	Frequency	Percent of total
SWO	593	43
SUB	215	15
PILOT	181	13
NFO	145	10
GENAV	49	4
LDO	111	8
Other	97	7

Table 5. Frequency and percentage of requests by community

The data shows that majority of applicants (43 percent) from November 2010 through November 2012, represented in the SWO community.

3. Rank

Rank is included to show the hierarchy of applicants and the relative importance of rank in the selection process. The numbers of officers that applied and who were selected by rank in each board from November 2010 through November 2012 are presented in tables 6 through 10. The aggregate numbers over the entire sample period are shown in Table 11.

NOV2010					
APPLICANTS	LTJG	LT	LCDR	CDR	Total
Selected	14	59	29	2	104
Not Selected	55	83	31	3	172
Total	69	142	60	5	276

Table 6. Selection by rank of applicants, November 2010

JUN2011					
APPLICANTS	LTJG	LT	LCDR	CDR	Total
Selected	14	63	25	1	103
Not Selected	29	101	44	0	174
Total	43	164	69	1	277

Table 7. Selection by rank of applicants, June 2011

NOV2011					
APPLICANTS	LTJG	LT	LCDR	CDR	Total
Selected	20	65	21	5	111
Not Selected	25	98	33	1	157
Total	45	163	54	6	268

Table 8. Selection by rank of applicants, November 2011

JUN2012					
APPLICANTS	LTJG	LT	LCDR	CDR	Total
Selected	17	75	24	1	117
Not Selected	41	80	35	3	159
Total	58	155	59	4	276

Table 9. Selection by rank of applicants, June 2012

NOV2012					
APPLICANTS	LTJG	LT	LCDR	CDR	Total
Selected	23	67	27	0	117
Not Selected	49	69	31	1	150
Total	72	136	58	1	267

Table 10. Selection by rank of applicants, November 2012

ALL BOARDS					
APPLICANTS	LTJG	LT	LCDR	CDR	Total
Selected	88	334	127	9	558
Not Selected	203	444	177	9	833
Total	291	778	304	18	1391

Table 11. Selection by rank of applicants, November 2010 through November 2012

These tables show that the majority of applicants are Lieutenants, with 778 individuals requesting lateral transfer between November 2010 and November 2012 (56 percent of total sample). However, LCDRs by percentage are being selected at a higher rate. Among all applicants, LCDRs represent only 22 percent of the sample while their selection rate is 54 percent, a 32 percentage point difference. The next highest difference is found among lieutenants, whose rate of selection is only 4 percentage points higher. LTJGs are selected at a lower rate as shown in Tables 6–10.

4. Race

Race categories are included in the model to determine whether there are any racial differences in the selection of applicants over time. The racial categories are defined as White, Black, Hispanic, Asian and all other races. The number of applicants by race for each selection board between November 2010 and November 2012 are shown in Figure 3 shows. The total number of officers who applied and who were selected by race across all five boards are displayed in Figure 4.

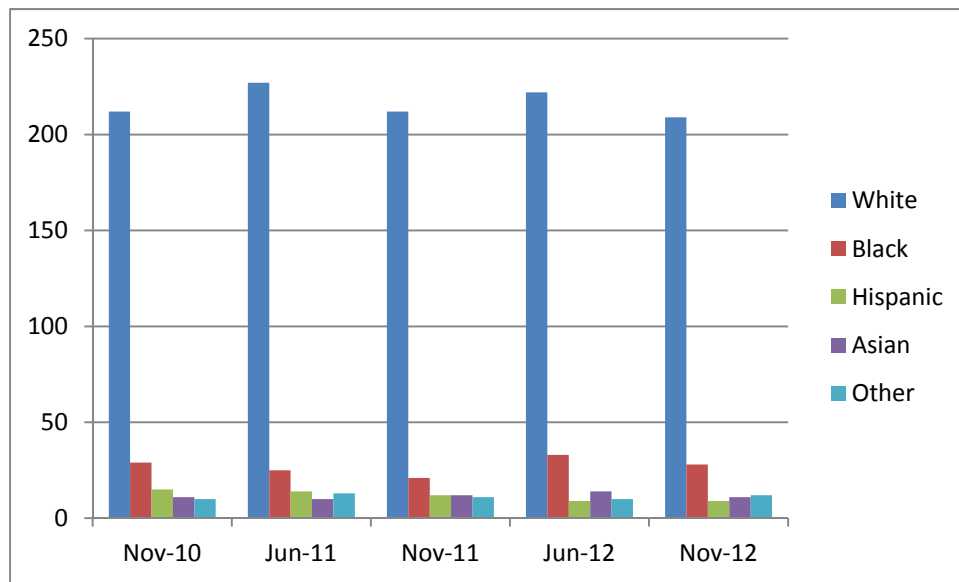


Figure 3. Applicants by race, November 2010 through November 2012

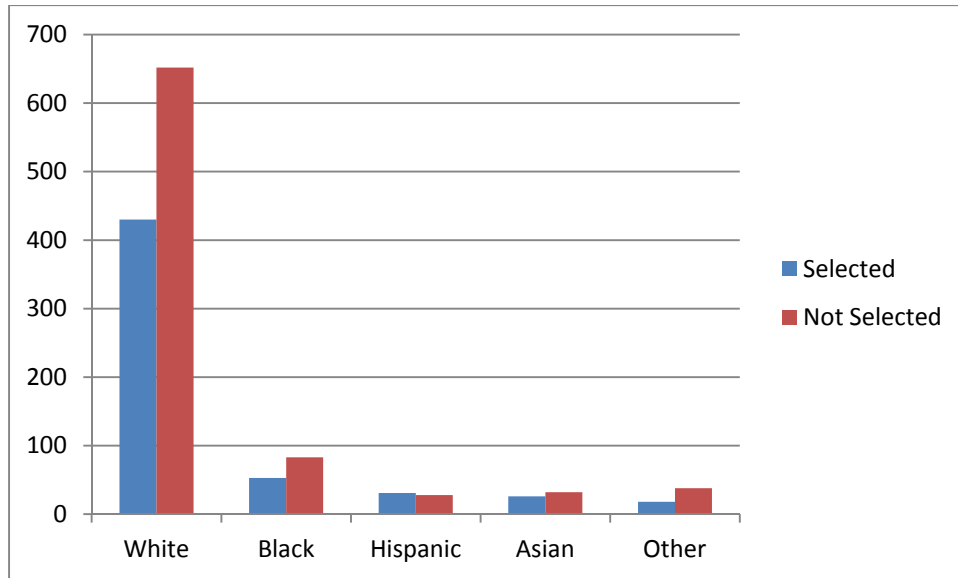


Figure 4. Applicants selected by race, November 2010 through November 2012

An overwhelming majority of applicants to these lateral transfer boards were white, representing 85 percent of the total sample as shown in Figure 2. This is not surprising because a majority of officers are white in the Navy. The race variable white represented 77 percent of those selected, whereas Hispanics represent only 6 percent selection as shown in Figure 3. However, out of the sample, Hispanic applicants are selected at a higher rate than any other race category. This is not surprising given that previous research (Arias & Dal, 2006), finds that Hispanics are more likely to stay in the military relative to white males.

5. Alternate Designator

An officer is allowed to apply for up to two designators in a lateral transfer package. If not selected for their primary choice, an alternate designator may be reviewed at the individual's request. One might expect that including an additional community increases an applicant's chance for selection by giving both communities the opportunity to request the individual's skill set. To investigate the relationship between supplying an alternate designator and the likelihood of selection, the analysis includes a dichotomous variable that identifies whether an officer applied to an alternate designator. Of all

applicants in this study, 349 (25 percent) applied for an alternate designator and of those selected, 133 (24 percent) individuals had applied to multiple designators.

6. Time as an Officer

A variable indicating each candidate's total time as an officer is included to determine if longevity increases the likelihood of selection for lateral transfer. The variable is constructed using the commission year groups of the applicants at each redesignation board and subtracting the year group of each officer from the date of each lateral transfer board. The number of officers in each year group that applied to the lateral transfer board between November 2010 and November 2012 is shown in Figure 4. The years of service ranges from 1989 to 2011 to define a time in service variable that ranges from approximately 2 to 22 years of service. The average years of service as an officer are 7.64 years with a standard deviation of 3.69 years.

The descriptive statistics show that the officers commissioned in 2005 request lateral transfer at the highest rate, followed closely by the 2007 year group. This is because officers are likely to make major career decisions at certain stages in their tenure. Typically, after four to six years of service an officer will decide whether to transition out of the Navy, apply for lateral transfer, or remain in their parent community.

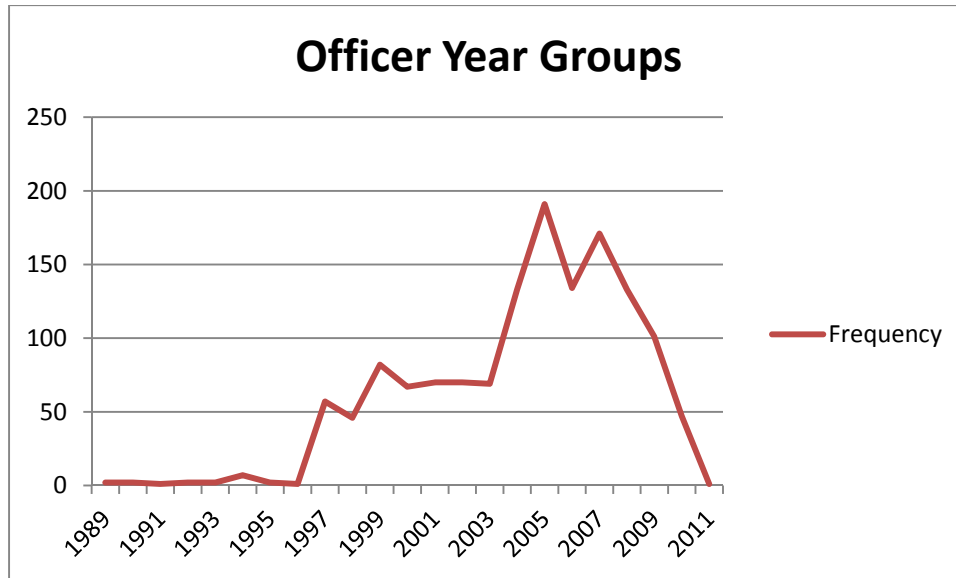


Figure 5. Applicants by year group, all boards, November 2010 through November 2012

D. SUPPLY AND DEMAND ANALYSIS

The decision to allow an officer to laterally transfer may depend on more than one's personal circumstances and work specific characteristics. The board is limited to selecting officers from communities that are authorizing movement out as well as those communities that have vacancies. Prior to convening the lateral transfer board, precepts are promulgated to board members in an instruction signed by the Director of Military Personnel, Plans and Policy Division (N13). The instruction specifies the total number of officers to be allowed to transfer out of and into the specific communities. Being a governing instruction, the board members are confined to these quotas. The following subsections presents information on the number of officers allowed in and out by each community. Furthermore this section analyzes how supply and demand within and across communities might influence the selection process.

1. Quota Supply (OUT)

A key constraint on the lateral transfer board is the number of officers each community will permit to transition out of their designator. These numbers are determined by the variation and necessity of manpower end strength inventory of each

community, current projected authorizations involving budget, threat assessment and mission capabilities. The breakdown of each board and the corresponding quota of personnel allowed out by community are shown in Table 12. This table shows that across all five boards, the GENAV community authorized an unlimited amount of individuals to transition out. This is because officers who are designated as GENAV no longer have a career in aviation due to medical, disciplinary or personal reasons and therefore are able to leave with no restrictions from their parent community. Table 12 also suggests that of the specific quotas, with the exception of June 2011, the SWO community releases the most officers.

	NOV2010	JUN2011	NOV2011	JUN2012	NOV2012	TOTAL
SWO	141	51	87	86	89	454
SUB	39	64	58	41	34	236
PILOT	53	56	42	34	10	195
NFO	31	39	34	31	25	160
GENAV	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
LDO	30	38	23	26	22	139
Total	294	248	244	218	180	

Table 12. Quota supply by community, November 2010–November 2012

In addition to examining the number of officers let out by each community, it is also important to examine the number of officers who requested to leave. As expected, the overwhelming number of applications to all boards comes from the SWO community. The number of officers who wanted out, as well as those who were selected, are shown in Tables 13 through 17. The data aggregated across all five boards is shown in Table 18.

NOV2010	Allowed out	Wanted out	Number Not Selected	Number Selected	Percent of those Selected	Percent of sample population
SWO	141	133	105	28	10	48
SUB	39	36	22	14	5	13
PILOT	53	27	15	12	4	10
NFO	31	32	17	15	5	12
GENAV	Unlimited	8	3	5	2	3
LDO	30	27	6	21	8	10

Table 13. Success rate by community, November 2010

JUNE2011	Allowed out	Wanted out	Number Not Selected	Number Selected	Percent of those Selected	Percent of sample population
SWO	51	112	71	40	14	40
SUB	64	56	35	21	7	20
PILOT	56	40	31	9	3	14
NFO	39	34	24	10	3	12
GENAV	Unlimited	10	9	1	1	4
LDO	38	24	4	19	7	9

Table 14. Success rate by community, June 2011

NOV2011	Allowed out	Wanted out	Number Not Selected	Number Selected	Percent of those Selected	Percent of sample population
SWO	87	107	61	46	17	40
SUB	58	54	32	22	8	20
PILOT	42	44	27	17	6	16
NFO	34	20	14	6	2	7
GENAV	Unlimited	11	10	1	1	4
LDO	23	19	7	12	4	7

Table 15. Success rate by community, November 2011

JUNE2012	Allowed out	Wanted out	Number Not Selected	Number Selected	Percent of those Selected	Percent of sample population
SWO	86	124	74	48	16	45
SUB	41	40	21	18	6	14
PILOT	34	39	28	11	4	14
NFO	31	31	19	11	4	11
GENAV	Unlimited	12	9	3	1	4
LDO	26	24	8	16	5	9

Table 16. Success rate by community, June 2012

NOV2012	Allowed out	Wanted out	Number Not Selected	Number Selected	Percent of those Selected	Percent of sample population
SWO	89	121	68	53	19	44
SUB	34	29	16	13	5	11
PILOT	10	32	18	14	5	12
NFO	25	29	22	7	3	11
GENAV	Unlimited	8	6	2	1	3
LDO	22	18	4	14	5	7

Table 17. Success rate by community, November 2012

APPLICANTS	Selected	Not Selected	Total	Percent selected	Percent not selected	Percent of sample population
SWO	216	377	593	39	45	43
SUB	89	126	215	16	15	15
PILOT	62	119	181	11	22	13
NFO	50	95	145	9	11	10
GENAV	12	37	49	22	4	4
LDO	82	29	111	15	3	8
OTHER	47	50	97	8	6	7
Total	558	833	1391	40	60	100

Table 18. Success rate by community, November 2010 through November 2012

These tables show that at each of the five boards, SWOs represent a minimum of 40 percent of the total applicants. However, SWOs represent the largest decline in those selected with no more than 19 percent in any given year. LDOs, who only comprise 4 percent of the total applicants had the highest rate of selection. In general, the proportion of applicants from each community does not significantly vary over time. Officers in SUB, GENAV, and other are also being selected at a higher rate than the other communities. One explanation is that the SWO community has had retention concerns and may therefore be limiting the number of officers they let out.

2. Quota Demand (IN)

In addition to setting the quotas for the number of officers allowed out of their respective communities, the precepts also specify the total number of officers that each community can allow in. The total number of applicants in each community and the total number of officers that each community was able to accept in that particular board are presented in Tables 19 through 23. Reviewing these tables provides insight on the most desirable communities and shows the acceptance rate over time.

Nov 2010			
Designator	Number Applied	Quota Allowed IN	Availability (%)
1180	6	5	83
1190	10	2	20
1200	29	15	52
1390	1	1	100
1460	51	16	31
1510	43	15	34
1650	14	7	50
17X0	24	21	87
1800	14	4	29
1810	20	14	70
1820	25	19	76
1830	27	7	26
2300	4	2	50
3100	8	7	88
5100	2	5	250

Table 19. Quota Demand in, November 2010

June 2011			
Designator	Number Applied	Quota Allowed IN	Availability (%)
1160	1	10	1000
1180	4	4	100
1190	6	2	33
1200	37	7	19
1460	54	15	28
1510	57	12	21
1520	5	2	40
17X0	20	18	90
1800	15	4	27
1810	20	17	85
1820	25	16	64
1830	35	13	37
2300	5	3	60
3100	1	3	300
5100	5	3	60

Table 20. Quota Demand in, June 2011

Nov 2011			
Designator	Number Applied	Quota Allowed IN	Availability (%)
1200	43	11	26
1390	2	1	50
1460	50	24	48
1510	52	15	29
1520	3	2	67
1650	6	6	100
17X0	27	17	63
1800	15	4	27
1810	19	14	74
1820	10	19	190
1830	32	7	22
2300	5	2	4
3100	3	7	230
5100	3	5	170
5100	5	3	60

Table 21. Quota Demand in, November 2011

June 2012			
Designator	Number Applied	Quota Allowed IN	Availability (%)
1160	3	8	260
1180	1	7	700
1200	45	11	24
1390	5	2	40
1460	41	20	49
1510	56	13	23
1650	4	8	200
17X0	34	29	85
1800	19	6	32
1810	22	17	77
1820	12	26	217
1830	31	13	42
2300	5	3	60
3100	5	8	160
5100	7	8	114

Table 22. Quota Demand in, June 2012

Nov 2012			
Designator	Number Applied	Quota Allowed IN	Availability (%)
1160	2	4	200
1200	44	20	45
1390	4	1	25
1460	37	18	49
1510	46	14	30
1520	5	5	100
1650	7	8	114
17X0	19	23	121
1800	10	4	40
1810	14	8	57
1820	24	25	104
1830	41	5	12
2300	4	3	75
2900	1	3	300
3100	2	5	250

Table 23. Quota Demand in, November 2012

The demand schedules over the five boards show that there are more officers applying to communities than demand. Tables 19–23 indicate that Aerospace Engineering Duty Officer Community is the most desirable but that applicants are requesting the HR and Intel communities in higher numbers compared to previous years. The data suggests that the IP community has had the highest sustained growth of quotas while the IW community has had the greatest decline. One explanation for this is that the IP community may have taken quotas from the IW community in recent efforts to build the IP inventory over the last several years in support of Navy Strategy to grow a cyber-security community. The Supply and Civil Engineering Corps has had the largest availability over time, potentially indicating that officers requesting into those designators are not met with as restrictive selection criteria. As depicted in Table 22, in June 2012 the FAO community had the most openings across all the five boards (29 quotas). Table 20 shows that in June 2011 the SWO community had the highest single availability of all five boards. On the other hand, during the November 2011 board, the Medical Service Corps Community had the lowest availability of all of the five boards with only 4 percent availability. The Supply and demand analysis suggests that one might expect that officers applying to designator IP and Supply are more likely to be selected for lateral transfer.

E. PROBIT MODEL

A Probit model is used to determine whether certain officer characteristics are more desirable than others for selection. In particular, the Probit model is used to estimate the likelihood that an officer is selected for lateral transfer based on basic demographic variables and board specific characteristics. The dependent variable is binary, assuming a value of “1” if the applicant was selected for redesignation and “0” otherwise. In addition to the demographic variables included in the model, board year and month are included in the empirical specification to capture some of the year specific variation that might have influenced decisions from each board. Equation (1) shows the model specification:

$$P(\text{Selected} = 1 | X) = \phi(a + \beta_i \text{Race}_i + \gamma_j \text{Rank}_j + \delta \text{Male} + \xi_k \text{Current Designator}_k + \theta_l \text{Board Date}_l + \pi \text{Time as Officer} + \lambda_m \text{Applying Designator}_m + \zeta \text{Alternate} + U)$$

F. VARIABLE DEFINITION

The specific variables used in this thesis are defined as follows:

Dependent Variable

Selected = 1 if selected at lateral transfer board; = 0 otherwise

Race

WHITE = 1 if race is White; = 0 otherwise

BLACK = 1 if race is African American; = 0 otherwise

HISPANIC = 1 if race is Hispanic; = 0 otherwise

ASIAN = 1 if race is Asian; = 0 otherwise

OTHER_RACE = 1 if race is not white, black, Hispanic or Asian; = 0 otherwise

Gender

MALE = 1 if gender is male; = 0 if gender is female

Designator

SWO = 1 if designator is 1110; = 0 otherwise

SUB = 1 if designator is 1120; = 0 otherwise

PILOT = 1 if designator is 1310; = 0 otherwise

NFO = 1 if designator is 1320; = 0 otherwise

GENAV = 1 if designator is 1300; = 0 if otherwise

LDO = 1 if designator is ANY 6000 code; = 0 if otherwise

OTHER_DESIG = 1 if designator is not SWO, SUB, PILOT, NFO, GENAV, or LDO; = 0 otherwise

Rank

CDR = 1 if rank is Commander; = 0 otherwise

LCDR = 1 if rank is Lieutenant Commander; = 0 otherwise

LT = 1 if rank is Lieutenant; = 0 otherwise

LTJG = 1 if rank is Lieutenant Junior Grade; = 0 otherwise

Years as Officer

TIME_OFFICER = number of years as an officer

Board Year Group

NOV_2010 = 1 if the board is November 2010; = 0 otherwise

JUN_2011 = 1 if the board is June 2011; = 0 otherwise

NOV_2011 = 1 if the board is November 2011; = 0 otherwise

JUN_2012 = 1 if the board is June 2012; = 0 otherwise

NOV_2012 = 1 if the board is November 2012; = 0 otherwise

Applying Designators

SWO = 1 if applying for Surface Warfare; = 0 otherwise

SPECWAR = 1 if applying for Special Warfare (SEALS); = 0 otherwise

SPECOPS = 1 if applying for Special Operations (EOD); = 0 otherwise

HR = 1 if applying for Human Resources; = 0 otherwise

PILOT = 1 if applying for Pilot; = 0 otherwise

EDO = 1 if applying for Engineering Duty Officer; = 0 otherwise

AEROSPACE = 1 if applying for Aerospace; = 0 otherwise

AERO_ENGINE = 1 if applying for Aerospace Engineering; = 0 otherwise

PAO = 1 if applying for Public Affairs; = 0 otherwise

FAO = 1 if applying for Foreign Area; = 0 otherwise

OCEANO = 1 if applying for Oceanography; = 0 otherwise

IW = 1 if applying for Information Warfare; = 0 otherwise

IP = 1 if applying for Information Professional; = 0 otherwise

INTEL = 1 if applying for Intelligence; = 0 otherwise

MEDICAL_SERVICE = 1 if applying for Medical Service; = 0 otherwise

SUPPLY = 1 if applying for Supply; = 0 otherwise

CIVIL_ENGINEERING = 1 if applying for Civil Engineering; = 0 otherwise

Alternate Applying Designator

ALT_DESIG = 1 if applying for ANY alternate designator; = 0 otherwise

G. HYPOTHESIS

The descriptive statistics presented in this chapter suggest that an applicant's parent community might be the most significant factor that influences the probability that an officer is selected for a lateral transfer. One might expect that certain communities are more likely to allow personnel in, and others are less likely to allow people out. Specifically, one could argue that the SWO community is less likely to allow people out due to retention concerns, especially at the department head level (Lefrere, 2001). Also one might expect that applying for an alternate designator or self-selecting as a GENAV would increase the chances of being selected for lateral transfer.

H. PROBIT RESULTS

This section describes the coefficient estimates as well as the marginal effects from the probit model and are presented in tables 24–31. In general, the results reveal that there is no gender difference in the probability of selection. The marginal effects are not statistically different from zero at any conventional significance level. However, Table 25 reveals that rank has statistically significant affect in increasing the probability of selection. These results are not surprising because officers of higher rank have shown sustained superior performance and are high quality candidates, which is evident by their previous success at promotion boards and advance qualifications. They have also developed skills and experiences that would make them more desirable in another community. The specifics of each variable are analyzed below.

1. Gender

The Probit results shown in Table 24, indicate that there is no statistically significant difference in the likelihood of selection between men and women. Specifically, the null hypothesis stating that male and female are selected equally cannot be rejected at the 10% significance level. This means that compared to females, males are not selected at different rates.

Selection Model - Regression Results			
		(1)	(2)
EQUATION	Gender	Probit Results	Marginal Effects
Selected	Male	-0.0986 (0.110)	-0.0383 (0.0430)
	Female	Left out Reference Group	
	Observations	1,391	1,391
Standard errors in parentheses			
*** p<0.01, ** p<0.05, * p<0.1			

Table 24. Probit Results (Gender)

2. Rank

The Probit results shown in Table 25, indicate that rank plays a significant factor in the likelihood that an individual will be selected for lateral transfer. Specifically, a higher ranked applicant is more likely to be accepted for lateral transfer. The results indicate that a LT is 20.8 percentage points, a LCDR is 35.2 percentage points, and a CDR is 37.7 percentage points more likely to be selected compared to a LTJG. The coefficient estimates on rank are all statistically significant. One explanation for why higher ranked officers are more likely to be selected is because they have proven themselves as a critical asset to the Navy and have developed superior skills that encourage other communities to desire their knowledge and experience.

Selection Model - Regression Results			
		(1)	(2)
EQUATION	Rank	Probit Results	Marginal Effects
Selected	CDR	1.009*	0.377**
		(0.530)	(0.163)
	LCDR	0.913***	0.352***
		(0.264)	(0.0952)
	LT	0.553***	0.208***
		(0.134)	(0.0490)
	LTJG	Left out Reference Group	
	Observations	1,391	1,391
	Standard errors in parentheses		
	*** p<0.01, ** p<0.05, * p<0.1		

Table 25. Probit Results (Rank)

3. Time as Officer

Time as an officer is another variable that was found to be a statistically significant factor that affects the probability of selection. Specifically, Table 26 shows that the each additional year spent in the Navy decreases the probability of selection by 2.5 percentage points. Although somewhat correlated with rank, this finding suggests that the lateral transfer board is more likely to select a higher ranked individual with the least amount of years as an officer. This may be due to the fact that a key element of the board is force shaping for the future. Communities with vacancies especially at the JO level are looking to fill gaps for the long term. Selecting officers with significant number of years of service may not deliver a significant return on investment after a redesignated officer is retrained for a particular community.

Selection Model - Regression Results			
		(1)	(2)
EQUATION	Time as Officer	Probit Results	Marginal Effects
Selected	Time as officer	-0.0656**	-0.0253**
		(0.0298)	(0.0115)
	Observations	1,391	1,391
Standard errors in parentheses			
*** p<0.01, ** p<0.05, * p<0.1			

Table 26. Probit Results (Time as Officer)

4. Board Date

The model includes board date to control for board specific variation. The coefficient results are presented in Table 27. The marginal effects reveal that if an applicant applied during the November 2011 board, the officer is 8.4 percentage points more likely to get selected compared relative to November 2010. The same was true for June 2012 and November 2012 which was found to increase an applicant's probability by 9.06 percentage points and 10.9 percentage points, respectively. The most plausible explanation for these results is that in 2010 the operational requirements were stricter. This may imply that the URL communities were more reluctant to allow personnel to redesignate during that period.

Selection Model - Regression Results			
		(1)	(2)
EQUATION	Board Date	Probit Results	Marginal Effects
Selected	June 2011	0.0192 (0.115)	0.00740 (0.0443)
	November 2011	0.216* (0.116)	0.0844* (0.0459)
	June 2012	0.232** (0.115)	0.0906** (0.0453)
	November 2012	0.278** (0.118)	0.109** (0.0464)
	November 2010	Left out Reference Group	
	Observations	1,391	1,391
Standard errors in parentheses			
*** p<0.01, ** p<0.05, * p<0.1			

Table 27. Probit Results (Board Date)

5. Applying Designator

The results, shown in Table 28, suggests that requests to transfer into the IP, FAO or SPECWAR communities are more likely to be successfully redesignated. This is probably a result of availability into those communities. Specifically, the regression results show that an applicant requesting to be an IP officer is 24.4 percentage points more likely to be selected relative to Civil Engineer. This result is statistically significant at the 5 percent significance level. SPECWAR and FAO are significant at the 10 percent level and were found to increase the probability of selection by 37.3 and 21.1 percentage points, respectively, compared to application for Civil Engineering. The remaining requested designators were not statistically different from zero at the 10 percent significance level, meaning that they did not have an effect on an individual's selection rate.

The supply and demand analysis earlier in this chapter indicates that these billets have shown the greatest increase in availability since 2010. This may be due to the fact that IP and FAO communities are newer specialties. The Navy may be trying to build their manpower and end strength with the help of the lateral transfer process, whereas SPECWAR has been increasing their manning to fulfill operational requirements and reduce the strain on current inventory (SPECWAR OCM Community Brief, 2011).

Selection Model - Regression Results			
		(1)	(2)
EQUATION	Applying Designator	Probit Results	Marginal Effects
Selected	Applying for SWO	0.501 (0.760)	0.198 (0.295)
	Applying for Specwar	0.996* (0.547)	0.373** (0.169)
	Applying for Specops	-0.181 (0.446)	-0.0678 (0.161)
	Applying for HR	-0.312 (0.269)	-0.115 (0.0947)
	Applying for Pilot/NFO	0.0683 (0.464)	0.0265 (0.182)
	Applying for EDO	0.0455 (0.266)	0.0176 (0.103)
	Applying for Aerospace	-0.486 (0.308)	-0.176* (0.103)
	Applying for Aerospace Engineering	0.110 (0.453)	0.0429 (0.179)
	Applying for PAO	0.250 (0.348)	0.0985 (0.139)
	Applying for FAO	0.537* (0.292)	0.211* (0.113)
	Applying for OCEANO	-0.355 (0.297)	-0.129 (0.0998)
	Applying for IW	0.412 (0.288)	0.163 (0.114)
	Applying for IP	0.621** (0.296)	0.244** (0.113)
	Applying for INTEL	-0.358 (0.273)	-0.131 (0.0936)
	Applying for Medical Service	0.259 (0.361)	0.102 (0.144)

Selection Model - Regression Results		
Applying for Supply	0.349	0.138
	(0.419)	(0.167)
Applying for Civil Engineering	Left Out Reference Group	
Observations	1,391	1,391
Standard errors in parentheses		
*** p<0.01, ** p<0.05, * p<0.1		

Table 28. Probit Results (Requested Designator)

6. Alternate Designator

The results shown in Table 29, indicate that applying to an alternate designator does not affect an officer’s chance of being selected. Specifically, the results were not statistically different from zero at the 10 percent significance level.

Selection Model - Regression Results			
		(1)	(2)
EQUATION	Alternate Designator	Probit Results	Marginal Effects
Selected	Alternate Designator	-0.117	-0.0447
		(0.0916)	(0.0346)
	No Alternate Designator	Left out Reference Group	
	Observations	1,391	1,391
Standard errors in parentheses			
*** p<0.01, ** p<0.05, * p<0.1			

Table 29. Probit results (Alternate Designator)

7. Race

The Probit model suggests that being Hispanic increases the likelihood of selection as shown in Table 29. Specifically, a Hispanic applicant is 21.1 percentage points more likely to be selected relative to the “other” race group. This was found to be statistically significant at the 5 percent level. The remaining race variables are not

statistically different than zero at the 10 percent significance level. This means that with the exception of Hispanic applicants, an individual's race is not a determining factor for lateral transfer success.

Hispanics may be selected more due to a higher motivation to remain in the Navy. Arias and Dal (2006) found that Hispanics have lower predicted rates of first term and early attrition, and higher estimated rates of retention. A quantitative and qualitative analysis suggest that increased immigration, lower test scores and higher school dropouts rates, leaves Hispanic individuals more likely to be committed to the Navy. This directly relates to the lateral transfer board because voting members are looking for applicants that will be dedicated to serve long term (Author interview with CAPT Thaeler, February 2013). Following the findings of Arias and Dal (2006), it is likely that a Hispanic's performance reports indicate strong convictions to remain in the Navy which may be lending weight for these officers to be selected at higher rates.

Selection Model - Regression Results			
		(1)	(2)
EQUATION	Race	Probit Results	Marginal Effects
	White	0.244 (0.189)	0.0919 (0.0691)
	Black	0.112 (0.222)	0.0436 (0.0870)
	Hispanic	0.535** (0.253)	0.211** (0.0980)
	Asian	0.278 (0.261)	0.109 (0.104)
	Other Race	Left out Reference Group	
	Observations	1,391	1,391
Standard errors in parentheses			
*** p<0.01, ** p<0.05, * p<0.1			

Table 30. Probit Results (Race)

8. Current Designator

As expected, Table 31 indicates that an applicant's current designator affects the probability of being selected for his or her desired designator. Specifically, applicants who are SWO, SUB or GENAV are less likely to be redesignated. However, an LDO is more likely to be selected. The results show that GENAV applicants are 21.2 percentage points, SWO applicants are 10.9 percentage points and SUB applicants are 11.6 percentage points less likely to be selected for later transfer compared to specialties defined as "other designators." The results indicate that GENAV variable is statistically significant at the 1 percent level and SWO and SUB variables are significant at 10 percent level. On the other hand, an LDO is 15.5 percentage points more likely to be chosen for redesignation compared to "other designators" at the 10 percent significance level.

One explanation for the LDOs results may be due to the fact that like senior ranked officers, LDOs have gained operational fleet experience and have proven skills, which make them more desirable to other communities. It is also likely that board members give weight to years of service and select LDOs in order to retain them in the Navy. For the most part board members are looking for sustained superior performers shown through above average performance marks (Author interview with CAPT Thaeler, February 2013). Compared to other designators, officers with prior enlisted experience and greater years of service, LDOs have more evaluations in their record than a typical URL JO.

Selection Model - Regression Results			
		(1)	(2)
EQUATION	Current Designator	Probit Results	Marginal Effects
	SWO	-0.286*	-0.109*
		(0.153)	(0.0577)
	SUB	-0.312*	-0.116*
		(0.180)	(0.0635)
	PILOT	-0.0499	-0.0191
		(0.241)	(0.0918)
	NFO	-0.217	-0.0813
		(0.227)	(0.0821)
	GENAV	-0.628**	-0.212***
		(0.265)	(0.0733)
	LDO	0.394*	0.155*
		(0.221)	(0.0874)
	Other Designator	Left Out Reference Group	
	Observations	1,391	1,391
	Standard errors in parentheses		
	*** p<0.01, ** p<0.05, * p<0.1		

Table 31. Probit Results (Current Designator)

V. SUMMARY, CONCLUSION AND DISCUSSION

A. SUMMARY

The goal to retain quality officers remains high in the Navy. One tool to optimize force structure and target high quality officers is the lateral transfer process. Specifically, the aim of the lateral transfer process to optimize manning deficiencies across communities and when used effectively, the lateral transfer process optimizes designated officer communities to meet end strength requirements. In an attempt to better understand the transfer process, this study examined the outcomes of the lateral transfer board by utilizing a Probit model to identify leading factors that determine lateral transfer success.

Previous research suggests that optimizing officer redesignation is essential to maximize return on investment. Moore and Reese (2004) found that officers who attrite in an initial community are less likely to be promoted and have lower retention rates than warfare qualified officers who redesignated. Research by Cook and Mooney (2004), show that reducing SWO lateral transfers negatively impacts the experience and productivity of RL and Staff Corps communities. Monroe and Cymrot (2004) found corroborating evidence that limiting the amount of SWO applicants would require the RL and SC communities to increase their direct accessions by 47 percent. Additionally, officers who are not selected at the lateral transfer board are twice as likely to leave the Navy (Ryan, 2007).

The general results from this study suggest that rank, current and requested designators, and years of service as an officer have a statistically significant effect on the likelihood of selection at the lateral transfer board. While these variables are important for determining selection, the Navy should more effectively align an applicant's knowledge, skills and abilities with manpower and end strength deficiencies, especially in the RL and SC communities. Specifically, the Navy needs to effectively utilize officers that apply to the lateral transfer boards for occupational specialties that are better aligned with their individual characteristics and career goals, because officers not

selected for lateral transfer are more likely to attrite, the Navy needs to find alternate criteria in order to select the right individual for the right job.

B. CONCLUSIONS AND RECOMMENDATIONS

1. Research Question 1: What Are the Characteristics and Trends of Officers who Apply for Lateral Transfer?

a. Conclusion

Navy officers who meet policy requirements in accordance with governing instructions are allowed to request lateral transfer any time during their career. The policy requirements produce a diverse pool of applicants who vary by gender, ethnicity, rank, and job background. The data shows that the majority of applicants are white males, however the analysis reveals that there is no statistical difference in the likelihood of selection across race or gender. In fact, the sample of officers in the data set is representative of the Navy population as a whole in terms of racial and gender composition.

Across all boards, LTs represent the greatest number of applicants who desire lateral transfer. However, LCDRs are selected at the highest rates. LTJGs and LCDRs apply in similar numbers but represent half as many LTs, indicating that LTs have the most availability and strongest motivation to leave their initial community. This may suggest that a LT is the optimal candidate to redesignate for having gained more operational experience and knowledge than a LTJG, and being able to provide a longer return than a LCDR.

Additionally, the descriptive statistics show that only a quarter of officers request an alternate designator in their lateral transfer package, suggesting that the vast majority of applicants seek a particular job fit. Also, prior to evaluation, it was believed that adding an alternate designator would increase selection probability. However, the probit results reveal that applying to an alternate designator is statistically insignificant.

b. Recommendation

It is likely that officers who are applying for a lateral transfer possess the skills and abilities that support a specific field. For instance, a Surface Warfare Officer (1110) that has a Business Administration/Management Undergraduate degree and a Master's degree in Manpower System Analysis Management from Naval Postgraduate School might serve the Navy better as a Human Resource Officer (1200). In this case, the job fit maybe optimal for the Navy but also the lateral transfer move might provide a better sense of accomplishment and understanding for the officer leading to higher motivation, performance, and effectiveness. As such, information on degree type would be beneficial for future analysis.

Furthermore, the lateral transfer board should place an applicant's occupational background characteristics as the strongest determinant for selection. Also less emphasis should be placed on lengthy success in a different community. Specifically, the lateral transfer board should be selecting LTs at the highest rate instead of LCDRs.

2. Research Question 2: Can One Predict the Likelihood that an Officer is Chosen for Lateral-Transfer Based on Observable Characteristics and if so, which Factors Contribute Most to the Selection Process?

a. Conclusion

Between November 2010 and November 2012, 1391 officers applied to the lateral transfer board and 558 officers were selected. In general, the lateral transfer board selects only 40 percent of the applicants with slight variation across years. The Probit results indicate that several of the observable variables included in the model do affect the likelihood of selection. For instance, higher ranked officers are more likely to be selected relative to lower ranked officers. Although the average applicant was a male, LT and a surface warfare officer, the probit results suggest that officers who are most likely to be successful at redesignating are LCDR as well as Limited Duty Officers. One explanation for why non-LDO warfare qualified officers are being selected at lower rates is that heavy emphasis is placed on prior enlisted service. This may suggest that LDOs are not the optimal candidate to maximize return on investment. LDOs have at least eight

years of experience and are required to have a college degree before they are allowed to lateral transfer. This means that the typical LDO at the lateral transfer board has 12 years of service prior to redesignating. If only serving for 20 years, the return on investment is lower than a typical URL officer from ROTC/USNA.

As expected, there are no gender or racial differences in selection, except for Hispanics. The estimated coefficients on race indicate that a Hispanic officer is more likely to be selected relative to any other race category and is the only statistically significant race variable.

The probit results also indicate that if an applicant is requesting into Information Professional or Foreign Area Officer communities, they are more likely to be accepted for a lateral transfer. This suggests that demand is a critical factor that influences selection. Specifically, it is plausible that strict selection criteria may be minimized for communities that have manning concerns and/or are trying to expand inventory for the future. This may also suggest that end strength may be more important than aligning skills and abilities.

b. Recommendation

The lateral transfer board should increase the 40 percent selection rate, selecting more officers at every board. In addition, it is recommended that LDOs have fewer officers redesignating into the RL and SC communities. This will improve longevity, reduce turnover and increase the motivation and productivity in the RL and SC communities.

3. Research Question 3: Which Officer Designators Provide the Most and Fewest Lateral Transfers Applicants as Well as which Designators are the Most Desirable and Most Available?

a. Conclusion

Although SWO has the largest number of yearly initial accessions it also has the largest number of lateral transfer requests. The low number of actual SWOs allowed to transfer is to facilitate retention requirements to fill department head billets. Also AEDO, HR, and Intel appear to be the most frequently requested designator for

lateral transfer while the IP and FAO communities have the largest demand. This confirms the finding from previous research that the RL accesses most officers from the URL. Furthermore, officers that apply to the lateral transfer board are better suited to serve the Navy than direct accessions.

One hypothesis was that GENAV officers would be more likely to be selected due to unlimited restrictions. However, the data does not support this claim. In fact, an officer who has been released from flying status is less likely to be selected for a lateral transfer. This finding may suggest that board members view GENAV officers as lower quality even though the release may be for medical reasons. Since GENAV officers no longer have a career in Aviation, there may be concerns that these officers will display poor leadership, and/or other disciplinary problems in a different community. However, data on medical releases or attitudes on GENAV officers was not available for this study to be sure.

b. Recommendation

In today's downsizing environment, the lateral transfer board should minimize the selection of non-warfare qualified officers as well as officers who fail training schools and/or initial designators. Specifically, the lateral transfer board should select more SWOs especially into the RL and SC communities.

C. FURTHER RESEARCH

1. One limitation of this study is that the data received did not have information on marital status, dependents, degree type, GPA, location, FITREPS, and specific skills. As a result, the coefficient estimates provided in the previous section may be biased if successful transfer is a function of any of these variables. Therefore, it is recommended that PERS-803 assemble a data set with the following variables to replicate this study in the future: educational background information including GPA and type of undergraduate and postgraduate degree, commissioning source, and APC code.

2. A study should be conducted to examine an officer's APC. An APC is a three-digit code that summarizes pertinent portions of an officer's prior performance. The Navy

utilizes the APC code as a standard to filter candidates for specific NPS curriculum and can be used to foreshadow an officer's potential in other jobs.

3. It is recommended that future studies include a longer time range to observe variation in the in the selection criteria over time and utilize panel methods to control for unobserved heterogeneity. Specifically, PERS-803 should maintain at least 10 boards, five years, for statistical analysis.

LIST OF REFERENCES

- Arias, W., & Dal, S. (2006). *Hispanics in the U.S. military* (Master's thesis, Naval Postgraduate School). Retrieved from <http://www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA457178>
- Assistant Commander Navy Personnel Command, (2012, October 31). Lateral transfer/redesignation board requirements (Ser N13/145). Washington, DC: A.M. Kurta.
- Assistant Commander Navy Personnel Command, (2012, May 30). Lateral transfer/redesignation board requirements (Ser N13/072). Washington, DC: A.M. Kurta.
- Assistant Commander Navy Personnel Command, (2011, October 28). Lateral transfer/redesignation board requirements (Ser N13/289). Washington, DC: A.M. Kurta.
- Assistant Commander Navy Personnel Command, (2011, June 1). Lateral transfer/redesignation board requirements (Ser N13/225). Washington, DC: A.M. Kurta.
- Assistant Commander Navy Personnel Command, (2010, October 29). Lateral transfer/redesignation board requirements (Ser N13/103). Washington, DC: A.M. Kurta.
- Assistant Commander Navy Personnel Command Memorandum (2010, November). Lateral transfer/redesignation board membership. Washington, DC.
- Assistant Commander Navy Personnel Command Memorandum (2011, June). Lateral transfer/redesignation board membership. Washington, DC.
- Assistant Commander Navy Personnel Command Memorandum (2011, November). Lateral transfer/redesignation board membership. Washington, DC.
- Assistant Commander Navy Personnel Command Memorandum (2012, June). Lateral transfer/redesignation board membership. Washington, DC.
- Assistant Commander Navy Personnel Command Memorandum (2012, November). Lateral transfer/redesignation board membership. Washington, DC.
- Chief of Naval Operations (2005, December). Lateral transfer/redesignation and augmentation of officers in the Navy (OPNAV Instruction 1210.5). Washington, DC: J.C. Harvey, JR.

- Clemens, G. T. (2002). *An analysis of factors affecting the retention plans of U.S. Navy Junior Officers* (Master's thesis, Naval Postgraduate School). Retrieved from <http://www.dtic.mil/dtic/tr/fulltext/u2/a401629.pdf>
- Cook, J., & Mooney, J. (2004). *A performance analysis of the officer lateral transfers and redesignation process* (Master's thesis, Naval Postgraduate School). Retrieved from <http://www.dtic.mil/dtic/tr/fulltext/u2/a427299.pdf>
- Deputy Chief of Naval Operations (Manpower, Personnel, Training and Education) (2012, November). Precept convening a selection board to consider officers for lateral transfer/redesignation, Washington, DC: S.R. Van Buskirk.
- Lefrere K. J. (2001). *An assessment of U.S. Navy Junior Officer retention from 1998-2000* (Research Report, Air Command and Staff College). Retrieved from <http://www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA407142>
- Military Personnel Manual (2002, August 22). Lateral transfer and change of designator codes of regular and reserve officer (Article 1210-010). Washington, DC.
- Monroe, A.B., & Cymrot D.J. (2004) *Enabling officer accession cuts while limiting laterals*. Alexandria, Virginia: Center for Naval Analysis. Retrieved from <http://www.cna.org/sites/default/files/research/d0009656.a2.pdf>
- Moore C. S., & Reese D. L. (1997). *The lateral transfer system: how well does it serve officers and communities*. Alexandria, VA: Center for Naval Analysis.
- Naval Personnel Command (2013, March). Facts and statistics. Retrieved from <http://www.public.navy.mil/bupersnpc/organization/bupers/WomensPolicy/Pages/NavyWomenFactsStatistics.aspx>
- Naval Personnel Command (2012, August 31). Officer programed authorizations (OPA) manpower personnel navy (sea/shore).
- Office of the Chief of Naval Operations (2013, January). Manual of Navy Officer manpower and personnel classifications (NAVPERS 15839I, Volume I Major Code Structures). Washington, DC.
- Ryan, F. (2007) *Analysis of the officer lateral transfer and redesignation process and its impact on the unrestricted line* (Master's thesis, Naval Postgraduate School). Retrieved from <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA467140>
- Uriell, Z. A., Newell, C. E., & Whittam, K. P. (2011, March). Retention quick polls of three Navy communities (NPRST-TN-11-5). Millington, Tennessee: Navy Research, Studies and Technology, Navy Personnel Command.

Whittam, K. P. (2009, November). Navy-wide personnel survey (NPS) management report (NPRST-TN-10-2). Millington, Tennessee: Navy Research, Studies and Technology, Navy Personnel Command.

Wilcove, G. L., Burch, R. L., Conroy, A.M., & Bruce, R. A. (1991, September) *Officer Career Development: A review of the civilian and military research literature on turnover and retention* (TN-91-23). San Diego, CA: Navy Research and Development Center.

THIS PAGE INTENTIONALLY LEFT BLANK

INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center
Ft. Belvoir, Virginia
2. Dudley Knox Library
Naval Postgraduate School
Monterey, California
3. Academic Associate Manpower Systems Analysis
Naval Postgraduate School
Monterey, California
4. Professor Dina Shatnawi
Naval Postgraduate School
Monterey, California
5. CDR Bill Hatch, USN (ret)
Naval Postgraduate School
Monterey, California
6. LCDR Duquesne Loudior
PERS-45E
Millington, Tennessee
7. LCDR Charles Minski
PERS-440B
Millington, Tennessee