



**NAVAL
POSTGRADUATE
SCHOOL**

MONTEREY, CALIFORNIA

THESIS

**ASSIGNING ENLISTED SAILORS INTO HARD-TO-FILL
LOCATIONS**

by

Christopher J. Ricard and Richard A. Neuer

March 2020

Thesis Advisor:

William R. Gates

Second Reader:

William D. Hatch II

Approved for public release. Distribution is 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 2020	3. REPORT TYPE AND DATES COVERED Master's thesis	
4. TITLE AND SUBTITLE ASSIGNING ENLISTED SAILORS INTO HARD-TO-FILL LOCATIONS			5. FUNDING NUMBERS	
6. AUTHOR(S) Christopher J. Ricard and Richard A. Neuer				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A			10. SPONSORING / MONITORING AGENCY REPORT NUMBER	
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.				
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release. Distribution is unlimited.			12b. DISTRIBUTION CODE A	
13. ABSTRACT (maximum 200 words) There is a disproportionate distribution of Sailors throughout the naval aviation enterprise, as the Navy is unable to solicit Sailors to voluntarily serve in specific geographically remote locations. The topography and proximity to open airspace in these locations are ideal for the aviation community's mission, but Sailors do not identify them as desirable places to live and raise their families. This mismatch causes friction between detailers and their constituents, leading to poor job satisfaction, command readiness, and retention efforts. Our research supports Navy leaders in managing talent within the enlisted naval aviation community. We employ two surveys to compare enlisted Sailors with their detailers to understand individual motivations, experiences, and preferences related to incentives, and how these values can impact the assignment process. Our survey results conclude that incentives are a worthwhile investment and are likely to increase the probability of voluntary assignment. Our recommendations include merit-based and blended cafeteria-style incentive options, a detailer optimization tool, and an increased investment in base support services. In a never-ending quest for talent, the Navy must be willing to offer the incentives that appeal to the relevant Sailor population and remain within the Navy's budgetary constraints in order to achieve overall operational effectiveness.				
14. SUBJECT TERMS AIP, assignment, base support services, billets, cafeteria style incentive, detailer, detailer variation, distribution, dual military, fill, fit, geographical remote location, hard-to-fill, Hawthorne Effect, Hyperbolic Discounting, incentive, Lemoore, merit-based incentive, monetary, NAVADMIN, Naval Aviation Enterprise, NPC, placement, PERS-4, remote area, Sailor, SDIP, time-consistent			15. NUMBER OF PAGES 133	
			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 is unlimited.

ASSIGNING ENLISTED SAILORS INTO HARD-TO-FILL LOCATIONS

Christopher J. Ricard
Lieutenant Commander, United States Navy
BS, Southern New Hampshire University, 2007

Richard A. Neuer
Lieutenant Junior Grade, United States Navy
BSB, University of Phoenix, 2009
MS, Embry-Riddle Aeronautical University, 2015

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

**NAVAL POSTGRADUATE SCHOOL
March 2020**

Approved by: William R. Gates
Advisor

William D. Hatch II
Second Reader

Marigee Bacolod
Academic Associate, Graduate School of Defense Management

THIS PAGE INTENTIONALLY LEFT BLANK

ABSTRACT

There is a disproportionate distribution of Sailors throughout the naval aviation enterprise, as the Navy is unable to solicit Sailors to voluntarily serve in specific geographically remote locations. The topography and proximity to open airspace in these locations are ideal for the aviation community's mission, but Sailors do not identify them as desirable places to live and raise their families. This mismatch causes friction between detailers and their constituents, leading to poor job satisfaction, command readiness, and retention efforts.

Our research supports Navy leaders in managing talent within the enlisted naval aviation community. We employ two surveys to compare enlisted Sailors with their detailers to understand individual motivations, experiences, and preferences related to incentives, and how these values can impact the assignment process. Our survey results conclude that incentives are a worthwhile investment and are likely to increase the probability of voluntary assignment.

Our recommendations include merit-based and blended cafeteria-style incentive options, a detailer optimization tool, and an increased investment in base support services. In a never-ending quest for talent, the Navy must be willing to offer the incentives that appeal to the relevant Sailor population and remain within the Navy's budgetary constraints in order to achieve overall operational effectiveness.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

I.	INTRODUCTION.....	1
	A. OVERVIEW.....	1
	B. PROBLEM STATEMENT	4
	C. PURPOSE.....	6
	D. RESEARCH QUESTIONS.....	7
	E. THESIS SCOPE.....	7
	F. DATA COLLECTION	8
	G. LIMITATIONS.....	8
	H. BENEFITS OF THE STUDY	9
II.	REVIEW OF THE LITERATURE	11
	A. OVERVIEW	11
	B. MAIN TOPICS OF CONSIDERATION.....	11
	C. SPECIFIC CONCERNS OF THE AVIATION COMMUNITY.....	11
	D. GEOGRAPHICAL DISPARITIES.....	12
	E. MANPOWER SHORTAGES.....	13
	F. INCENTIVES.....	14
	1. Introduction.....	14
	2. Discounting Effects	14
	3. Incentive Types.....	15
	4. Monetary.....	18
	5. Non-monetary.....	25
	6. Hawthorne Effect	35
III.	METHODS	37
	A. ENLISTED SAILOR PREFERENCE SURVEY	37
	1. Admin.....	37
	2. Relevant Total Population.....	38
	3. Expected Return Rate.....	38
	4. Electronically Delivered with Timeline (11 Days).....	38
	5. Topics Covered.....	39
	B. DETAILER SURVEY	41
	1. Admin.....	41
	2. Relevant Total Population.....	42
	3. Expected Return Rate.....	42
	4. Electronically Delivered with Timeline (11 Days).....	42
	5. Topics Covered.....	43

IV.	RESULTS	47
	A. ENLISTED SAILOR PREFERENCE SURVEY	47
	1. Demographics	47
	2. Location Features.....	48
	3. Outside-the-Job Features	49
	4. Incentive Preferences.....	50
	5. Additional Unexpected Valued Incentives.....	52
	6. Gender-Specific Incentive Preferences	54
	7. Rank-Specific Incentive Preferences.....	57
	B. DETAILER SURVEY	60
	1. Demographics.....	61
	2. Detailing Methodology.....	65
	3. Detailing Challenges	67
	4. Detailer’s Perspective on Incentives.....	71
V.	CONCLUSION	79
	A. RESEARCH QUESTIONS.....	79
	B. FINAL ANALYSIS.....	79
	1. Location Preferences	80
	2. Incentive Preferences.....	81
	3. Detailer Variation	84
	4. Detailer Friction	85
	5. Discounting Effects	85
	6. Hawthorne Effect	85
VI.	RECOMMENDATIONS.....	87
	A. RECOMMENDATIONS.....	87
	1. Merit-Based Fixed-Incentive Option.....	87
	2. Mixed-Incentives Option	87
	3. Time-Consistent Incentive.....	88
	4. Detailer Optimization Tool	88
	5. Increased Investment in Base Support Services	88
	6. Augment NAE Vacant Billets Using Navy Reserve Force Members	89
	B. FURTHER RESEARCH.....	90
	APPENDIX A. ASSIGNMENT INCENTIVE PAY ELIGIBILITY.....	93
	APPENDIX B. SEA DUTY INCENTIVE PAY ELIGIBILITY.....	95

APPENDIX C. ENLISTED SAILOR PREFERENCE SURVEY.....97

APPENDIX D. ENLISTED DETAILER SURVEY103

LIST OF REFERENCES.....109

INITIAL DISTRIBUTION LIST113

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF FIGURES

Figure 1.	Enlisted Detailing Timeline. Source: NPC (2019d).	1
Figure 2.	Navy Personnel Command PERS-40 Detailing Cycle. Source: NPC (2019d).	3
Figure 3.	NAS Oceana versus NAS Lemoore Manpower Comparison. Adapted from Contractor J. Bridges (email to author, May 28, 2019).	5
Figure 4.	Base Pay Multiple Payout According to Selective Reenlistment Bonus Program. Source: DoN (2019, p. 9).	22
Figure 5.	Obligated Amounts for Special Incentive Pays and Bonuses from GAO Department of Defense. Source: Farrel (2017, p. 2).	24
Figure 6.	Overall Response to Location Features	49
Figure 7.	Overall Response to Outside-the-Job Features	50
Figure 8.	Overall Responses to Incentive Features	51
Figure 9.	Overall Responses to Monthly Monetary/Advancement Incentive Amount	52
Figure 10.	Responses to Open-Ended Additional Incentives	53
Figure 11.	Comparison of Gender Responses to Incentives	55
Figure 12.	Gender Responses to Monetary Incentive Amounts	56
Figure 13.	Responses to Gender Advancement Point Amount	56
Figure 14.	Responses to Rank-Specific Incentive Preferences	57
Figure 15.	Rank-Specific Monetary Response Amounts	59
Figure 16.	Responses to Rank Advancement Point Amount	60
Figure 17.	Detailer Variation	65
Figure 18.	Enlisted Detailers Factors for Consideration	66
Figure 19.	Enlisted Detailer Matching Program	70
Figure 20.	Enlisted Detailers' Biggest Challenges with Sailors	70

Figure 21. Enlisted Detailers' Biggest Challenges as a Detailer.....71

Figure 22. Enlisted Detailer Overall Incentive Features72

Figure 23. Enlisted Detailer Monetary Benefit Amount74

Figure 24. Bonus Amount by Gender76

LIST OF TABLES

Table 1.	Command Manning Levels. Adapted from Contractor J. Bridges (email to author, May 28, 2019).	4
Table 2.	Survey Demographics	48
Table 3.	Enlisted Detailer Gender Demographics	61
Table 4.	Enlisted Detailer Marital Status	62
Table 5.	Enlisted Detailer Children under 18 Years of Age	62
Table 6.	Enlisted Detailer Dependency Demographics	63
Table 7.	Enlisted Detailer Service Demographics	63
Table 8.	Enlisted Detailer Billet Demographics	64
Table 9.	Enlisted Detailers Decision-Making Authority	67
Table 10.	Percentage of Enlisted Detailer Decisions Challenged.....	68
Table 11.	Enlisted Detailer Percentage of Detailing Effect on Reenlistment.....	69
Table 12.	Enlisted Detailer Overall Incentive Features	72
Table 13.	Monetary Program Benefit	75
Table 14.	Detailer Open-Ended Incentive Options.....	76

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF ACRONYMS AND ABBREVIATIONS

A2P	Advancement to Position
AIP	Assignment Incentive Pay
BA	Billets Authorized
CDB	Career Development Board
CDC	Child Development Center
CINC	Commander Navy Installations Command
COB	Current on Board
COLA	Cost of Living Allowance
EAOS	End of Active Obligated Service
EFMP	Exceptional Family Member Program
FFSC	Fleet and Family Support Center
FMS	Final Multiple Score
MAP	Meritorious Advancement Program
MCA	Manning Control Authority
MWR	Morale Welfare and Recreation
NAVADMIN	Naval Administrative Message
NAE	Naval Aviation Enterprise
NCIS	Naval Criminal Investigative System
NEC	Navy Enlisted Classifications
NJP	Non-Judicial Punishment
NPC	Navy Personnel Command
PRD	Projected Rotation Date
PRT	Physical Readiness Test
PERS-4	Navy Personnel Command (Assignment/Distribution Department)
PST	Prescribed Sea Tour
SDIP	Sea Duty Incentive Pay
SRB	Selective Reenlistment Bonus

THIS PAGE INTENTIONALLY LEFT BLANK

ACKNOWLEDGMENTS

Special thanks to our advisors, Dr. William Gates and CDR William Hatch, USN (Ret.), for their attention and expertise in navigating this complex research topic. Additionally, to the leadership and our points of contact at FRCW, VFA-41, and PERS-40, your insight and willingness to introduce this topic to your commands was critical for the success of our survey. To the NPS faculty, especially Dr. Marigee Bacolod, thank you for providing support throughout the process.

Lastly, we could not have completed this process without the unconditional support and understanding from both of our families. To Danielle and Christopher, thank you for giving me the daily inspiration and drive for continuing this process; know that I would not have been able to do this without your love and support. To Kellee, Kemar, and Alana, I know the road has not been easy, but we did it. We kept moving forward one day at a time, with one foot in front of the other. Whenever I needed you to understand or be patient, you were. Thank you for being you, and thank you for allowing me to be me. It has made all the difference.

THIS PAGE INTENTIONALLY LEFT BLANK

I. INTRODUCTION

A. OVERVIEW

The Navy is unable to properly and evenly distribute enlisted Sailors from one command to another without significant variations in the detailing process leading to perceptions of bias in the assignment process. When Sailors are forced into billets in geographically remote or undesirable locations, job satisfaction and command morale decrease while adding a tremendous amount of stress to the service member's quality of life. This reduces long-term retention within the Naval Aviation Enterprise (NAE).

The current enlisted distribution process carefully balances Navy requirements and Sailors' desires. According to the enlisted detailing section on the Bureau of Navy Personnel web page, "The primary consideration for selection for orders should consider each of the following: Needs of the Navy, career needs of the individual, and desires of the individual" (Navy Personnel Command [NPC], 2019d, p. 1). Figure 1 shows the detailing timeline for Sailors to request follow-on orders with their respective detailer. Sailors start this process approximately fourteen months prior to their Projected Rotation Date (PRD).

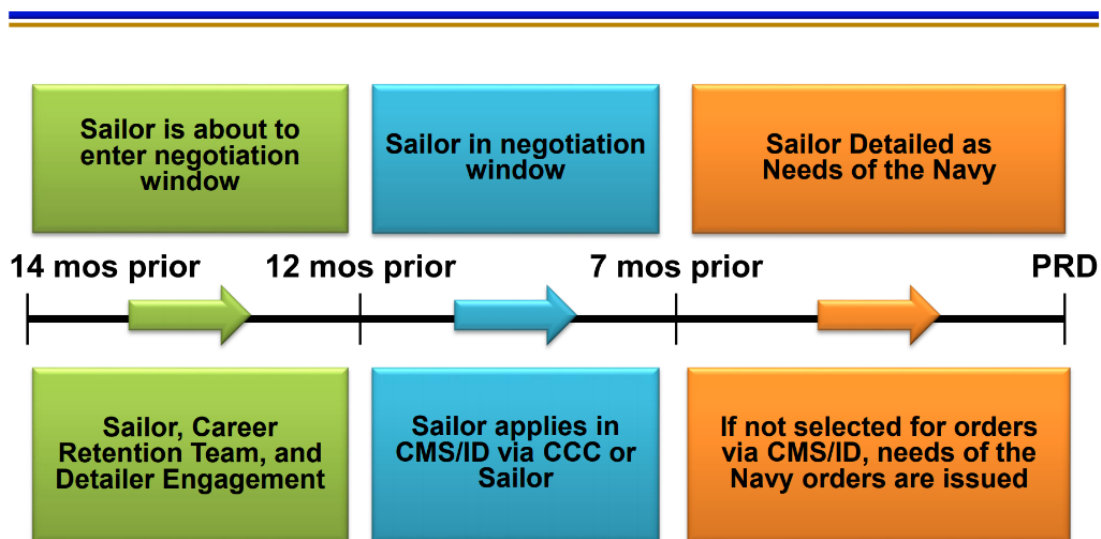


Figure 1. Enlisted Detailing Timeline. Source: NPC (2019d).

The command assembles a team consisting of the Command Career Counselor and the individual's divisional leadership to mentor the Sailor and to conduct a Career Development Board (CDB) to evaluate the Sailor's career plans. This combines a Sailor's career intentions with the feasibility of uniting their job preferences, based on community health and available job opportunities.

The CDB addresses preferences and future jobs recommendations to prepare for follow on job negotiations with his or her detailer. Approximately twelve months prior to their PRD, Sailors have five months to select orders that are available in the assignment/distribution software system called Career Management System - Interactive Detailing (CMS-ID). Approximately seven months from their PRD, Sailors that have not selected orders will be issued orders by their detailer where they are contractually obligated to serve, contingent upon meeting other obligated service requirements.

Figure 2 illustrates the Navy's detailing process cycle. Every cycle United States Fleet Forces Command reviews and establishes manpower assignment priorities with the Manning Control Authority (MCA). The priority listing is delivered as priority requisitions to the enlisted marketplace in CMS-ID. Enlisted Sailors can view available billets in CMS-ID and have approximately one week to apply for preferred jobs based upon their desires and their community's career progression and milestone recommendations (NPC, 2019d).

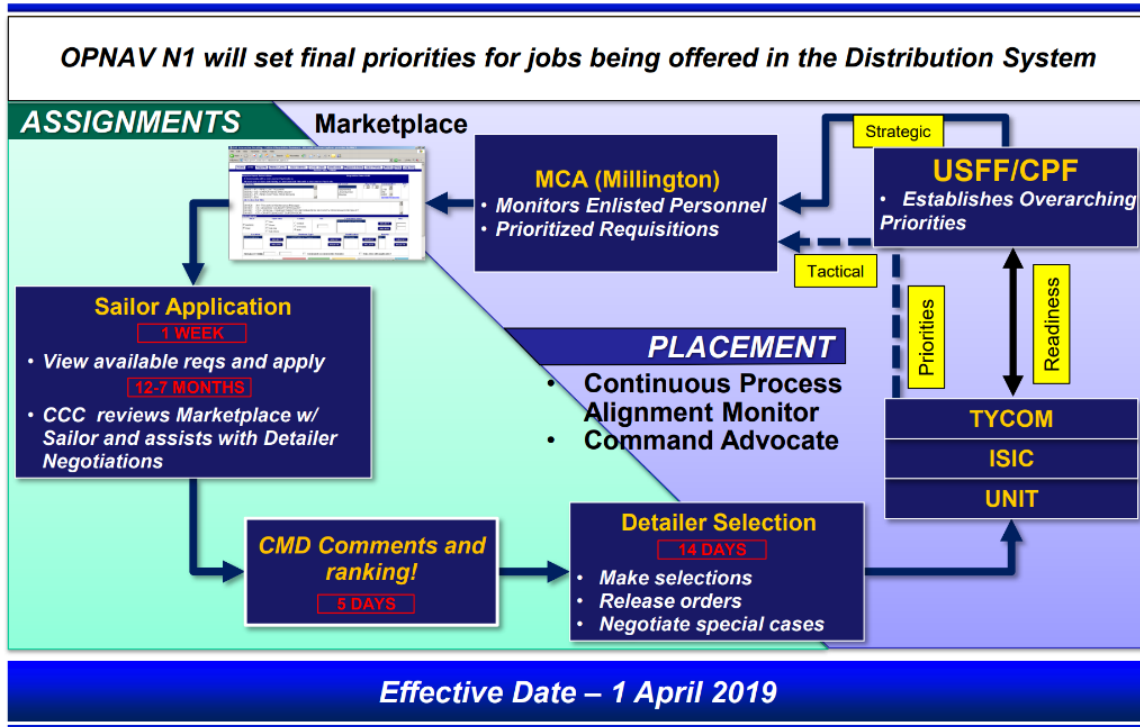


Figure 2. Navy Personnel Command PERS-40 Detailing Cycle. Source: NPC (2019d).

Commands review applicants and rank their best match of applicants for the listed billet before the timeline expires. Upon completion of the command’s request, detailers then have fourteen days to assign Sailors based on command recommendations, individual preferences, and Navy Personnel Command business rules, to ensure legal and policy requirements are met. Detailers may then issue orders electronically through the orders processing system.

For many years the Navy has been challenged with assigning Sailors to geographically remote and undesirable areas, such as Naval Air Stations Lemoore, Fallon, and China Lake. This process has been founded to be detrimental to the NAE, which relies on filling appropriate manpower requirements to achieve operational readiness. Failure to attract and retain the appropriate inventory with qualified and high performing Sailors, potentially degrades mission requirements and could compromise operational deployability, creating a cascading systematic failure impacting multiple other command and warfare elements (NPC, 2019d).

This is not just an aviation issue, but a total force human capital problem that must be addressed to support a long-term viable national defense strategy. The ability to identify the drivers of the assignment process from both the individual Sailor and their respective detailer will have a direct impact on monetary and/or non-monetary incentives. These findings may also be relevant for other hard-to-fill locations within the CONUS. The survey instrument and research design in this study could be utilized in future research to support creating and/or maintaining monetary and/or non-monetary incentives.

B. PROBLEM STATEMENT

Locations such as Lemoore, China Lake, and Fallon are identified as hard-to-fill because of the low demand that Sailors have for jobs in these locations. Navy contractor Jonnie Bridges (email to author, May 28, 2019) provided a personnel report where we extracted the Current On Board (COB) level compared to BA by command and filtered by location. We analyzed the manpower percentage of COB/BA by location and aggregated all commands assigned to aviation specific locations. We used this empirical data to compare two of the Navy’s premier master jet bases, 18 commands at NAS Oceana consisting of all operational F-18 commands, Fleet Readiness Center West, Center for Naval Aviation Technical Training Unit, and Commander Strike Fighter Wing Pacific to 17 similar commands at NAS Lemoore. Table 1 compares COB inventory across both NAS Oceana and NAS Lemoore.

Table 1. Command Manning Levels. Adapted from Contractor J. Bridges (email to author, May 28, 2019).

	<u>Aug-14</u>	<u>Feb-15</u>	<u>Aug-15</u>	<u>Feb-16</u>	<u>Aug-16</u>	<u>Feb-17</u>	<u>Aug-17</u>	<u>Feb-18</u>	<u>Aug-18</u>	<u>Feb-19</u>
Oceana, VA	90%	93%	96%	96%	98%	95%	94%	92%	92%	95%
Lemoore, CA	91%	93%	95%	94%	93%	90%	90%	89%	91%	89%
Delta	-1%	0%	1%	2%	5%	5%	4%	3%	1%	6%

* Manning levels are calculated by COB divided by BA

Figure 3 reveals an uneven distribution of manpower across these two locations. The disparity between aggregated overall manpower COB levels compared to BA at NAS Lemoore’s commands, reflected a consistent uneven disparity from February 2016 to February 2019 with diverging trends.

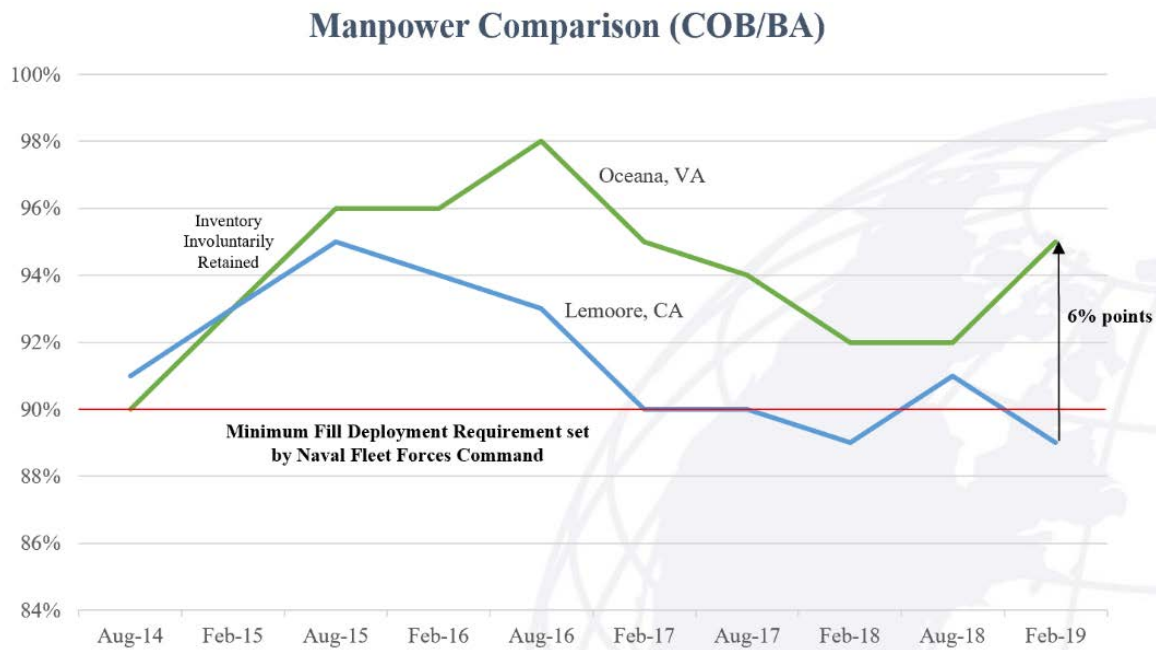


Figure 3. NAS Oceana versus NAS Lemoore Manpower Comparison.
Adapted from Contractor J. Bridges (email to author, May 28, 2019).

This manpower misalignment creates a problematic scenario where enlisted detailers and MCA representatives must resort to assigning or diverting some Sailors who prefer not to work and live in these locations to meet the minimum fill requirements. These Sailors may feel forced into a job or location they do not desire, lowering their overall job satisfaction and their desire to remain in naval service upon the completion of their obligated service. According to a CNA report, “To man the force, the Navy relies on ordering Sailors into billets where they are most needed. Involuntary assignments may keep billets filled in the short run, but in the long run they may hurt recruiting, readiness, and retention” (Christensen et al., 2002, p. 1).

There are several reasons why some people do not want to voluntarily accept duty in these areas. We presume most Sailors do not desire duty in geographically remote areas, however some Sailors may have specific individual preferences. However, the Navy cannot meet the duty preferences of all Sailors and meet minimum manpower levels across the enterprise. The Navy has recognized the value of human capital by managing their critical talent and providing incentives to retain them. The Navy has already implemented several monetary and on-monetary incentives, including financial compensation for Sailors willing to accept duty in locations they do not prefer.

According to Christensen et al., “Many factors can influence the quality of the job match, including location, worker skills required, job tasks or requirements, coworkers, how career enhancing the assignment is to the Sailor, and how critical the job is to the Navy” (2002, p. 9). To facilitate a marketplace for Sailors to voluntarily accept billets in hard-to-fill locations, the Navy should provide incentives for Sailors to voluntarily accept these assignments, ensuring long-term viability of naval retention efforts, especially in the aviation community. Our research will explore the enlisted assignment process as it relates to incentives based on an individual’s geographic preference and how that aligns with the detailer’s perspective and responsibility to match a qualified Sailor to each billet.

C. PURPOSE

This study supports Navy leaders in managing high-quality distributable inventory within the enlisted naval aviation community and provides insight and context to a Sailor’s preference for serving in a geographically remote or undesirable location. Secondly, it provides leaders with valuable analysis comparing the preferences of Sailors assigned to a geographically remote location within the NAE to community detailers. Our aim is to reduce friction between a Sailor and their respective detailer during the assignment process. This will directly result in process transparency, increase overall job satisfaction, and subsequently provide a positive impact on long-term retention.

D. RESEARCH QUESTIONS

(1) Primary Research Question

Do incentives increase voluntary assignment in hard-to-fill locations?

(2) Secondary Research Question

Is there variation in the detailer's methodology during the assignment process?

E. THESIS SCOPE

Our research includes a literature review concerning the assignment of enlisted Sailors to geographically remote or undesirable areas, job satisfaction, monetary and non-monetary incentives, and base support services. Additionally, we collect the preferences of Navy Personnel Command's detailers and enlisted aviation Sailors who are assigned to Naval Air Stations Lemoore, China Lake, and Fallon. We analyze the results to provide Navy leadership recommendations for potentially effective compensation policies to increase voluntary assignments in hard-to-fill locations. We anticipate this will also result in a more even distribution of inventory across the aviation enterprise, balancing out the number of billets filled in each location across the NAE. This move will reduce the manpower shortages at each location, and promote command climate metrics, potentially increasing job satisfaction and long-term retention benefits.

This research does not consider legal and naval requirements concerning assignment and distribution of enlisted Sailors. This may include Sailors who are dual military, have Exceptional Family Member Program (EFMP) restrictions, and ratings outside of the aviation community. The target group studied here was selected as the primary population due to the ongoing historic challenge of inventory management to these geographically remote and hard-to-fill locations.

Additionally, this research does not address the financial constraints facing the Department of Defense (DOD). The focus of this project is the monetary and non-monetary incentives that will attract Sailors to hard-to-fill locations and the assignment process where friction develops between a Sailor and their respective detailer. Base

funding and the commander's discretion over asset and funding utilization are additional topics that may benefit from follow on research projects.

F. DATA COLLECTION

Our research consists of empirical manning data and two independently constructed and disseminated surveys. The first survey examines aviation enlisted Sailors assigned to jobs at Naval Air station Lemoore and their duty station preferences. The survey focuses on possible effects of incentives on motivation for a future voluntary assignment to a geographically remote or undesirable location from the preferences from the Sailors currently assigned to a geographically remote area. Two specific commands have been selected to serve as our survey population and included the following commands: Fleet Readiness Center West (FRCW) and Strike Fighter Squadron Forty-One (VFA-41).

The second survey collects data from Navy Personnel Command (PERS-40) to determine if variation or friction exists in the assignment process as Sailors are detailed to future billets. Their insight on the potential effects of the incentives discussed in our research is critical to understand an enlisted Sailor's motivation for potential voluntary assignment to a geographically remote or undesirable location.

G. LIMITATIONS

This study unfortunately is limited to the metrics that could be collected and does not encompass all relevant data. The addition of empirical and authoritative data would be extremely useful to determining any correlation or trends to further demonstrate significant results. We were also limited by the responses received, as they were completely random, voluntary, and anonymous. These samples do not represent the entire population and may contain traces of self-selection bias, measurement error, the Hawthorne Effect, and most certainly omitted variable bias that is inherent with any survey collection. Additionally, the scope of this project limited us in our ability to extrapolate our data into other enlisted rating or officer communities.

H. BENEFITS OF THE STUDY

There are numerous benefits for conducting this study. Most importantly, we seek to find a potential solution to the personnel challenges of distributing Sailors across the aviation enterprise with the current available inventory. Balancing the Navy's willingness to offer incentives, and a Sailor's willingness to accept those incentives for assignment to geographically remote or undesirable locations is the key to achieving long-term overall operational effectiveness.

Additionally, we intend to identify any variation in the assignment and detailing processes where a recommendation can be provided to naval leadership. Incentivizing Sailors to voluntarily select jobs in geographically remote and undesirable locations will exponentially improve the assignment process and increase transparency. This in turn, we believe, will increase Sailor job satisfaction, and directly contribute to overall command readiness and long-term retention efforts.

Lastly, our intentions for this document to serve as another resource for researchers to continue finding the optimal solution for the Navy's manpower challenges. As this is an ongoing challenge where the traditional military structure has begun to see a paradigm shift. In an all-volunteer force where a decreasing fraction of the population are eligible for military service, incentives and retention must be focused on retaining specific talent known as fit, not just fill.

THIS PAGE INTENTIONALLY LEFT BLANK

II. REVIEW OF THE LITERATURE

A. OVERVIEW

A thorough literature review was conducted to ensure that each area considered in the scope of our project had appropriate context and the ability to assimilate seamlessly in our findings. Over 37 references are cited, consolidating and incorporating a diverse knowledge base to inform key stakeholders in this research effort.

B. MAIN TOPICS OF CONSIDERATION

Relevant literature to these topics includes the broad areas of Sailor preferences and distribution. The assignment and distribution processes are a massive undertaking with hundreds of thousands of transactions annually to move Sailors from one place of duty to another. The most important factor from the detailer's perspective is meeting the "needs of the Navy" and having a qualified Sailor perform the required tasks that justify each individual billet. Next, assignments must adhere to legal and policy requirements, and those Sailors who fall into certain protected groups (such as EFMP/dual military etc.) are accommodated. After these main considerations, it becomes a balancing act between aligning a Projected Rotation Date (PRD), the preferences of the individual Sailor, based on a multitude of factors, including career enhancing, family, and financial incentives. This is our focus area for recommending improvements.

C. SPECIFIC CONCERNS OF THE AVIATION COMMUNITY

The Naval Aviation Enterprise has unique challenges within the enlisted distribution and inventory management processes. Members of these communities are often faced with long work hours, many days away from home port, and little down time while assigned to most aviation units. Moreover, naval aviation maintainers are consistently challenged with keeping aging F-18 platforms at high readiness rates. According to a Naval Aviation fighter jet readiness article featured in military.com, "When the military services were ordered to get 80% of their tactical aircraft ready for the fight, Navy officials decided to try to push the numbers even higher. They wanted

341 F/A-18 E/F Super Hornets and 93 EA-18G Growlers mission-capable and ready to deploy” (Harkins, 2019, p. 1). Additionally, Naval Aviation has been challenged with a much higher number of mishap rates in the past several years. As stated on a recent Naval Postgraduate School news article, Vice Adm. Miller, the new leader of Commander Naval Air Forces (CNAF), stated, “In the fall of 2017, U.S. Navy aviation faced a daunting challenge. The preceding five years had seen a surge in aviation mishaps, and aircraft readiness levels across the Fleet had reached unacceptable levels” (Schehl and Imbukwa, 2019, p. 1). Ensuring that the Navy can meet its increasing readiness goal, and at the same time reduce mishap rates, is a daunting task that requires proper talent management coupled with distributing the right Sailors in the right place at the right time. Adding to his remarks, we are concerned with retention rates, not just filling a billet one time with someone who may leave naval service. The Navy needs a cadre of motivated and eager Sailors who are properly incentivized and have ample opportunity to thrive in a career in Naval Aviation.

D. GEOGRAPHICAL DISPARITIES

A significant contributing factor to the overall health of the aviation community is signaled by their attrition rate and inability to incentivize members to select remote or undesirable locations. Although these characteristics may be considered undesirable duty locations for Sailors, they are ideal locations for aviation operations that require substantial air and ground space to conduct training. Further, remote installations can be purchased or leased at a discounted rate. This increases the value for the Navy, especially as the cost falls to the taxpayers. Although the topography and proximity to open airspace is ideal for the aviation communities’ mission, it also becomes the antithesis of the desired traits in an ideal location in which to live and raise a family.

This research will focus on two major types of locations, remote and centrally located. For comparison, NAS Lemoore and NAS Oceana have been chosen to represent the distinct geographical disparities that may sway a Sailor away from taking one location over the other. NAS Oceana is centrally located in Virginia Beach with multiple major cities and military communities to support the base and the attached Sailors and

their families. This location provides a strong billet base to support the families who request accommodation for dual military, EFMP, or spousal employment purposes. NAS Lemoore is approximately 100 miles inland from the California coast and a few hours drive to many of the activities and locations in which Sailors are interested. NAS Oceana is situated in a vibrant community with a thriving economy, while NAS Lemoore suffers from stagnation, not only in the local marketplace, but in the air and water quality as well. These factors, among others, have created a systemic failure of Sailors to volunteer for this duty location, and challenged Navy leadership to redesign an incentive plan that provides a viable long-term solution.

E. MANPOWER SHORTAGES

Each billet assigned to a command represents a collection of work requirements that totals 67 hours per week based on the Navy Total Force Manpower Policies and Procedures. (Department of the Navy [DoN], 2015). One person is designed to fill each billet, but unfortunately, due to manpower shortages, billets are often unfilled. This has a direct negative impact on mission readiness and results in at least two of the four possible outcomes: either overwork an existing member from another billet or accept the risk of not completing the required tasks.

Although budgetary limitations will always constrict Navy leadership, particular consideration must be given to the NAE due to the cost of readiness. According to Candreva (2017), programmers have four options when there is a difference between the desired plan and the existing plan known as the 4 R's:

When there is a difference between the desired plan and existing plan, a programmer has four options: (a) fund the difference, but this requires resources from somewhere; (b) restructure the program so adjusting the programs results which more often than not means fewer items or slower progress; (c) reengineer the program to improve the efficiency of the process or lower costs (legitimately doing more with less), but that is largely out of the control of the programmer and may become a problem for those who execute the program, (d) accept the risk and simply give the program fewer resources and hope they can execute effectively. (p. 216).

F. INCENTIVES

1. Introduction

Historically, the Navy has offered different incentive plans to make an opportunity more attractive. Most are monetary, as in a bonus or monthly stipend. Other types of non-monetary incentives have also been utilized, such as points towards advancement, non-chargeable leave, and purchasing a plane ticket for use during a leave period. These options have been offered a la carte, and without an option to pair them or offer a blended version. Our research aims to identify if such an option could optimize the Navy's budget and the Sailor's preferences by allowing members to self-select a portfolio that is important to them if they would serve in a geographically remote or undesirable duty location.

2. Discounting Effects

The effect of an incentive can be influenced at the rate that the Sailor values that incentive. Understanding the role that behavioral economics can play in the Sailor's decision-making process is a critical tenet to providing the relevant incentives that will encourage the desired effect. Dr. Sean Webeck, a public policy professor at Naval Postgraduate School, identifies the discount rate at which Sailors assign value to the potential incentives is based on their personal preference, and is exhibited through the intertemporal choices they face when deciding between events that can occur in the present or in the future (S. Webeck, personal communication, January 4, 2020).

The mathematical calculations behind this theory are complicated and relatively unstable as individuals will all respond differently. According to Dr. Marigee Bacolod, a labor economics professor at Naval Postgraduate School, despite the variation in individual preferences, assumptions can be made, on average, while holding all other factors constant. She explains that exponential discounting occurs when someone is not likely to change how they feel about future costs and benefits. They are said to behave in a time-consistent manner, where these values assigned are unlikely to change, and are able to withhold gratification until a long-term goal is achieved. In this model, the only unknown effects are external to the person's behavior. Conversely, hyperbolic

discounting occurs when someone is time-inconsistent, where the value they place on future costs and benefits dramatically shifts, causing impulsivity and irrational decision making. The unknown factors in both the internal psychology and the external environment compounds the interaction term, and results in an increase in variance and unpredictability in the error term, making a predictive model extremely complex (M. Bacolod, PowerPoint slides, February 26, 2020).

According to Sparks (2011), this concept was popularized by the Marshmallow Test of 1974:

More than 40 years ago, Stanford University researchers led by Walter Mischel conducted a now-famous study in self-control: they asked 4-year-olds at Stanford's Bing Nursery School to hold off on eating one sweet in exchange for the promise of two sweets 15 minutes later. In the years that followed, numerous follow up and various studies have found that the preschoolers who managed to delay gratification were also more likely later on to do well in school, avoid substance abuse, maintain a healthy weight, and even perform better on the SAT than peers who could not resist temptation. (p. 1)

This area of behavioral economic theory is an untapped resource for the Navy as a potential targeting tool for Commanding Officers, Command Career Counselors, and community managers. The idea of being able to identify and focus retention efforts on time-consistent Sailors could provide long-term benefits for both the Sailor and the Navy.

3. Incentive Types

Three main types of incentives are addressed in this section to differentiate the delivery mechanisms in which they are offered and target different audiences.

a. Fixed

The Navy's current approach to offering incentives has traditionally stemmed from the equitable distribution of a benefit to all in equal terms. If one Sailor were to be offered an incentive, each Sailor who met the eligibility requirements was to be given the same amount. This binary approach has been wholly successful in condemning any criticism of disparate treatment, but does not have the ability to reward top performers,

and likely overpays the economic rent to others who may be willing to accept a lower incentive.

b. Choose One

In this category, the Navy uses different incentive options to incentivize members, but only allows the selection of one option. As described in the Overseas Tour Extension Incentives Program instruction, eligible enlisted members have the opportunity to choose one of four incentive options to extend an overseas tour length of 12 months or more. (NPC, 2017a, p. 1). The instruction provides the following four options for each Sailor to choose from:

- \$80 special pay for each month during the extension period
- 30 days rest and recuperation (R&R)
- 15 days R&R absence, plus round-trip transportation at Government expense from the location of the extended tour of duty to the port of debarkation in the continental United States (CONUS) and return during the period of extension. Members authorized OTEIP extensions longer than 12 months are entitled to receive 20 days R&R
- \$2,000 lump sum payment

Sailors find this option-based program preferable, as it allows them to control which option to choose from and achieve their best match. Sailors select these choices based upon their needs and desires. We believe this is a critical element in a long-term strategic approach to retain the Navy's top performers.

c. Blended

Using a blended approach to offer incentives is a modified version of the choose one methodology, but allows a more personalized plan for each member. Blending monetary and non-monetary incentives is the key to achieving an optimized match and generate the highest levels of job satisfaction. According to Lazear and Gibbs (2015),

“One problem with providing a specific benefit is that the same benefit does not suit every worker. A cafeteria plan gives a worker more flexibility in the benefit choice” (p. 317). The Navy can capitalize on this model by offering a combination of incentives, either in full or at a reduced percentage when combined to meet the needs of individual Sailors.

An example of a blended incentive plan could include the following options:

- Option 1—80% monetary bonus + advancement points
- Option 2—50% monetary bonus + non-chargeable leave period
- Option 3—50% monetary bonus + bundled preferred orders
- Option 4—Custom blend of incentives that meet Sailor’s needs

A blended incentive plan would allow the Navy to offer the exact incentives Sailors desire and meet their expectations to increase voluntary assignment to geographically remote locations, while also raising job satisfaction, and ultimately retention efforts.

d. Time-Consistent

A time-consistent incentive model would pose a benefit for the Sailor that incorporates delayed gratification to allow members to self-identify as long-term oriented. A specific application for this model could include a Thrift Savings Plan contribution compared to a cash incentive.

An example of a time-consistent incentive plan could include the following options:

- Option 1—Monetary Bonus of (\$250 per month)
- Option 2—Thrift Savings Plan Contribution of (\$350 per month)

Sailors who are likely to select the second option, would more likely behave in a time-consistent manner. Considering that these Sailors are expected to be long-term

focused, they would be self-selecting into the time-consistent incentive option. As a Sailor approaches their EAOS, and is asked to choose to remain in naval service, the Navy could focus on this cohort. This group is more likely to demonstrate sustained superior performance over the course of a career, compared to those who are time inconsistent (S. Webeck, personal communication, January 4, 2020).

4. Monetary

Cash incentives are an historically effective option that has motivated people from the earliest employment records. According to Hein, (1998) “Standard economic theory says that cash is always best due to option value and this result is also found in survey results which confirm that most people state a preference for cash incentives. The results were staggering with 79% selecting cash as their first choice and travel was the next best option with only 15%” (Hein, 1998, p. 3).

Slowing pay raise rates coupled with an increase in the cost of living, the acceptance of financial incentives is considered part of base salary, and not as actual compensation for assuming any additional risk or hardship. Members stationed in geographically remote or undesirable areas may be awarded monetary incentives to increase willingness to accept assignment to these locations and are expected to perform well once onboard.

The Navy primarily uses three main incentives to increase voluntary assignment and retention shortfalls in hard-to-fill geographically remote or undesirable areas. We describe below the three methods the Navy has used for many years to meet the needs of the Navy and manage talent across the fleet.

a. Assignment Incentive Pay (AIP)

Active duty Sailors view all assignments differently, and do not view them all as equally desirable. Factors such as geographic location, job type, and the type of sea/shore duty all factor into their decision in selecting orders. It was determined that a compensating value should be provided to offset the low demand for working in locations that are considered undesirable. The Chief of Naval Operations established incentive Pay

Policy Decision Memorandum 003–6, which is authorized by Congress to incentivize voluntary assignment to billets that the Navy determines to be difficult to fill. “The Assignment Incentive Pay Program has been initiated in the attempt to make all assignments desirable to at least one qualified volunteer” (NPC, 2006, p. 1). A Sailor who is interested in receiving an incentive for a job in a specific location that offers AIP reviews and applies for billets that are advertised in CMS-ID. Jobs that have an AIP incentive have an indicator that shows Sailors which jobs have an AIP. As jobs are posted in CMS-ID, Sailors can compare those that offer an AIP with those that do not. This allows a Sailors to compare benefits of one job over another. If the Sailor is interested in voluntarily selecting a job with an AIP indicator, the Sailor will bid in increments of \$50.00. As stated on the AIP frequently asked questions sheet,

A bid is the amount of money, up to the max allowable for that job that each Sailor is willing to accept to go to the AIP assignment. The Detailer reviews all eligible applications and makes the best selection. Orders are issued to the selected applicant. The Orders will contain the Sailor’s bid amount. Commands with Sailors being ordered to an AIP eligible command should ensure that the AIP authorization is contained in the orders, even if the amount is “\$0.00.” (NPC, 2019a, p. 1)

The current AIP program aims to encourage Sailors to voluntarily select sea duty or shore duty jobs in hard-to-fill locations by paying a monthly monetary incentive. Offsetting the undesirability of a location with a monetary payment increases voluntary assignments, but also increases job satisfaction, leading to potential increased long-term retention benefits.

Under this instruction, the Navy establishes specific factors for which locations, commands, ratings, qualifications, and paygrades are eligible for AIP. NPC issues this criterion and distributes the AIP chart, reproduced in Appendix A (NPC, 2019a, p. 1). Sailors can view the eligibility chart to determine what locations are AIP eligible when deciding on selecting their future job. Additionally, AIP administrators ensure all PERS-40 detailers are aware of current AIP policy. Billets that are authorized AIP are properly coded in CMS/ID to further ensure detailers assigning Sailors to jobs are aware of the available incentive and its relative career impact.

The current AIP list of eligible jobs targets difficult to fill sea duty and shore duty jobs in very specific locations and does not aim to address the overall issue of increasing overall manning in those locations considered hard-to-fill. The current policy pinpoints specific geographical areas of concerns and applies AIP incentives to increase voluntary assignments in those locations. However, AIP can better increase voluntary assignments if it increases the target monetary range or considers a merit-based multiplier for Sailors willing to voluntarily accept billet in locations with an uneven distribution of manpower inventory.

b. Sea Duty Incentive Pay (SDIP)

Similar to AIP, SDIP aims to increase voluntary assignments to billets that are hard-to-fill. This incentive offers a monetary incentive for sea duty billets. Additionally, this policy serves as a tool for enlisted detailers to assign their Sailors into billets that are considered “hot fill” or priority and require immediate assignment. According to the SDIP policy Decision Memorandum, “In an effort to improve sea duty manning, the Navy has established SDIP (using existing AIP) statutory authority to help harness the talent, energy, and motivation of the all-volunteer force” (NPC, 2017b, p. 1). The SDIP policy lists specific ratings, pay grades, and skills to be eligible for select sea duty billets. The NPC website hosts the SDIP eligibility chart, which is displayed as Appendix B (NPC, 2019c, p. 1). The policy is frequently revised to target the areas that require increased sea duty manning. SDIP policy lists three options that eligible Sailors can choose from.

(1) SDIP-B

Provides a means for Sailors to extend on sea duty, past their respective Prescribed Sea Tour (PST) for up to 48 months. Approved Sailors will receive orders to a follow-on sea duty command and a lump sum payment for the monthly amount listed in the eligibility chart Appendix B within two pay periods after reporting to their sea-duty command.

(2) SDIP-C

Provides a means for Sailors who are currently serving on shore duty to curtail their assignment by six months after completing a minimum activity tour to return to sea duty for an eligible sea duty SDIP-C approved billet. However, approved Sailors will receive incentive pay based only on the number of months shore duty was curtailed. A lump sum for the monthly amount is listed on the eligibility chart in Appendix B (NPC, 2019c, p. 1). SDIP-C is paid within two pay periods after reporting to their new sea-duty command.

(3) SDIP-E

Provides a means for Sailors to extend on sea duty for up to 48 months past their respective PST at their current sea-duty command. Approved Sailors receive a lump sum payment for the monthly amount listed on the eligibility chart in Appendix B (NPC, 2019c, p. 1). within two pay periods after their initial completion of their PST.

All Sailors who are interested in and are eligible must request command approval no later than 12 months prior to their PRD to ensure their prospective billet has not been assigned to another Sailor, and the detailee ensures the Sailor meets the requisition priority requirement. Additionally, as stated on the SDIP Policy Memorandum, “The billet filled must match the rating, pay grade, and skill of that being requested” (NPC, 2017b, p. 4). Although the SDIP program has continually targeted specific Sailors to meet the emergent sea duty billet requirements, especially in predominately hard-to-fill locations such as NAS Lemoore, there is still an uneven distribution of Sailors across the fleet coupled with the non-voluntary assignment of Sailors across the NAE.

c. Selective Reenlistment Bonus (SRB) Program

The SRB program is the Navy’s primary monetary method of shaping the enlisted naval force to meet optimal retention and end-strength manpower levels. SRB focuses principally on specific categories such as ratings, Navy Enlisted Classifications (NEC), and skills to set the amount of SRB awarded to Sailors. Stated on the Selective Reenlistment Bonus Program Instruction, “Award levels are changed in response to

changes in retention behavior and in line with the needs of the Navy” (DoN, 2019, p. 4). Updates and changes to the Navy’s SRB eligibility, pay out amounts, and eligibility are normally issued as a Naval Administrative Message (NAVADMIN), but can be changed to modify established manpower limits and requirements as it benefits the needs of the Navy based on inventory shortfalls.

Sailors who are nearing their End of Active Obligated Service (EOAS) or Navy enlistment contract, can, if eligible under the SRB policy, decide to reenlist for a monetary reenlistment bonus. Monetary payout is calculated by the SRB amount as either a flat rate payout, or by a base pay multiple payment, as indicated by the most current SRB NAVADMIN message. According to the Selective Reenlistment Bonus Program Instruction, “SRB flat rate contracts will be for the entire contract value and will be clearly defined by contract length (e.g., \$2,500 for 3 years). The minimum contract value is \$2,500 with a maximum value of \$100,000. The flat rate will take into account the paygrade, year group, length of contract, NEC, and any other criteria determined by the program manager” (DoN, 2019, p. 9).

The base pay multiple is calculated by SRB award multiples in 0.5 increments, as indicated on the most current SRB NAVADMIN. The total SRB amount is computed as shown below in Figure 4.

$$\left[\frac{\text{Monthly Basic Pay} \times \text{Additional Obligated Service in months}}{12} \right] \times \text{SRB Award Multiple}$$

Figure 4. Base Pay Multiple Payout According to Selective Reenlistment Bonus Program. Source: DoN (2019, p. 9).

After the SRB amount is determined and approved, Sailors receive an upfront payment. According to the Navy’s SRB Program Instruction, “Fifty percent of the SRB award amount is paid up front at the time of reenlistment and the remaining 50 percent is paid in equal annual installments during the anniversary month of the reenlistment, unless otherwise published by the current SRB NAVADMIN” (DoN, 2019, p. 9). Interested and eligible Sailors who intend to reenlist, must submit a request no later than 35 days, but

not earlier than 120 days, prior to the requested reenlistment date, which is their End of Active Obligated Service (EAOS).

Although the SRB program is a monetary incentive for Sailors, it is primarily a retention tool, and not an assignment tool. However, the current SRB program could also be an assignment incentive tool. SRB policy can target highly qualified and skilled Sailors that are undecided on reenlisting in the Navy. This monetary adjustment can coincide with AIP and SDIP, or work independently to award payment if the Sailor not only volunteers to reenlist, but also if they decide to accept duty in a geographically remote or undesirable area. The advantage to this policy is that it can increase volunteer job selection, and also provide a conduit to retain highly qualified and skilled Sailors.

d. Evaluation of Monetary Pay

There has been a decrease in overall military obligation to monetary incentives between 2005 and 2015, as shown in Figure 5 below. This is mainly due to end-strength reductions in the United States Army, Navy, and Marine Corps.

Moreover, the GAO found that the DOD has not ensured efficient use of monetary resources. As stated in the GAO report, “DOD also has not established related measures to ensure efficient use of resources. Without such measures, DOD and the services generally assess the effectiveness of S&I pay programs by the extent to which they achieve desired staffing targets” (Farrel, 2017, p. 2).

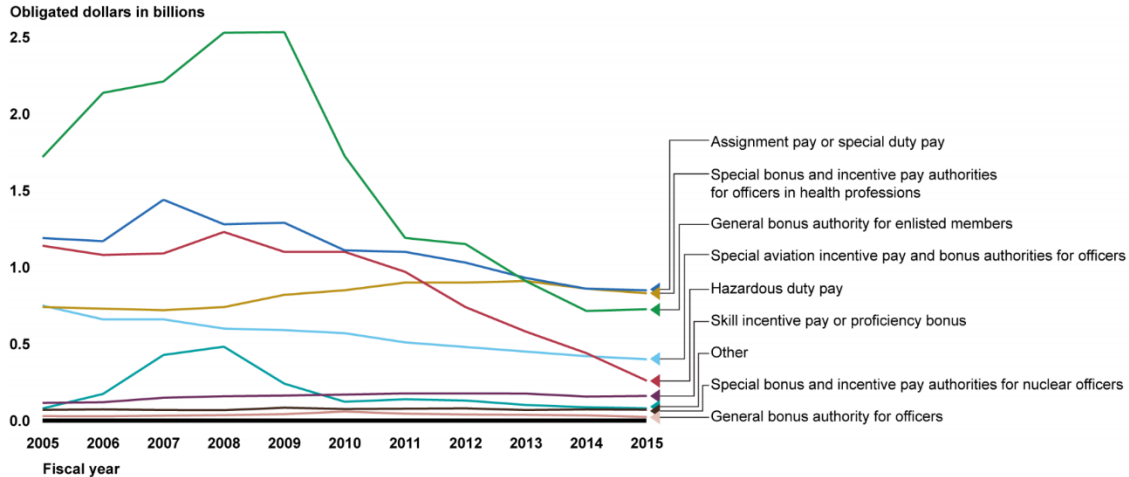


Figure 5. Obligated Amounts for Special Incentive Pays and Bonuses from GAO Department of Defense. Source: Farrel (2017, p. 2).

According to Stitt, “In general, the more emphasis placed on the Navy’s cost, Sailor value decreased. Conversely, Sailor value goes up when cost is ignored. Moreover, the Sailor fit of a billet increases when cost is ignored” (2009, p. v). Certainly, in these financially challenging times, filled with budget constraints, sequestration, and other budgetary shortfalls, the Navy must continue serving as a faithful steward of the taxpayer’s money. A blended incentive system could reduce costs over purely monetary incentives and would certainly be fiscally responsible if it reduced the cost of human capital turnover.

Current aviation incentives are monetarily based, possibly overpaying the economic rent needed to retain Sailors who would have already remained in service. According to Tilley (2010), “Simple monetary retention auctions address the overarching problem of retaining the precise number of personnel desired but fails to address the ability to provide exact retention while offering the potential for lower total cost. Non-monetary incentives offer higher compensation values at an equivalent or lower cost” (p. 19). The retention of the aviation community Sailors relies on the Navy’s ability to match the Sailors’ expectations with similar opportunities available in the civilian marketplace. Manpower costs, the needs of the Navy, and the Sailor’s expectations are not always

aligned despite the Navy's best efforts to provide career progression for each individual Sailor.

The easy solution if there was an unlimited budget available, would be to increase the monetary benefit of any Sailor who is willing to accept a voluntary assignment to a geographically remote or undesirable location. However, we believe there would be a diminishing return on the Navy's benefit, as this policy may attract those that are just interested in a large fixed monetary incentive. This unintended consequence is the result of the incentive not being applied as a condition for performance or any other operational expectation. The current AIP/SDIP/SRB monetary incentive policies provide this type of fixed payout without considering any merit-based performance measurements. The optimized model, based on our research, would be to apply an incentive that ties the monetary amount to a performance standard or metric. Talent management requires the appropriate use of fit and fill to build the best teams that can achieve the mission to which they are assigned.

Unfortunately, the Navy does not operate with an unlimited budget, and considerable financial and budgetary restrictions exist. Navy policy adheres to equitable distribution of available funds to incentivize hard-to-fill billets.

5. Non-monetary

This section will examine the non-cash compensation incentives that can be offered to Sailors to incentivize voluntary assignments. The Navy's challenge in offering these types of benefits can in some cases be more generous than civilian equivalents, but remain more restrictive in other applications due to the nature of the work environment inherent to a tax funded organization such as the DOD. Non-monetary incentives are discussed below.

a. Promotion

The organizational structure of the Navy has remained intact since the establishment of the Navy, and is rooted in the Great Britain's Royal Navy (Oliver, 1983). The Navy's ranking and promotion system is focused on grooming supervisory

talent from within the organization. There are three general promotion mechanisms in place today that are available to all eligible Sailors; examination, meritorious advancement, and the advancement to position program.

The most common manner enlisted members are promoted is by examination, where a Sailor is advanced by achieving a higher Final Multiple Score (FMS) than the minimum requirement. This number is based on each rating's community health and changes every advancement cycle to meet manpower inventory needs. The FMS is a collection of inputs, including an adjusted Performance Mark Average of recent evaluations which may include a Reporting Senior Cumulative Average adjustment, the raw score from a written examination, and any points received from awards, education, service in paygrade, and points awarded for previous success in past examinations after which the member was not advanced. As a non-monetary incentive, promotion points could be added as an additional category of those willing to accept a voluntary assignment, as there has been similar policy precedent set with the Individual Augmentee Program (NPC, 2019b, p. 2). There is much criticism regarding the validity and fairness of this process, particularly concerns that the examination could contain outdated or extremely specific questions, and the inherent bias in the personnel evaluation system.

The second method to advance enlisted Sailors is outlined in the Meritorious Advancement Program (MAP), where Commanding Officers can promote high performing members of their organization in recognition for sustained superior performance (NPC, 2015). This program was established as the Command Advancement Program, but later expanded the number of available quotas and was subsequently renamed the Meritorious Advancement Program. Similar criticism is present in this program, particularly potential bias because the final decision resides with the Commanding Officer, the same person responsible for the Sailor's evaluation. Recent efforts have been made to increase the number of MAPs, placing more ownership on the Commanding Officers to reward top performers.

The third method of promotion authorizes promotion as a detailing and retention tool to incentivize Sailors to accept hard-to-fill jobs in geographically remote or undesirable locations. According to NPC (2019b), "The Advancement to Position (A2P)

Program focuses on the overwhelming success of the pilot program and fills priority billets via an advancement incentive, and is another step towards a modernized personnel system and manning through better distribution of our talent” (p. 1). This program offers direct correlation to the foundation of our research and will be explored in greater detail to assist in finding the most effective incentive(s) to meet the Navy’s mission, operational effectiveness across the NAE, and the overall satisfaction of enlisted Sailors.

There is one unintended issue with offering a promotion-based incentive system. Although a Sailor may be promoted under the advancement to promotion system because they meet the minimum technical ability required for the billet (2019b), not everyone in a promotion-based incentive system may be properly prepared for their transition into their new assignment. This will cause a disruption within multiple layers of the Navy. Advancing a member too quickly will have career implications for the member, their enlisted community, and the command at which they are serving.

According to Lazear and Gibbs (2015), “A promotion-based incentive system motivates employees that feel a promotion will be earned. Passed over employees will not be motivated. This decline of extrinsic motivation for long-time employees who do not have prospects for advancement is one reason for the common complaint that such workers are relatively unproductive” (p. 273). If Sailors are unable to attain promotion through the current merit-based programs, will the Navy sacrifice quality to fill geographically remote and undesirable locations? In other words, if no one else is willing to accept this duty but underperforming Sailor volunteers, is selecting them for the position the right choice? More importantly, what happens if multiple people in this position are assigned to the same command during the same time frame? How will underperforming Sailors who are chasing the promotion and financial incentives affect the command and operational readiness of the unit?

b. Orders Bundling

Bundled orders are an opportunity for Sailors to select back to back orders in a move that would allow them geographic stability for a period between four and eight years. As Sailors enter into their negotiation window, one of the biggest concerns

becomes the uncertainty of relocation. For Sailors who have purchased a home, are raising a family, or have strong ties to a local community, having the option to select one geographic area for concurrent orders may be of interest. Simultaneously, for a Sailor who is willing to serve in a geographically remote or undesirable location, a follow-on tour of their choice may be something they are willing to consider. This is a win-win situation as the Navy wins both the billet being filled, a reduced PCS budget, and help meeting the retention goal. The Sailor is offered more stability and a choice of where they will serve next.

Communication efforts between the Sailor and the detailee coordinate this exchange of information, as it is critical to identify where the Sailor will be assigned and living. According to Buelow (2010), “Because of the limited number of shore billets, many Sailors have to move for their second tour. Some Sailors will choose a sea billet for their second tour if given the choice of platform. This allows the detailee to assign more Sailors within the region they are stationed” (p. 33). There is a massive advantage for the Navy if they can reduce the PCS costs associated with routinely moving Sailors and their families around the world, when in fact they would be more interested in homesteading.

Selection of orders is often aligned to a Sailor’s strategic goal, with either a personal or professional connection. Sailors who are married must consider balancing the needs of the Navy and their family. This includes multitude considerations ranging from the geographical area, command operational tempo, the quality of local healthcare, schools, etc. Sailors’ preferences and career intentions vary across individuals. Some Sailors may consider taking a difficult job in a fleet concentration area to boost advancement probability, while others may request a job that offers a financial incentive to encourage efforts to save money. Bundling orders offers assurance that any hardship endured temporarily will result in a future preference being granted.

Bundling orders is a tool and goodwill effort to acknowledge that some assignments pose challenges for Sailors and their families, but providing a Sailor geographical stability for up to six or more years allows the Sailor’s family to establish continuity that is inherent to remaining in a single location.

There are many reasons that this is an important issue. Most career Sailors become interested location stability advantages, such as purchasing a home, raising their children in one school district from kindergarten through high school, and the ability for a spouse to establish and maintain a successful career.

c. Accompanied

Members who are married and have dependents value an assignment where they can be accompanied by their family members. The Navy has a vested interest because the Sailors are more likely to perform their job better when co-located. According to the DOD (2017), the Navy enlisted population consisted of 264,024 personnel in 2017, with almost half (49.2%) being married, and 6.6 percent of those being a dual-military marriage. Living in a geographically remote area may be a preferred option for some members and their families, but challenges may arise being isolated or without a vibrant community and resources. During the 2016 fiscal year, 3.5 percent of enlisted personnel are estimated to have divorced (DOD, 2017). There are many reasons why a marriage would result in dissolution, but our focus remains on the preferences of the Sailors making decisions on their upcoming assignments and how their family helps influence their decision.

d. Medical and Dental Access

Without access to acceptable health care, members may not be eligible for assignment to certain locations, specifically in geographically remote locations, which exacerbates manning shortages. Sailors or their family members may have certain medical conditions that require a higher quality of care. Remote locations with smaller populations do not typically offer extensive military or civilian treatment facilities to address certain medical conditions. The Exceptional Family Member Program (EFMP) is committed to supporting families with special needs and ensuring they are assigned to locations that can provide an appropriate quality of care. (NPC, 2020a, p. 1). Sailors who are dealing with ongoing medical issues must factor in the ability for their healthcare needs to be met, and select a duty station that can support them.

One of the most common life events that requires specific ongoing medical attention is pregnancy. Pregnancy is defined by the Navy as a temporary medical condition that requires medical intervention (Secretary of the Navy, 2019). We understand this has a direct impact on a Sailor's decision about where they would like to live. Nine percent of females in the Navy are pregnant at any given time, with 17% of women reported being pregnant in 2017 (Office of Talent Optimization, 2018). Combining the number of Sailor pregnancies with the number of dependent pregnancies results in a significant population that must consider access to health care and colocation to family services as a priority. Remote locations may not offer as much of a robust portfolio of providers, which may limit the specific care available and not meet the patient's needs.

e. Quality of Life

Work/life balance is the single greatest issue that members cite for poor job satisfaction and the increasing attrition rate. According to the Office of Talent Optimization (2018), "Sailors were most likely to hear the leaders at their current command talk about work/life balance (61%), but only 47% see their command leaders demonstrate work/life balance" (Office of Talent Optimization, 2018, p. 3). This is an extremely broad topic that contributes to many unquantifiable variables that affect decision making efforts in Sailors who are considering their next career move. Balancing both personal and professional goals within the opportunities and limitations of the military lifestyle is extremely difficult. This requires a robust network of resources designed to assist Sailors in achieving the balance they seek.

Sailors often link their quality of life to the amount of liberty, or free time they are offered, as well as the command climate in which they must operate. Micromanagement provides a toxic environment that increases stress and degrades performance. Being geographically remote, operating at a high OPTEMPO, and a poor command climate, creates a confluence of negative quality of life issues that usually results in degraded mission effectiveness and ultimately their attrition.

f. Morale Welfare and Recreation (MWR) Support

Installations across the fleet offer discounted tickets, tours, and programs to the diverse population of Sailors and their families who have varied interests. Because of the broad scope of services and opportunities provided, MWR can deliver meaningful respite for all patrons. From leisure activities, auto hobby shops, and subsidizing costs for command events, MWR is one of the key resources that Commanding Officers rely on to increase morale. This program has been positioned in the Commander Naval Installations Command (CNIC) organization to develop partnerships between Sailors, activities, and the community. The operational tempo at which Sailors are expected to perform while working is unsustainable if not complemented with a balance of leisure activities.

Individual MWR budgets are based on the number of Sailors assigned to the base installation. Large bases with higher populations command more money than smaller geographically remote bases (Commander Navy Installations Command [CNIC], n.d.-a). This disparity is one reason for the perception that fleet concentration locations offer “better” MWR services. Conversely, certain locations face a utilization challenge, where leisure trips and activities are being offered, but Sailors and their families are not taking advantage of these opportunities. The scope of our research does not include an analysis as why this may be, as the number of possibilities is endless and specific to each location.

Locations such as NAS Lemoore must “do more with less” while dealing with the challenge of being in a remote area. The MWR facility in Lemoore serves all eligible patrons with recreation opportunities throughout the year. With Lemoore being centrally located among several major metropolitan cities in California, numerous activities are available all within a day’s drive. From San Francisco to San Diego, National Parks, ski resorts, and theme parks are some of the favored attractions. California boasts some of the most famous beaches on its 840-mile coastline. Even though there are plenty of activities to enjoy, geographically remote areas force Sailors to travel further compared to those stationed in a fleet concentration area.

g. Commissary and Exchange Privileges

The Defense Commissary Agency and Navy Exchange Services Command provide low cost grocery and department store shopping to Department of Defense members, especially in remote locations. This non-monetary benefit subsidizes the cost of food and household goods and provides quality products at affordable prices.

According to Hansen et al. (2018), “Commissary shopping is a significant non-pay benefit for military personnel because goods are offered at a low price. Commissaries sell all goods at purchase cost plus 5%, while grocery stores typically markup goods by 25% to as much as 70%” (p. 1). The commissary has been under scrutiny over the past few years due to its inability to sustain a profit across all locations. This has become problematic and resulted in talks of closing the commissary system. But there may not be other shopping options in geographically remote locations.

Similar to MWR benefits, the size and scope of the services provided by Defense Commissary Agency (DeCA) and the Navy Exchange (NEX) are relative to the size of the population assigned to the installation. Installations with a small population will not have a robust shopping system to provide substitutes and alternatives that are common in larger shopping areas. Some families rely on specific shopping preferences, such as, gluten free, or other dietary restrictions. They would prefer to live in a location with multiple shopping options, within reasonable travelling distance, to fulfill their shopping needs.

h. Children and Youth Programs

Child Development Centers (CDCs) are the cornerstone to mission readiness, providing the primary educational needs of the children who attend while ensuring service members are available to report for duty. The Child and Youth Programs (CYP) organization employs over 6,000 workers caring for 45,000 daily enrolled children and youth in 238 facilities world-wide (CNIC, n.d.-b). Significant changes have been made to increase the hours that sites are available for use, reflecting the very demanding work schedules of local commands. Although Sailors are charged a fee for this service, it is normally at a reduced cost compared to private services in the community. Strict

employee screenings and convenience make the CYP the preferred childcare method for most service members. Limited capacity may result in childcare availability shortages, forcing Sailors to join a waitlist. Having the ability to afford quality childcare minutes away from their home or duty station saves discretionary time and money.

i. Fleet and Family Support Center

Since 1979, The Fleet and Family Support Center (FFSC) has provided Sailors and their families with a variety of counselling services, including individual, family, financial, relocation, and other services that promote a more cohesive bond between the Sailors and their families. Information relating to the issues facing Sailors, family members, and even commands are addressed using active training methods, information dissemination, and referral services. Operating under the CNIC umbrella, this organization employs GS and contract employees at over 81 service delivery sites around the world. (CNIC, n.d.-c) This critical service has provided a substantial advocacy for Navy families and facilitated an increased quality of life that has enriched the lives of Sailors and their families. The FFSC remains one of the most reliable organizations in times of crisis and is an essential resource for Commanding Officers. When Sailors are asked to serve in geographically remote or undesirable locations, these resources become considerably more important, yet unfortunately scarcer as smaller populations do not support larger budgetary considerations.

j. Non-chargeable Leave

One benefit that has successfully increased job satisfaction is leave. While Sailors earn 30 days of leave per year, which is generous compared to their civilian counterparts, each absence is charged against their leave account (DOD, 2016, p. 7). As discussed earlier, the OTIEP option offers a special rest and recuperation absence for members serving overseas. Having an additional choice available to CONUS Sailors who are also geographically remote and exposed to similar hardships that stem from living in a remote location, may provide respite. This may incentivize a Sailor who is marginally undecided about accepting duty in these areas.

k. Service “C” School

To meet the technical needs of the Navy, and based on enlisted rating communities’ needs, along with billets requirements, Sailors are awarded various “C” schools. These service schools educate and train Sailors to prepare them for the specific career paths for which they have volunteered. The benefit to Sailors is the training and education they receive, which is documented in their training record and may offer college credit or credentialing in a field of study that interests them for the civilian market.

Inside of the Navy, “C” schools are just as valuable as they make a Sailor more desirable and, in some cases, eligible for highly coveted programs and billets. Assignment to some locations and commands requires certain training and certifications that the “C” schools provide. Upon completing the training, a NEC code is awarded to signify that the member graduated from the program. When considering incentives, an additional “C” school may be of value to a member, and certainly benefit the Navy, as we continue to invest more in technology to maintain our competitive advantage.

l. Paid Relocation and Travel

We would be remiss if we did not identify one of the biggest selling points of the Navy was the opportunity Sailors have to leave their hometown and travel to different locations around the world. Base locations may be geographically remote to gain a strategic advantage, however what makes one location undesirable for one Sailor may be the exact factors that appeal to another. Most of this literature and the context of this paper paints geographically remote areas as undesirable, but being assigned to this type of duty may also result in a positive impact. Some Sailors who are assigned or diverted to an undesirable location gain additional information and a new perspective on the location that they had not been previously exposed to. A Sailor’s preference may change once they are able to gain first-hand knowledge and find themselves asking to remain in an area they thought they would never prefer.

m. Navy Recruiting Strategy

In an effort to increase the strength and diversity of the Navy, a renewed focus has been placed on the Hometown Recruiter Program. According to Navy Personnel Command, “In an era of Great Power Competition, these programs play a key role in the recruiting of the Sailors of tomorrow in this tightening labor market and provide a great opportunity to highlight the experiences a candidate can gain from the Navy” (NPC, 2020b, p. 1). This program offers multidimensional benefits beyond the Sailors recruited from the program. Sailors can spend time with friends and family in their hometown, which can be priceless for some members. This especially benefits junior Sailors who are transitioning to military life and have not accrued a significant leave balance. The Navy benefits from this program, as it provides a Sailor who is already familiar with the location and networked into the community. This is a substantial asset to any recruiting station in their recruiting efforts, especially in areas that have specific demographic or ongoing recruiting challenges.

The Navy can use this program as a laser-focused tool to pinpoint the exact locations where recruiting efforts should be focused. Identifying eligible Sailors based on their home of record could provide Navy Recruiting Command a potential list of candidates for this program. Using this proactive approach of reaching out to Sailors and offering them this opportunity, the Navy can target certain geographical areas and potentially attract more Sailors from these areas.

Over time, Sailors who are successful in recruiting from geographically remote areas will create a pool of new Sailors who do not view those geographically remote areas as undesirable, but as home. This strategic approach solves many problems and would reduce the need to provide additional monetary and non-monetary incentives (W. Hatch, personal communication, February 6, 2020).

6. Hawthorne Effect

Although the surveys conducted in support of our research were completed anonymously, it is plausible to consider that some people may have altered their behaviors or decisions. These decisions are based on whether they believed there was a

possibility that the information could be traced back to them. Every reasonable effort was made to ensure this did not happen, but the potential for an implicit bias remains. This is known as the Hawthorne Effect, and occurs when people's behavior changes when they know they are being observed. This effect can distort the root causes of the problem and prevent solutions from being discovered.

Similarly, the effect can also be found in reverse, and something we believe may have permeated our research. According to Berthelot et al. (2019), "The negative Hawthorne effect stems from multiple factors including a wish to receive greater consideration or priority management status" (p. 86). We believe, in the cases of Sailor's assigned to NAS Lemoore, enduring the hardships of living in a geographical remote area drive the demand for increase compensation compared to Sailors who may be assigned to fleet concentration areas. Berthelot et al. continues, "Use of the evaluation to express frustration about being ill or bitterness at receiving a lower level of support" (p. 86). When Sailors have an opportunity to identify how much money they are willing to take as an incentive to voluntarily accept orders to a geographically remote or undesirable duty location with multiple options being available, they typically choose the highest option.

III. METHODS

An overview of the Navy's enlisted assignment process was presented in Chapter I along with the problem statement. The problem statement citing the uneven distribution of NAE inventory was developed using empirical data from Manpower, Personnel, Training, & Education data systems. These data points were aggregated and analyzed so that we could compare and contrast the inventory shortages between the naval air stations Lemoore and Oceana. This issue affects all commands within the NAE, but specific challenges are present at the two Navy master jet bases. This unbalanced distribution of inventory reveals that Sailors prefer certain locations over others, which hinders enlisted detailers from effectively distributing this inventory evenly across the fleet.

To answer our primary research question, Chapter II presented an in-depth review of available literature pertaining to the current and ongoing monetary and non-monetary incentives the Navy offers or previously offered to enlisted Sailors. Additionally, we presented information regarding the impact of the base services that benefits all members and their dependents. A Sailor's decision on job selection, geographical preference, and whether to remain in naval service, is influenced by their ability to secure a base that supports their wants and needs.

A. ENLISTED SAILOR PREFERENCE SURVEY

1. Admin

Our primary research question focuses on enlisted Sailors in the aviation community who are assigned to geographically remote locations, such as NAS Lemoore, CA. Fighter Squadron FORTY-ONE and Fleet Readiness Center West were the two tenant commands selected to participate in our anonymous survey. The survey included the questions listed in Appendix C and was issued to all enlisted Sailors in paygrades E1–9 using the online platform LimeSurvey. These two commands were selected to ensure there was an even distribution of enlisted Sailors across sea and shore duty in comparable commands located at NAS Oceana. This survey captured what enlisted aviation Sailors

look for in selecting duty assignments, and what incentives do and do not appeal to them, so our recommendations can accurately address the problem statement.

2. Relevant Total Population

The enlisted aviation population included 726 personnel within ten aviation maintenance ratings and five surface ratings that are typically assigned to sea going and shore aviation commands. The survey included 33 questions tailored to the NAE to determine Sailors' demographics, location desires, outside job preferences, and incentive desires when negotiating with their detailer during the assignment process. The results will ultimately lead to recommendations for Navy leadership identifying incentives that could potentially increase voluntary assignment in hard-to-fill locations.

3. Expected Return Rate

According to Baruch and Holtom (2008), the average response rate for surveys collected from organizations is 35.7%, with a standard deviation of 18.8%. Considering our population is 726 possible participants, we expect a minimum of 30% return rate to ensure our results would fall into a normal distribution with statistical significance (p. 1150). Our survey results are critical to our analysis, but with so many other competing priorities and operational commitments, for both VFA-41 and Fleet Readiness Center West, we decided to offer an eleven (11) day window for maximum survey participation.

4. Electronically Delivered with Timeline (11 Days)

The survey was issued on December 2, 2019, and delivered electronically via an email link to the Administrative Officer at FRCW and the Safety Officer of VFA-41. Both officers released the email, containing the link, to all enlisted hands at each command. The survey was available via the LimeSurvey website. An additional email was sent on December 11, 2019, as a reminder that participation was encouraged and produced useful information to this research project. On December 12, 2019, after initial review of the returned surveys showed low participation from E-4 and below Sailors, we conducted a site visit to increase their response rate. It was determined that one cause for the low response was that not all Sailors have regular access to a computer. On December

13, 11 days after the survey issue date, the LimeSurvey link expired, and was no longer available. The results then became available for analysis and processing.

5. Topics Covered

a. Demographics

The demographics covered in this survey kept participants anonymous, and at the same time provided us with the ability to use descriptive statistics to group response rates by age, gender, marital status, number of dependents, and years of service. We will summarize the overall responses and attempt to reveal differences in participant preferences. We expect to display gender specific and rank specific preferences based on location, job assignment, and incentive features that can be used to make a more detailed recommendation to policy makers for enlisted aviation assignments.

b. Location Features

This primarily discloses the desirability of Sailor's preference when selecting a job in a specific location during the detailing process. Participants were asked a series of questions, with their answers rated using a five-point Likert preference scale to determine their preferences on features such as: climate, proximity to friends and family, amount of available activities, proximity to the ocean, available jobs for military transition, and if the locations were overseas.

These questions were designed to determine what Sailors prefer when deciding duty in a specific location, and essentially what helps to drive their decision to accept and determine which incentives could most effectively influence their decision. The results can reveal what factors were not only important to Sailors and their family, but also the magnitude by which some factors are more important than others.

c. Outside-the-Job Features

Further questions focused on factors outside of the job that influence a Sailor's decision to select a job in a specific location. Participants were asked a series of questions, and again using a five-point Likert preference scale, to determine their

preferences on features, such as the availability of: spouse job opportunities, additional employment opportunities, Naval Medical Treatment Facilities, civilian health care providers, child-care facilities, schools for children, colleges or universities, and sports or social activities.

d. Incentive Preferences

The last section of the survey addressed questions that focused on what monetary and non-monetary incentives Sailors prefer, and if they would be willing to receive a specific incentive to select duty in a geographically remote location. Participants were asked a series of questions, and again answered using a five-point Likert preference scale for the preferred incentives. Sailors were asked about five distinct incentives to determine which of those had the highest response. The first and second questions focused on monetary incentives, asking if Sailors would be willing to go to a job in a less desirable location that provides a compensating monetary bonus. Respondents then had the opportunity to select a dollar amount in \$100 increments from \$0 to \$900, or “No amount of money would get me to choose a job in these locations,” to incentivize duty in a geographically remote area.

The remaining questions focused on non-monetary incentives that the Navy may have or may not have previously explored. We first asked if Sailors would be interested in receiving final multiple points towards advancement. Respondents then had the opportunity to select an award point amount in 1-point increments from 0 to 6+, or “no point listed would be enough” to incentivize duty in a geographically remote area. We presumed that some Sailors may be attracted to receiving additional points towards advancement to increase their chances of promotion and may be willing to accept duty in a geographically remote area to do so.

We then asked Sailors if they would be interested in attending a “C” School as an incentive. We presumed that some Sailors who desire an additional skill could add this to their résumé. Our next non-monetary incentive asked if Sailors would be interested in receiving a follow-on job in a geographic area of their choice after completing a tour in a geographically remote area. Some Sailors want to change geographical coasts or

locations for many different reasons but have been previously limited from doing so as a result of Navy policy. The last non-monetary incentive asked if Sailors would be interested in receiving bundled orders. Sailors could select duty in a geographically remote area and at the same time choose a follow-on job in a geographical location of their choice. We presume that some Sailors may be attracted to planning out their careers for the next five to eight years, as they would be able to negotiate with their detailer two different sets of orders at the same time. The last question on the survey asked for open-ended responses about incentive choices that were not listed in the survey. This provided an opportunity to capture additional potential incentives that were not considered and the amount of that incentive required to voluntarily accept duty in a geographically remote area.

B. DETAILER SURVEY

As stated in Chapter I and II, identifying the current enlisted assignment and enlisted distribution process required a thorough review of policies listed on NPC's website, followed up with communications with PERS-40 leadership. Multiple opportunities to understand the assignment process regarding the Navy's Enlisted Distribution System were provided through information made available to us. Our intention was to uncover the methodology used by enlisted detailers; the primary goal of the survey was to determine if there is any variation or friction in the assignment process that prohibits detailers from meeting the needs of the Navy or a Sailor's expectations in the assignment process. A secondary, but just as important objective, was to capture the detailer's perspective on what incentives they feel may or may not be effective compared to the results from the Enlisted Preference Sailor Survey. We will then better understand what factors may influence voluntary assignments to geographically remote locations.

1. Admin

Enlisted detailers are located in Millington, Tennessee at Navy NPC, and were the primary focus area for this survey. Enlisted detailers are assigned to PERS-40 to support the assignment and distribution of all enlisted Sailors to billets within the Navy. The survey design was constructed using questions listed in Appendix D, and was issued to

all PERS-40 active duty enlisted detailers in paygrades E5–9 using the online platform LimeSurvey. The survey included 28 questions to determine demographics, detailing methods, detailing challenges, and assignment incentives. The assignment incentive questions determined the methods and incentives detailers use to increase volunteer assignments in hard-to-fill locations. Detailers can leverage frequent and ongoing communication with Sailors to gain insight into potential incentives that may attract and increase the voluntary assignment to geographically remote locations.

2. Relevant Total Population

The enlisted detailer’s population include 324 personnel representing all enlisted ratings or job classes that are grouped together. This is a prestigious, but demanding, assignment with a heavy focus on customer service, while meeting the needs of the Navy. As the Navy continues to increase its end strength, the number of detailers will also grow to meet the fleet’s expectations and assign the right person to the right job, known as a measurement of fit and fill. Our goal is to achieve the highest possible response rate to collect all unique perspectives and understand how to address both research questions so we may provide viable recommendations to Navy leadership.

3. Expected Return Rate

According to Baruch and Holtom (2008), the average response rate is 35.7% for studies using survey data collected from organizations, with a standard deviation of 18.8%. Considering our population is only 324 total possible participants, we expect a 30% return rate to ensure our results will fall into a normal distribution with statistical significance (p. 1150).

4. Electronically Delivered with Timeline (11 Days)

Survey results are critical in our analysis, but with so many other competing priorities on the detailer’s agenda, we decided to offer an eleven (11) day window for completing the survey. The survey was approved during a particularly challenging time, where the command was approaching the holiday stand-down period. However, we were able to coordinate with PERS-40 leadership to maximize participation during this time.

Our response rate would likely have been lower if we shifted or reduced the amount of days the survey was available, or the PERS-40 leadership had not fully supporting our efforts.

The survey was issued on December 2, 2019, and delivered electronically via an email link to the Deputy Director of Assignments (PERS-40). The survey became available to all enlisted detailers via a Lime Survey hyperlink enclosed in a separate email. Each detailer had computer access, and we were under no impression that any member would be unable to complete the survey. On December 13, 11 days after the survey issue date, the link was no longer available, and the results were collected and processed.

5. Topics Covered

a. Demographics

The survey design ensured participants remained anonymous and at the same time captured key demographics to analyze and understand how their descriptive statistics may impact detailers' perceptions on the effectiveness of incentives. We expect the relevant detailer population to be a senior group of Sailors compared to the Enlisted Preference Survey conducted at NAS Lemoore. The responses will capture demographics such as: age, gender, marital status, number of dependents, and years of service. We will break the responses into major categories to reveal differences in participant preferences and compare these responses to the responses from the Enlisted Preference Survey. Comparing both the survey results will lead to a deeper understanding of enlisted Sailor's incentive preferences, against the detailers perceptions on incentives for the enlisted Sailors as they manage the Sailor's expectations.

b. Detailer Variation

There is tremendous pressure on detailers to ensure that each Sailor is treated equally during the assignment process, regardless of the differences across Sailors in their particular caseload. NPC business rules provide detailing guidelines as to how the process should work, but some Sailors in the fleet have claimed that unfair practices

prevented them from securing the billet to which they initially applied, or that some desirable billets were not made available. We wanted to address this claim with what the detailers had to say. We asked them directly if they assigned all Sailors to billets using the same methodology to determine if any variation or bias could lead to intentional or unintentional discrimination.

c. Challenges

Along the same thought process, we wanted to know what percentage of detailers were challenged for decisions they made if Sailors felt left out of a desirable assignment. Realizing that there are multiple methods to address grievances of this type, we offered two questions asking if detailers had been challenged, either formally or informally. Informal challenges include phone conversations or emails with the Sailor or a command representative on their behalf. Formal challenges include, but are not limited to, a command representative communicating with the detailer's peers or chain of command, Interactive Customer Evaluation (ICE) surveys, and filling out a report with the Inspector General (IG) or Naval Criminal Investigative Service (NCIS). Our interest was how the probability of the aviation detailing communities being challenged compared to other communities, and if there was a reasonable explanation outside of the detailer's control.

d. Incentive Features

Incentives were divided into two categories, monetary and non-monetary, for detailers to identify which incentives may most effectively encourage Sailors to accept voluntary assignments to geographically remote locations, such as NAS Lemoore. This perspective is fundamental to our research, as the detailers can integrate their own personal experiences with the Sailors' preferences in their interactions, including electronic and telephonic means. The relationship between detailers and Sailors is privileged and may contain an individual's sensitive personal and professional information. This is the significant viewpoint for our research to determine what minimum incentive features would allow the Navy to retain, without overpaying, our Sailors, allowing additional funds to be reallocated to other programs and policies.

When considering a monetary incentive, the benefit was divided into three categories based on the Sailor's pay band. The first group was E-4 and below, the second group was E5-6, and the last group was E-7 and above. Each detailer was asked what the minimum fair bonus is (per month) for selecting a job (sea or shore) in an area such as China Lake, CA; Fallon, NV; or Lemoore, CA?" Respondents had the opportunity to select a dollar amount in \$100 increments from \$0 to \$900, or whether "any amount" would be ineffective. This wide range should represent the preferences of Sailors and not just an inflated amount.

The non-monetary program benefits included awarding promotion points toward the Final Multiple Score, offering a guaranteed "C" School, geographical area of choice, and bundled orders to a guarantee preferred orders to a geographical area of choice. These incentives increase chances of promotion, learning new job skills, and providing geographical stability for Sailors and their families by remaining in a single homeport for a longer period. The incentive selection offers a different choice criterion that could potentially reveal improvements over a traditional monetary incentive.

THIS PAGE INTENTIONALLY LEFT BLANK

IV. RESULTS

A. ENLISTED SAILOR PREFERENCE SURVEY

The enlisted Sailor preference survey was completed by 216 respondents, almost 30% of the 724 enlisted Sailors assigned to FRCW and VFA-41. This response rate met our expectations for a valid survey return, and increases the data dependability, and significance. Additionally, the data includes a diverse demographic background relevant to the assignment process. The results of the Enlisted Sailor Preference Survey involved four main sections described in further detail later in this chapter. Each of the four main sections suggests specific insights as to how and why a Sailor determines job preference and order selection with their respected detailer. This chapter will address the survey respondents' demographics, overall Sailor's location features, outside the job features, and incentive preferences. Additionally, we will present specific demographic integration based on rank and gender. These incentives to present a more accurate result of the true populations willingness to accept a voluntary assignment to a geographically remote area. Over the long-term, we believe these incentives could positively impact the aviation community's retention.

1. Demographics

The demographic questions were fairly standard to ensure all disclosures would remain anonymous, and for us to obtain relevant results from our questions. As listed in the Table 2 below, out of the 216 survey participants identified as 73% males and 27% females. Compared to the Navy's 268,024 enlisted population (DOD, 2017, p. 18) female gender exceeds the overall Navy average by seven percentage points as with enough male and female observations to remain statistically significant. The majority of survey respondents are on shore duty (74%), and the remainder are on sea duty (26%). This is primarily because FRCW is a large shore command with a smaller sea duty component, and VFA-41 is a smaller sea duty command. Although recent updates to the AIP/SDIP policy offers monetary compensation for all enlisted Sailors who are assigned to NAS Lemoore, 98% of the respondents do not report receiving any form of AIP/SDIP.

However, 88% of the 216 respondents are willing to receive some form of incentive to increase their likelihood of voluntarily accepting duty in a geographically remote area. As shown in Table 2, rank was separated into four distinct categories and further separated by dependent status to illustrate the differences in preferences and understand which incentives would be most effective.

Table 2. Survey Demographics

<u>Gender</u>		<u>Receiving Incentive</u>		<u>Rank</u>						
Male	Female	Yes	No	<u>E1-4</u>		<u>E5-6</u>		<u>E7-9</u>		
				Children	No Children	Children	No Children	Children	No Children	
73%	27%	2%	98%	0%	55%	6%	30%	4%	4%	
				Single						
				Married	15%	21%	39%	15%	81%	7%
				Separated	2%	2%	2%	1%	0%	0%
				Divorced	2%	2%	5%	2%	4%	0%

n=216 for all categories

The majority, 55%, of Sailor’s in the ranks of E1–4 are single with no children. Sailors in pay bands E5–6 are split between being married with children at 39% and married with no children at 30%. The majority, 81%, of Sailors in pay bands E7–9 are married with children. With many Sailors having at least one dependent, a robust incentive plan must not just consider the individual Sailor, but also accompanying spouses and children as well.

2. Location Features

The second category identified specific features enlisted Sailors look for in location features during the assignment process. Participants were asked to rate each of the six preference questions using a five-point Likert Scale to determine their preference for each feature.

On average, 4.32 of the respondents chose to have a high variety of activities as shown in Figure 6. The availability of a civilian job to transition into averaged 3.90, if or when respondents decide to transition from naval service. Additionally, being located within close proximity to friends and family averaged 3.68. These results reveal that these Sailors place a higher value on off duty time, so they may participate in activities and spend time with their friends and family. This is not only important for them when

deciding on a duty location, but also for their dependents. Most Sailors do not seek jobs overseas as the results averaged 2.66. This may reflect that some Sailors do not fully understand overseas duty or have never been stationed overseas. This fear of the unknown has a big influence and prohibits Sailors from voluntarily choosing duty overseas.

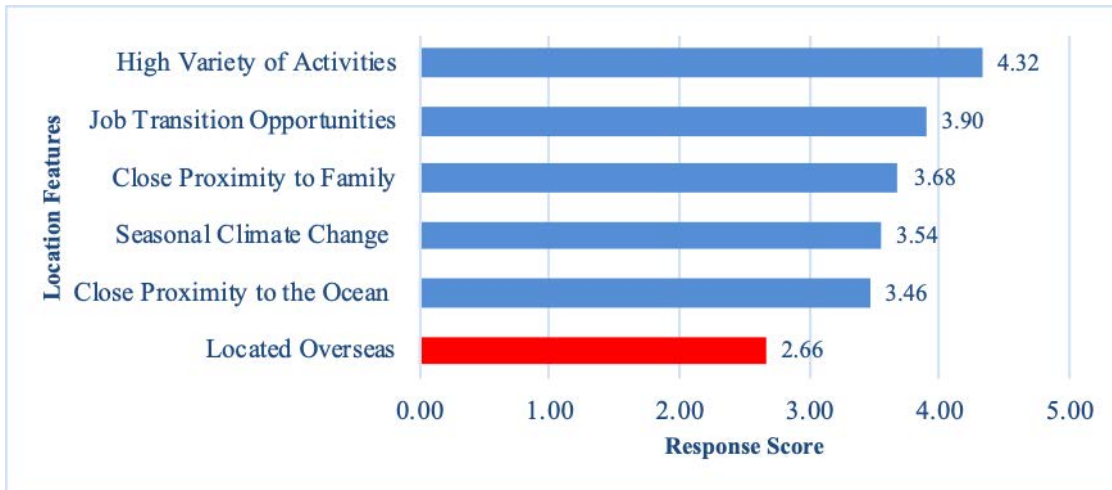


Figure 6. Overall Response to Location Features

3. Outside-the-Job Features

The third category identified what specific non-job features enlisted Sailors seek in a location during the assignment process. Participants were asked to rate each of the nine questions using a five-point Likert Scale to measure their preference for each feature. Figure 7 lists the average response for each of the nine questions.

When examining the responses, three features stood out from the rest. Selecting locations with good schools for kids in grades K-12 averaged 4.44, locations where spouses can find a job averaged 4.40, and locations that have civilian health care options averaged 4.37. These preference features place the highest priority on their dependents' security and stability. Additionally, geographically remote areas have fewer school options, medical facilities, and jobs available to spouses, which may be the primary reason Sailors who are currently assigned to Lemoore, CA, place a higher preference on

these features. Locations that have medical treatment facilities, additional second job opportunities, and jobs that provide dual military spouse co-location were the least attractive of the nine features, averaging below 3.89. Although these three were the least attractive of the nine, there is a demographic mix of single Sailors and Sailors with multiple dependents who have varying preferences that influence the results.

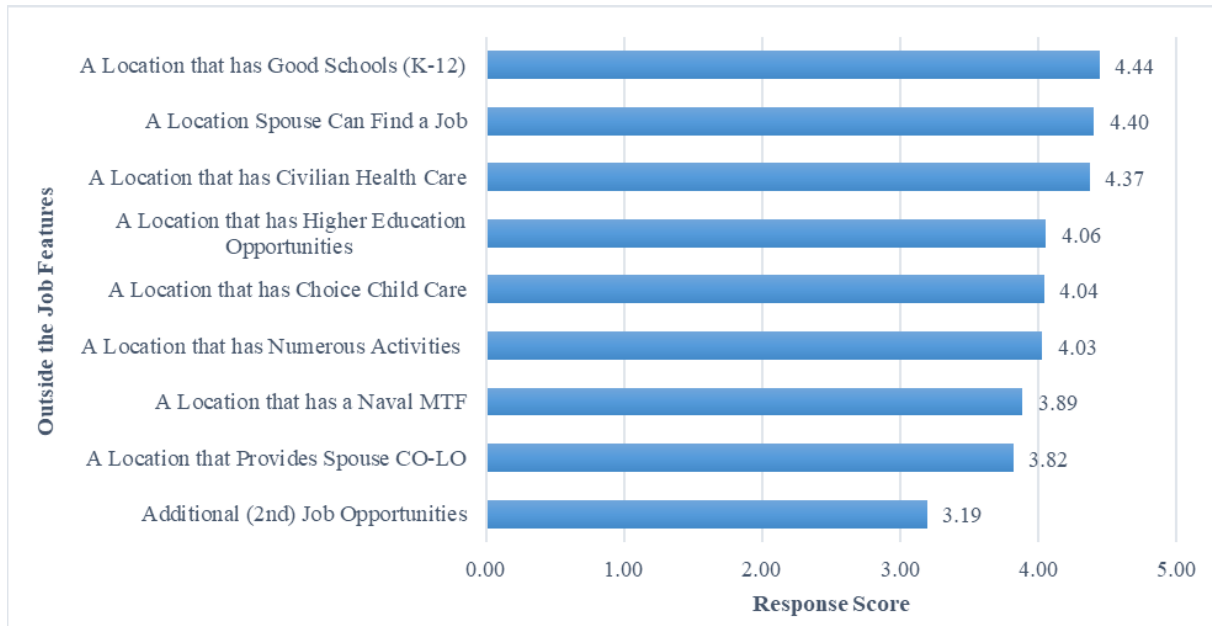


Figure 7. Overall Response to Outside-the-Job Features

4. Incentive Preferences

The fourth and last category focuses on the primary objective of this research. We asked for preferences over five separate incentive features that participants would receive to voluntarily accept duty in a geographically remote location. Additionally, we asked two additional questions to determine the amount of two specific incentives. These results will be compared to the detailers results to provide a final recommendation.

Participants were asked to rate each of the five incentives using a five-point Likert Scale for the attributes, reflecting their preference for each feature. Figure 8 lists the average response for each of the five questions. The average response across all incentives fell in a narrow range from the highest of 4.08 to the lowest of 3.21, only a

0.87 difference. The most popular responses were: Allowing bundling of orders with a follow-on tour to an area of choice, with an average score of 4.08; Allowing Sailors to select orders to a geographical area of choice scored an average of 4.05; and receiving a monetary incentive scored an average of 4.05.

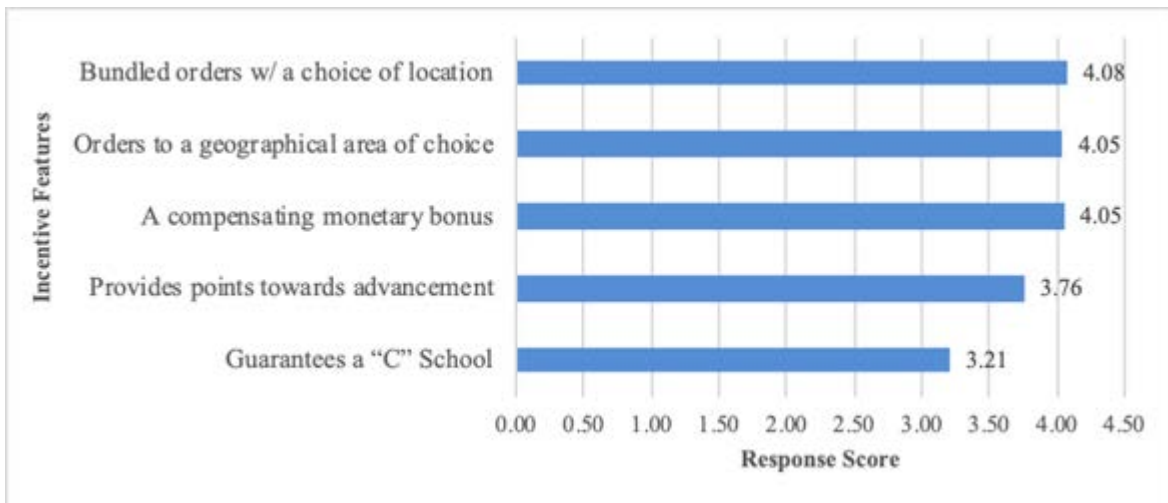


Figure 8. Overall Responses to Incentive Features

Results indicate that Sailors prefer career stability, predictability, and monetary security when selecting a compensating incentive. For the remaining two incentives, providing points towards advancement scored an average of 3.76. The least popular response was guaranteeing a “C” school of choice, which scored an average of 3.21.

Figure 9 illustrates the overall response across all demographics for the monthly monetary incentive and the additional advancement point(s) needed to accept duty in a geographically remote location. Sailors were asked how much money they needed, starting with \$0 and up to \$900, in increments of \$100, with a final option that no amount would be enough. The results were grouped by amount as listed in the Figure 9 below. The overall responses across all demographics revealed that 56% of Sailors prefer the higher payout to voluntarily accept duty in a geographically remote area. However, this amount can be biased as the monetary amount offered was capped at \$900. Different results could have been achieved if an unlimited amount was offered, in an attempt to

indicate a more realistic result. Conversely, we believe using an unlimited amount would also present a continued bias of respondents who would choose the highest amount listed, just as other would only accept the maximum, no matter what was listed. This is likely the reversed Hawthorne Effect.

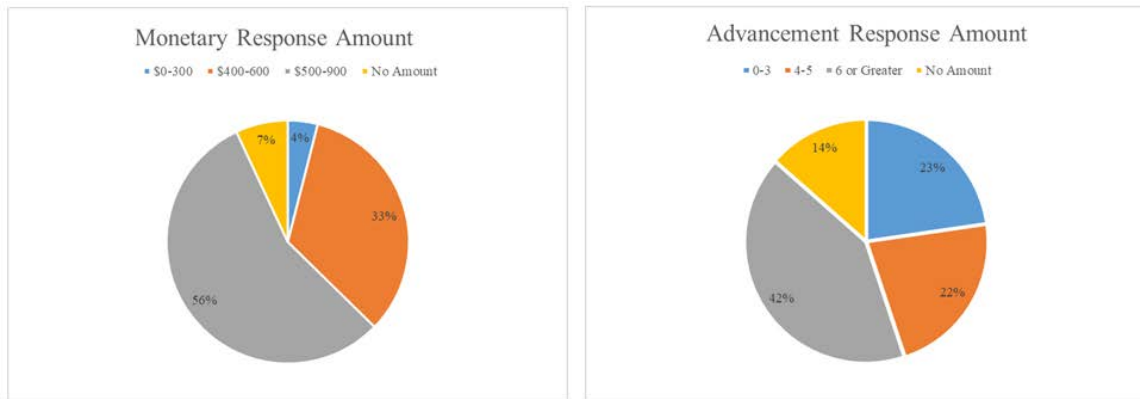


Figure 9. Overall Responses to Monthly Monetary/Advancement Incentive Amount

Figure 9 above reflects the responses of Sailors when asked how many advancement or promotion points they would need, ranging from 0 to 6 in increments of 1, including no amount would be enough. The overall responses across all demographics revealed that 42% of Sailors prefer the higher advancement point amount in order to voluntarily accept duty in a geographically remote area. However, this amount can be biased as advancement points were capped at 6. Different results could have been achieved if the amount was increased to over 6 to indicate a more realistic result. Conversely, increasing the amount to over 6 could also present a continued bias of respondents choosing the highest amount listed, likely a result of the Hawthorne Effect.

5. Additional Unexpected Valued Incentives

The survey concluded by asking if there were any other incentives that were not listed that would influence Sailors to consider a job in a remote area. The responses were grouped by category and are presented in Figure 10. Of the 136 respondents who chose to answer this open-ended question, an overwhelming response (64%) identified a monetary

issue including 50% asking for higher Basic Allowance for Housing (BAH) rates and higher Cost of Living Allowance (COLA) for Lemoore, CA.

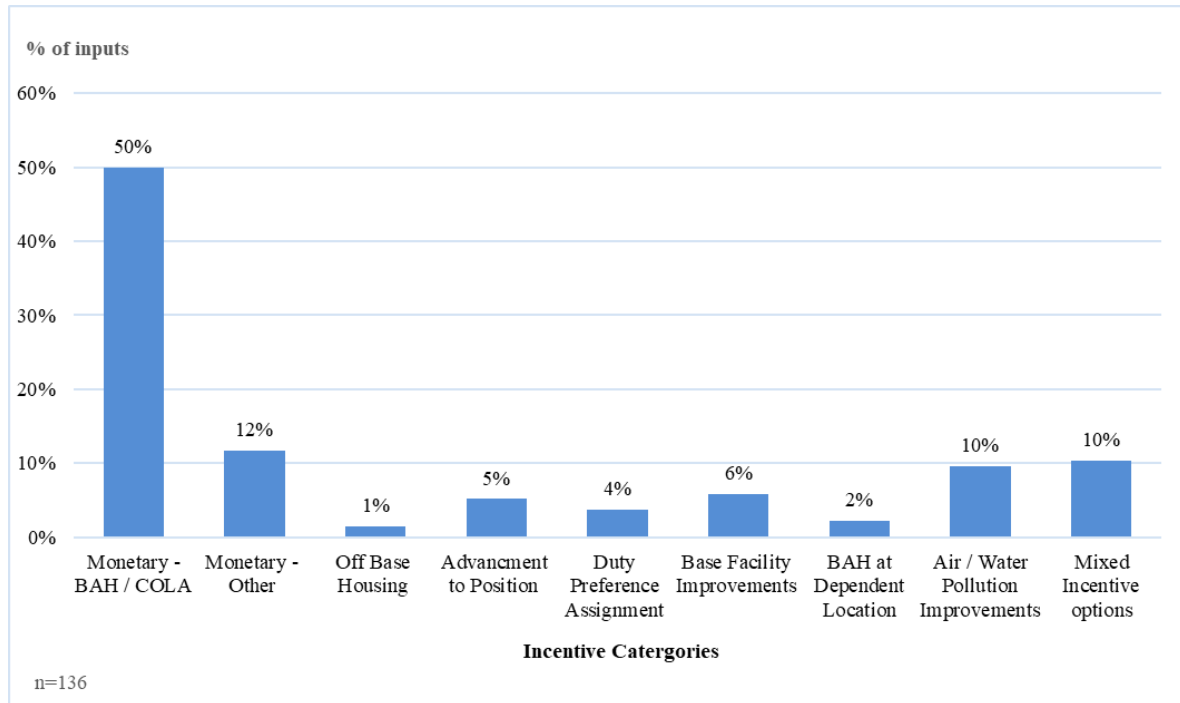


Figure 10. Responses to Open-Ended Additional Incentives

The second highest response rate was some other form of monetary incentives, such as revising the current AIP and SDIP eligibility criteria. The third highest response to the opened ended question was providing a mixed incentive package, representing just over 10% of the responses. Most respondents who selected the mixed incentive package option preferred the incentives offered in the survey, but they preferred the option to select an incentive that caters to each individual Sailor. The fourth most common response was improvements in air/water pollution, which represented just under 10% of the responses. These Sailors feel as though the air and/or water quality in the Lemoore area is sub-standard. Service members reported that health issues from being stationed in the area, and that they should receive compensation. The remaining categories, such as off base housing availability/quality, A2P, duty preference assignment, base facility infrastructure availability/quality, and BAH at dependent location, had response rates in

the range of 1%–6%. This reflects that these categories only appeal to smaller selected group of individuals. Although these response rates are lower than the others, they still yield significant incentives that could be worth pursuing, especially for single junior Sailors who are assigned to the base and primarily rely upon base services.

6. Gender-Specific Incentive Preferences

We separated male and female incentive responses to better analyze and determine which incentives appeal more to males and females, respectively. These results can potentially support recruiting and retention efforts by allowing members to self-select which incentives they prefer. As shown in Figure 11 below, the average responses for incentives reveal subtle preferences for males and females.

Males are more attracted to job and career stability, as they responded 0.3 higher, on average, to getting orders to a geographical area of choice after assignment to a remote area. Females responded more to monetary incentives, rating monetary incentives 0.12 higher on average than males. Additionally, females are more attracted to points towards advancement and a “C” School of choice, rating these incentives 0.08 higher on average than males. Males and females both responded equally to bundling orders with a follow-on tour to an area of choice.

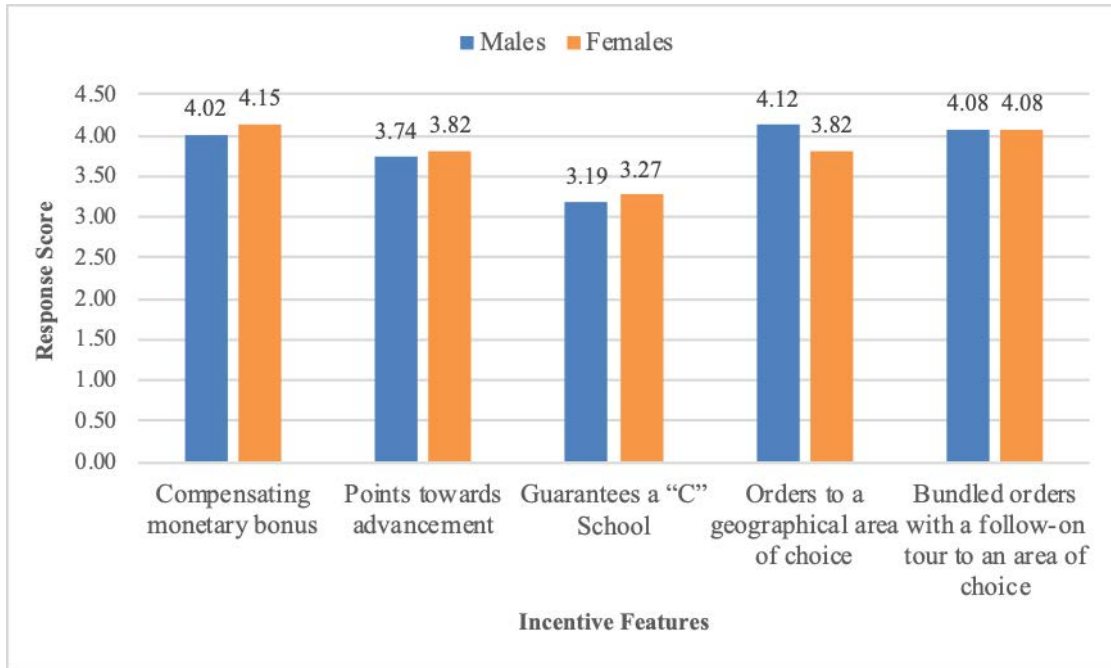


Figure 11. Comparison of Gender Responses to Incentives

Figure 12 illustrates the differences in responses for males and females for the monthly payment needed to accept duty in a geographically remote or undesired location. Females responded at a higher rate of 62% or \$700–\$900 payment, whereas males responded at 54% or \$700–\$900 payment.

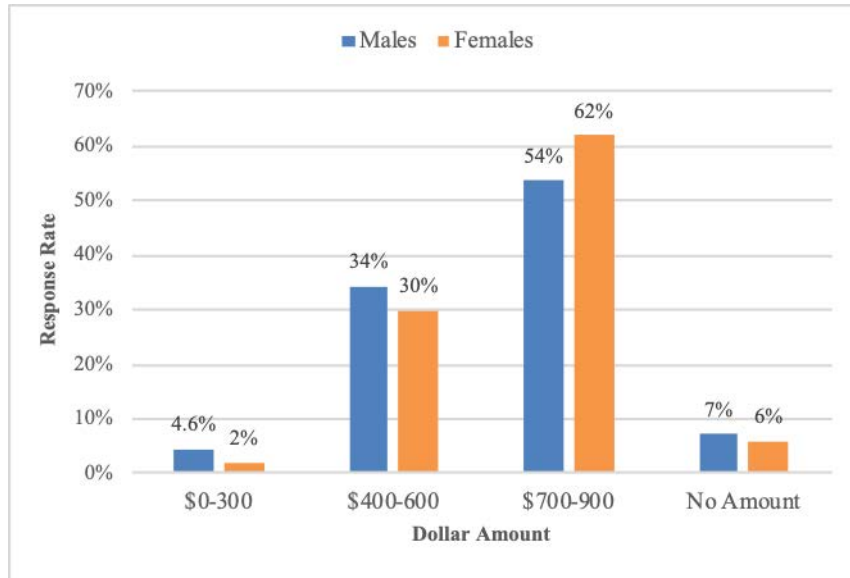


Figure 12. Gender Responses to Monetary Incentive Amounts

Figure 13 illustrates the differences between males and females for the additional advancement point(s) needed to accept duty in a geographically remote location. Females require more advancement points, with 48% requiring six points or more, whereas only 40% of males required six points or more. Conversely 48% of males required 0–5-points, amount whereas only 37% females would accept 0–5 points.

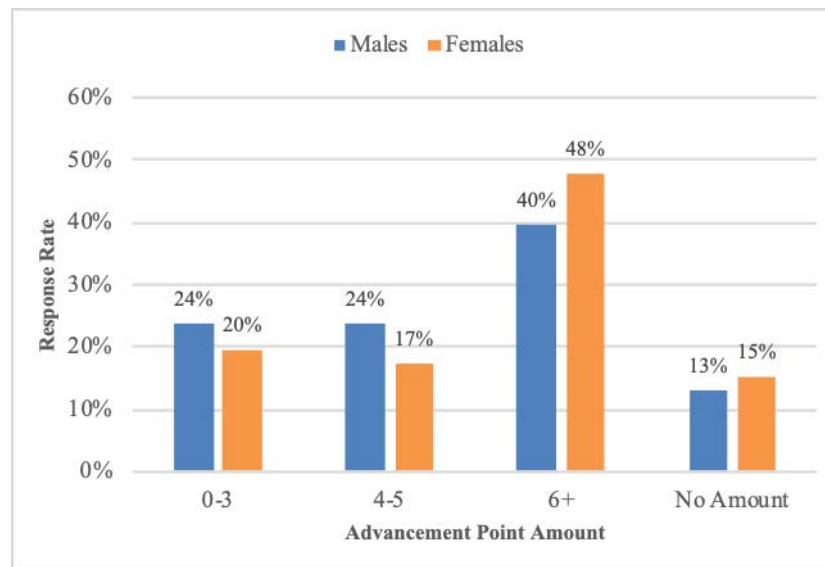


Figure 13. Responses to Gender Advancement Point Amount

7. Rank-Specific Incentive Preferences

We decided to separate rank by groups to reveal the differences between Sailors in different paygrades, which also indicates differences in age, experience, and dependent status. These factors alone are important considerations in determining how incentives factor into volunteer assignments. Figure 14 below shows preferences on incentives by rank. These results can potentially be used for recruiting and retention efforts across rank preferences. The 216 respondents comprised: 22% are E1–4; 66% are E5–6; and 13% are E7–9.

The average responses for incentives reveal subtle preferences by rank. E1–4s were mostly attracted to job and career stability, as they responded 3.95 on average to bundled orders with a follow-on tour to an area of choice. Their second highest preference was selecting orders to a geographical area of choice after assignment to a remote area, which averaged a response of 3.91. Junior Sailor’s third highest preference was almost evenly split between a monetary bonus, with an average response of 3.75, and points towards advancement, with an average response of 3.74. E5–6s’ highest preference was selecting orders to a geographical area of choice after assignment to a remote area, which averaged a response of 4.11. E7–9s’ highest preference was selecting orders to a geographical area of choice after assignment to a remote area, which averaged a response of 3.96. E7–9s’ lowest preference was guarantees a “C” School, which averaged a response of 2.14.

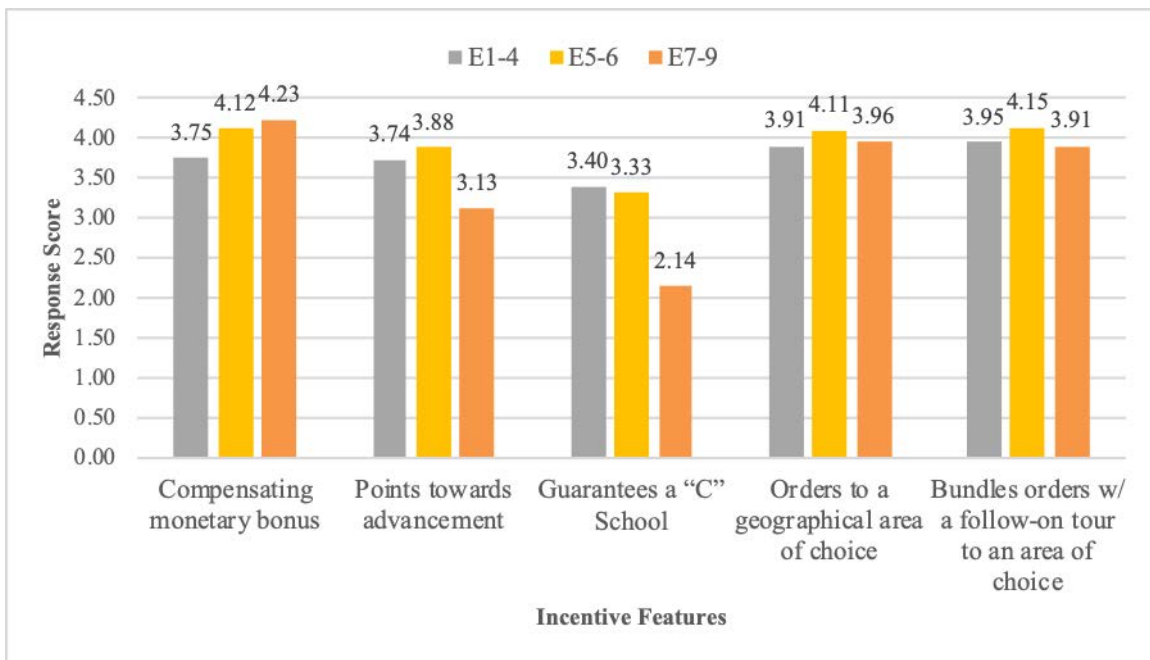


Figure 14. Responses to Rank-Specific Incentive Preferences

E5s and E6s were mostly attracted to job and career stability, as they responded 4.15 on average to bundled orders with a follow-on tour to an area of choice. Their second highest preference was almost evenly split between orders to a geographical area of choice after assignment to a remote area, with an average of 4.11, and a monetary bonus, with an average response of 4.12. Their third highest preference was points towards advancement, with an average response of 3.88.

E7–9s were attracted to security, stability, and having additional monetary incentives to support their career and families. E7–9s were mostly attracted to a compensating monetary bonus, with an average response of 4.23. Their second preference was selecting orders to a geographical area of choice, with an average response of 3.96. The senior enlisted’s third preference was selecting bundled orders with a follow-on tour to an area of choice, with an average of 3.91.

Figure 15 below shows the differences in responses by rank for the monthly payment needed to accept duty in a geographically remote area. E5–6s are more attracted to a higher monetary payment as 60% required a \$700–\$900 incentive; only 48% of E1–4s and E7–9s required a \$700–\$900 payment. The most important take away is that Sailors at each paygrade view the current AIP/SDIP compensation incentive as less than the amount that they feel would support their decision to accept a voluntary assignment to a geographically remote location. As discussed earlier, the high payment selected maybe a result of the reverse Hawthorne Effect.

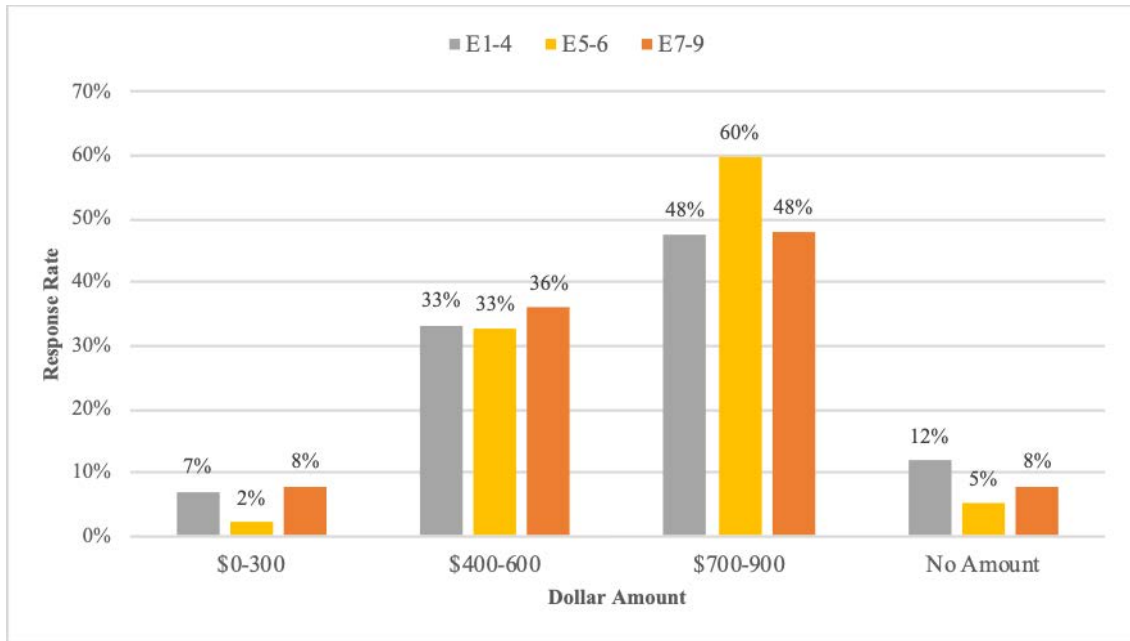


Figure 15. Rank-Specific Monetary Response Amounts

Figure 16 below illustrates the differences in responses by rank for the amount of additional advancement point(s) needed to accept duty in a geographically remote location. E5-6 require more advancement points, as 45% require six points or more. E1-4s closely resembled their E5-6 seniors with 40% requiring 6 points or greater. On average 45% of E5-6s required 0-5-points, whereas 42% of E1-4s required 0-5-points. Only 19% of E7-9s required a six point or greater incentive, while 33% required 0-3 points. Most senior enlisted Sailors required with the lowest amount of advancement points. We believe this is most likely attributed to having an established career progression that no longer relies upon advancement points, but on the selection board process.

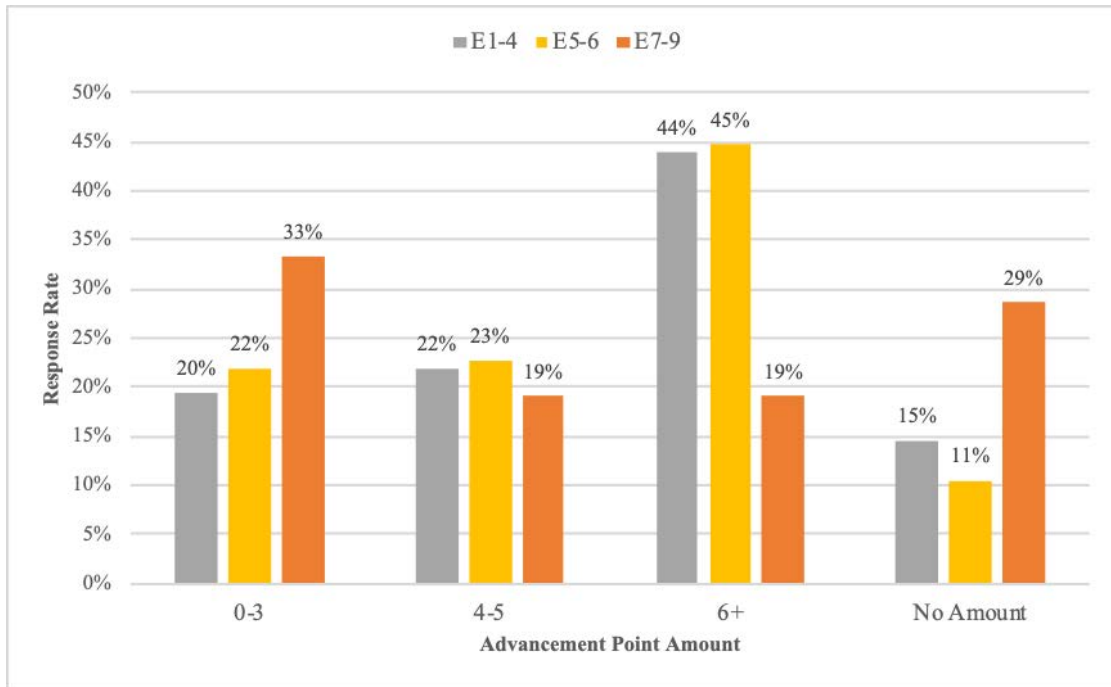


Figure 16. Responses to Rank Advancement Point Amount

B. DETAILER SURVEY

The Enlisted Detailer Survey had 171 participants, with 151 completed responses. The overall response rate exceeds the industry acceptable guidelines for significance, and our threshold for achieving credibility. We noticed the steady stream of responses over the available period with no major influx points, suggesting that responses were voluntary, and without command pressure. Due to the Naval Postgraduate School Institutional Review Board constraints, we were limited to only using the first 30 responses. This equates to 9% of the 324 enlisted detailers assigned to PERS-40. Unfortunately, the reduction from 151 to 30 responses greatly impacts the ability to reveal an accurate representation of the relevant population.

The results represent a diverse demographic in individual and service characteristics, and allows us to interact our results to identify possible correlations that may impact the assignment process. The results of the Enlisted Detailer Survey consisted of four main sections that will be described in further detail in this section. Each of these sections aim to provide specific insight as to how and why a detailer may assign Sailors.

This section will also address the survey respondents’ demographics, detailing methodology, the challenges they face, potential incentive features, and their perspectives offered in our open-ended questions that they feel should be considered for the assignment process.

1. Demographics

The demographic questions used standardized language to ensure all participant disclosures could remain anonymous and obtain the most accurate results. Out of the 30 usable survey responses, 87% were male and 13% were female, compared to the Navy’s 268,024 enlisted population shown in Table 3 (Department of Defense, 2017, p. 18). This ratio closely resembles the overall Navy average of male to female ratio, and we remain confident that the number of female observations is enough to ensure their views and input to this research is sufficiently represented.

Table 3. Enlisted Detailer Gender Demographics

		<u>Gender*</u>	
Enlisted Detailers		All Enlisted	
Male	Female	Male	Female
87%	13%	80%	20%
n=30		n=268,024	

In the case of the detailer’s marital and dependent status, four categories are presented in Table 4. Overall, approximately two-thirds of the sample reported themselves as being married, with aviation detailers being married at a rate of 83% above their peers. Notably, female detailers were almost more than four times likely to be single, compared to their male peers.

Table 4. Enlisted Detailer Marital Status

	<u>Marital Status*</u>						
	All	Male	Female	Aviation	Non-Aviation	E5-6	E-7
Single	27%	19%	75%	0%	33%	57%	17%
Married	70%	77%	25%	83%	67%	43%	78%
Divorced	3%	4%	0%	17%	0%	0%	4%
Separated	0%	0%	0%	0%	0%	0%	0%

*n=30

When considering other dependents, Table 5 indicates that 60% of detailers reported having at least one child less than 18 years old, with an overall average of 1.2 children. Within each subgroup, men responded with an average of 1.31, women 0.5, aviation detailers at 1.0 and non-aviation detailers at 1.25. We acknowledge that these numbers may be different than asking the question of “How many children do you have?”

Table 5. Enlisted Detailer Children under 18 Years of Age

	<u>Children*</u>				
	All	Male	Female	Aviation	Non-Aviation
0	40%	35%	75%	33%	42%
1	23%	27%	0%	33%	21%
2	20%	19%	25%	33%	17%
3	10%	12%	0%	0%	13%
4	7%	8%	0%	0%	8%
Average	1.20	1.31	0.50	1.00	1.25

*n=30

Our intent was not to determine who has parental experience, but who has parental responsibilities. The most significant results are that female detailers are twice as likely to have no children, and the aviation community is relatively consistent with the other detailers. Table 6 displays the dependency demographics in relation to marital status. We believe that being married and having dependents could alter the perspective and priorities that a detailer will use during the assignment process. Across all categories, 53% report being married with children under the age of 18, and only 20% have no dependents whatsoever.

Table 6. Enlisted Detailer Dependency Demographics

	<u>Marital and Dependent Status*</u>					
	All		E5-6		E7-9	
	Children	No Children	Children	No Children	Children	No Children
Single	7%	20%	14%	43%	4%	13%
Married	53%	17%	14%	29%	65%	13%
Divorced	0%	3%	0%	0%	0%	4%
Separated	0%	0%	0%	0%	0%	0%

*n=30

When determining the average paygrade and amount of experience the detailers possessed, a blend of questions attempted to provide insight. Participants were asked to identify their paygrade, which tour number they are serving, and how long they have been a detailer. A breakdown of the statistics can be seen in Table 7, and identifies that 83% of respondents have over 10 years of service, with 90% completing at least three previous tours. It should be noted that serving as a detailer is an extremely prestigious position that is reserved for top performers who have passed an additional screening process, to ensure each candidate is suitable for the position.

Table 7. Enlisted Detailer Service Demographics

	<u>Years of Service*</u>				
	All	Male	Female	Aviation	Non-Aviation
Less than 10	17%	12%	50%	17%	17%
More than 10	83%	88%	50%	83%	83%

	<u>Number of Tours*</u>				
	All	Male	Female	Aviation	Non-Aviation
1-3	10%	8%	25%	17%	8%
4-5	40%	35%	75%	0%	50%
6+	50%	58%	0%	83%	42%

*n=30

Out of the 30 usable responses, 20% came from PERS-404, the enlisted aviation detailer community, which is the focus area of our research; the other 80% participants are assigned to a variety of other communities. Table 8 shows that 27% of the

respondents did not identify their assigned community, which may include aviation community members. Although the survey was conducted anonymously, we believe that some participants would not disclose certain demographic information to prevent identification. Conversely, there are many special programs and detailers that do not fall into one specific community or rating listed on the survey, and we were not able to discern the information from these or any other explanations. Our aim here was to determine any significance or correlation between what incentives the aviation detailers preferred over the other communities to identify specific incentives that may be more efficient if a policy could be implemented supporting those recommendations.

Table 8. Enlisted Detailer Billet Demographics

	<u>Community*</u>				<u>Time Detailing*</u>				
	All	Male	Female		All	Male	Female	Aviation	Non-Aviation
PERS-404	20%	23%	0%	Less than 1	27%	19%	75%	33%	25%
PERS-405	33%	23%	100%	Between 1-3	63%	69%	25%	67%	63%
PERS-406	3%	4%	0%	More than 3	10%	12%	0%	0%	13%
PERS-407	3%	4%	0%						
PERS-408	13%	15%	0%						
Other	27%	31%	0%						
				<u>Number Detailed*</u>					
				All	Male	Female	Aviation	Non-Aviation	
			Less than 25	13%	15%	0%	17%	13%	
			26 - 75	43%	46%	25%	67%	38%	
			76 +	43%	38%	75%	17%	50%	

*n=30

When attempting to determine the average workload, Table 8 also shows 87% of detailers reported having at least 25 constituent Sailors in their caseload each month, with 43% having at least 76 Sailors each month. A heavy case load reduces the amount of time each constituent has to interact with their detailer, and possibly results in less effective customer service. Our survey instrument was not able to capture the exact number of Sailor interactions or transactions each month, so it is plausible that some detailers may significantly exceed the 100-member case load that served as our upper limit.

2. Detailing Methodology

We wanted to pay particular attention to the way Sailors were assigned to billets, particularly the geographically remote hard-to-fill jobs. The first approach we took was to ask the participants if each member was assigned using the same methodology. Each subgroup posted similar results as seen in Figure 17, 76% reporting that there is variation in their process of assigning members.

This is not surprising as each individual member has different qualifications, circumstances, and expectations, that are considered when matching inventory with requirements. Similar reports of variation exist across all communities. The variation between communities may be related to the billet base and factors outside of Sailor preferences and the scope of this research. We also contend that 27% of the respondents listed “other” as their community, and some of the aviation results may be biased differently as some results reside within the “other” category.

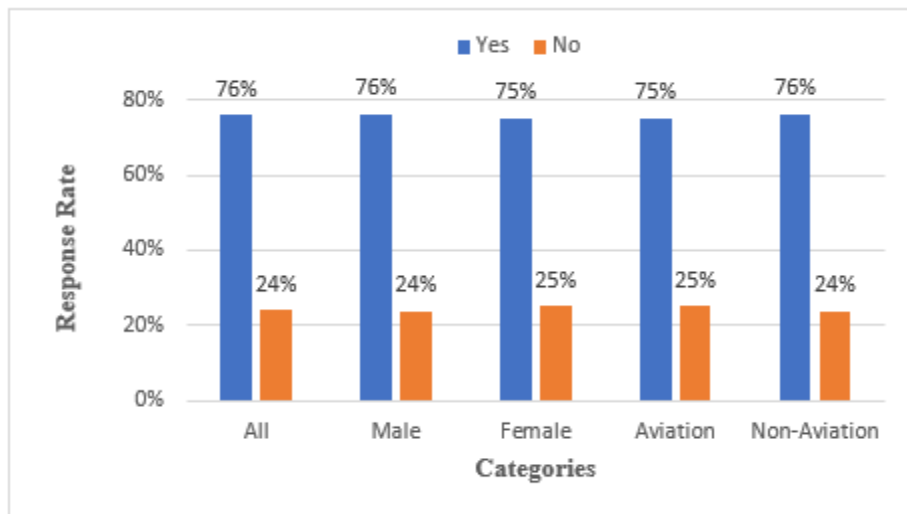


Figure 17. Detailer Variation

Each Sailor is promised a fair and equitable negotiation period, but a substantive number of mitigating factors contribute to where and when a member can be assigned. This becomes almost impossible to use a standardized method and achieve an optimized

solution. We asked detailers to use a five-point Likert Scale to rate the priority they give to the 13 factors listed in Figure 18 in the detailing process.

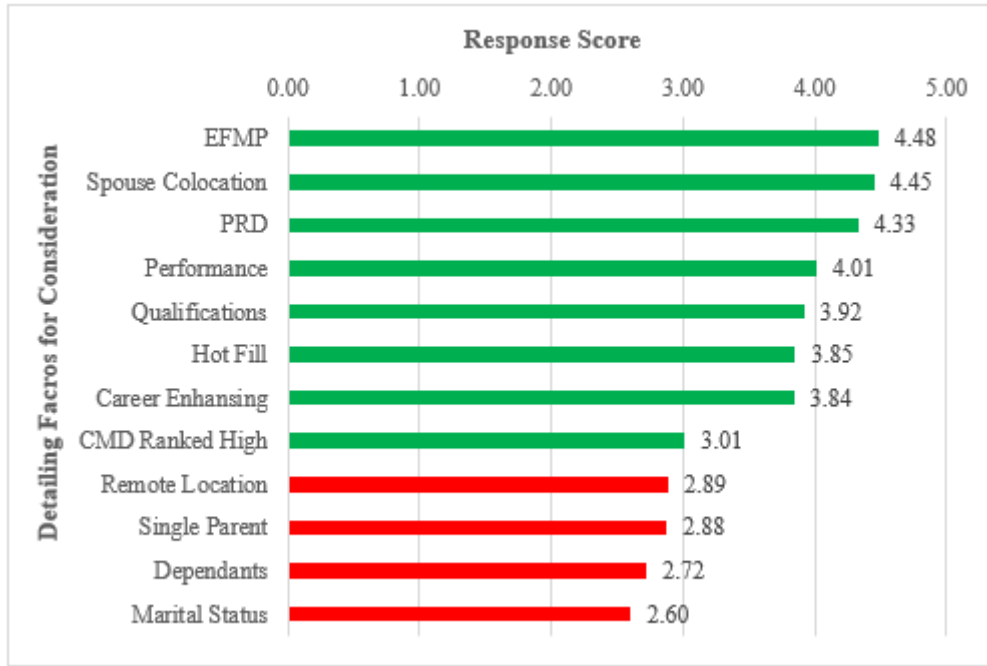


Figure 18. Enlisted Detailers Factors for Consideration

The results support our hypothesis that the rules, regulations, and policies detailers must adhere to, as in the EFMP and spouse colocation categories, were the factors receiving the most consideration. Additionally, the least consideration was given to those items that should not affect a detailers decision such as being a single parent, whether the location is remote or not, and if the Sailor has a civilian spouse or other dependents. Of the remaining factors, on time PRD was the highest priority and increase the number of qualified Sailors in billets to maximize the fit and fill standards.

The next factor that detailers prioritize in the assignment process is an individual’s performance. This includes their evaluations, NJP, PRT status, and other relevant career progression issues that may predict how well a Sailor will perform in the type of job they are being considered. Following performance, is how qualified is the member for a particular billet. Some assignments require specific training, a skill set or certification to

perform at the required proficiency suitable for that job placement. Considerable attention was given to whether a billet was career enhancing or a “hot fill,” one that was a high priority to meet the needs of the Navy. Jobs that are hot fill are likely arduous, remote, or where the billet has been vacant. Coincidentally, most “hot fill” jobs are career enhancing as they are harder to fill, and in turn typically valued higher in community promotion standards.

3. Detailing Challenges

Most detailers reported that they were the final decision maker for the majority of Sailors assigned. Table 9 provides statistics by subgroup that identifies only 7% acknowledge that they are not the decision maker, and all reside within the aviation subgroup. Open-ended comments revealed that in at least five different instances, detailers were frustrated that the orders initially negotiated or the decision they had made was interfered with or overridden. In some instances, this could be caused by the MCA redirecting a Sailor to a higher priority billet but may also be a command calling to advocate for or against a Sailor for a specific billet. This creates considerable friction, delays, and limits the detailers the ability to provide the best customer service to each of their constituents.

Table 9. Enlisted Detailers Decision-Making Authority

	<u>Decision Maker*</u>				
	All	Male	Female	Aviation	Non-Aviation
Yes	79%	76%	100%	100%	74%
No	7%	8%	0%	0%	9%
No (Normally Approved)	3%	4%	0%	0%	4%
Other	10%	12%	0%	0%	13%

*n=30

In cases where a member or a command is unhappy with the customer service, billet selection, or a range of other complaints, respondents claimed that an overwhelming 93%, have been either informally or formally challenged. Table 10 shows that 80% of the detailers report at least one informal communication citing disdain for the

way the detailer or the assignment process operates. Even more surprising is that 43% have reported they have had a formal challenge to their decision, invoking the chain of command, IG or NCIS. Interestingly, the data shows females are less likely to be challenged, formally or informally, by similar margins. Aviation detailers are just as likely to be challenged as other communities. Based on the reports provided for our research, we were not able to provide any additional details from these challenges to support the validity or outcome of any formal or informal grievance.

Table 10. Percentage of Enlisted Detailer Decisions Challenged

		<u>Informally Challenged*</u>				
		All	Male	Female	Aviation	Non-Aviation
Yes		80%	81%	75%	83%	79%
No		20%	19%	25%	17%	21%

		<u>Formally Challenged*</u>				
		All	Male	Female	Aviation	Non-Aviation
Yes		43%	46%	25%	50%	42%
No		57%	54%	75%	50%	58%

		Have been formally or informally challenged*
		93%

*n=30

Detailers play a vital role in Sailors' career progression, and are in a trusted position to ensure that each member maintains a history of career enhancing assignments, which may, at times be unpopular. Table 11 displays that 96% of detailers believe that they influence a member' decision to reenlist, and whether they retain in naval service. This is the most definitive answer we received in both of our surveys, and serves as the one of the biggest factors in addressing both of our research questions.

Table 11. Enlisted Detailer Percentage of Detailing Effect on Reenlistment

Detailing Effect on Reenlistment*					
	All	Male	Female	Aviation	Non-Aviation
None	4%	4%	0%	0%	5%
Some	57%	58%	50%	50%	59%
Critical	39%	38%	50%	50%	36%

*n=28

With so much at stake, and detailers having so much influence over the career progression and long-term retention of the enlisted communities, we asked if detailers felt like they would benefit from a matching program that used machine learning to assist them in the detailing process. Specifically, an algorithm that scored a Sailor’s preferences/qualifications/needs of the Navy and provided a recommended best match(s) based on weighted averages in a portfolio analysis. Most detailers expressed that they did not feel open to this possibility.

The popularity of a weighted average portfolio analysis was broken down by subgroup and shown in Figure 19. Only 20% felt that they could benefit from this option. Interestingly, female detailers were more open to the idea, which was encouraging. We feel that this may be the result of a lack of information about the capability of machine learning, and the resulting benefits. This would provide a more efficient manner to conduct business and increase transparency in the detailing process. In trying to understand why detailers are hesitant to accept this type of technology, it may be inferred that the previously reported incidents of interference in the detailer’s ability to decide what is in the best interest of the Navy and their Sailor. A detailer’s first priority is their responsibly to fill vacant requirements. Their second priority is to meet the Sailor’s preferences. Balancing these matters is the overall challenge detailers consistently face. Detailers must effectively balance these priorities through an effective communication in order to meet expectations.

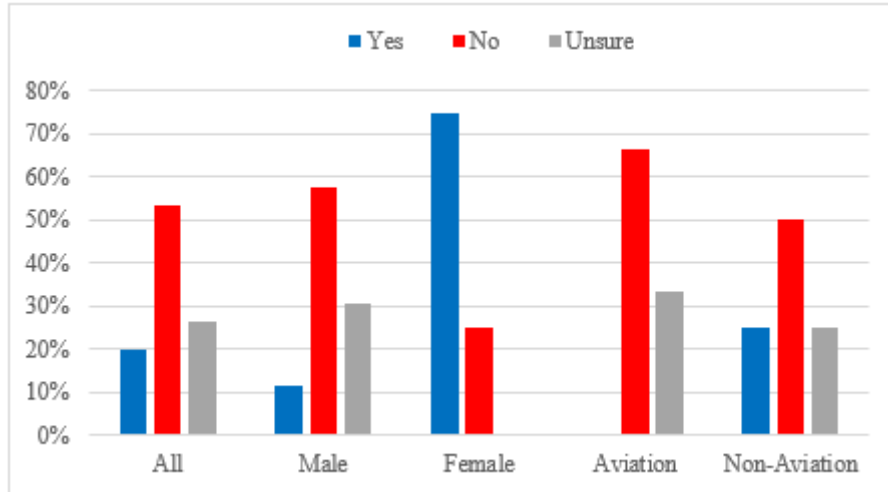


Figure 19. Enlisted Detailer Matching Program

When asked about challenges detailers face when working with Sailors, Figure 20 shows 50% of the detailers responded that meeting the Sailors’ unrealistic expectations topped the list. Directly following was the number of Sailors who were uninformed about relevant programs and policies, that then required significant time to educate or correct members and their commands. This caused significant friction and delays throughout the negotiation process. Other contributing challenges to detailers were managing the billet base, the needs of the Navy, and other system issues or delays.

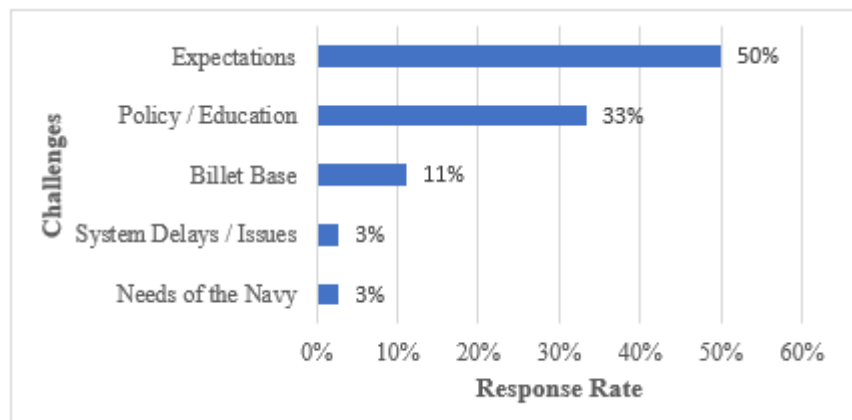


Figure 20. Enlisted Detailers’ Biggest Challenges with Sailors

When asked about the overall challenges associated with the assignment and distribution process, the detailers overwhelmingly stated that their frustrations shifted to the lack of policy clarification and educational resources for them and their constituents. This lack of comprehension or clarity about how the process was executed caused significant delays and rework. This left other Sailors with less time and attention from their detailer. Figure 21 identifies that 14% of the survey participants reported that system delays or technical issues prevented them from becoming more efficient, and was their biggest bottleneck causing detailer friction and decreased customer service.

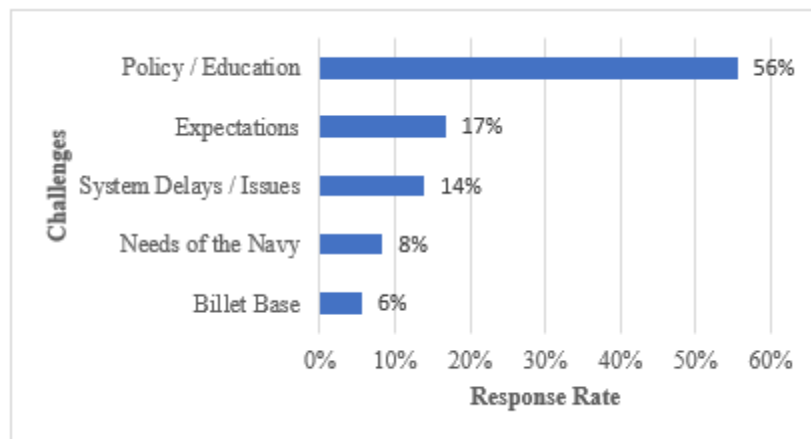


Figure 21. Enlisted Detailers' Biggest Challenges as a Detailer

4. Detailer's Perspective on Incentives

When considering which assignment incentives would be most effective to increase voluntary assignment to a geographically remote location, the following options were presented: a guaranteed "C" School, final multiple points, bundled preferred orders, and a monetary program benefit. Figure 22 shows that the monetary incentive is the most popular feature and in-line with all relevant information in our literature review. The next most popular incentive was bundled preferred orders, followed by final multiple points towards advancement and bundled orders. We feel bundled orders are a proxy for geographical stability, which explains its desirability across all demographic categories.

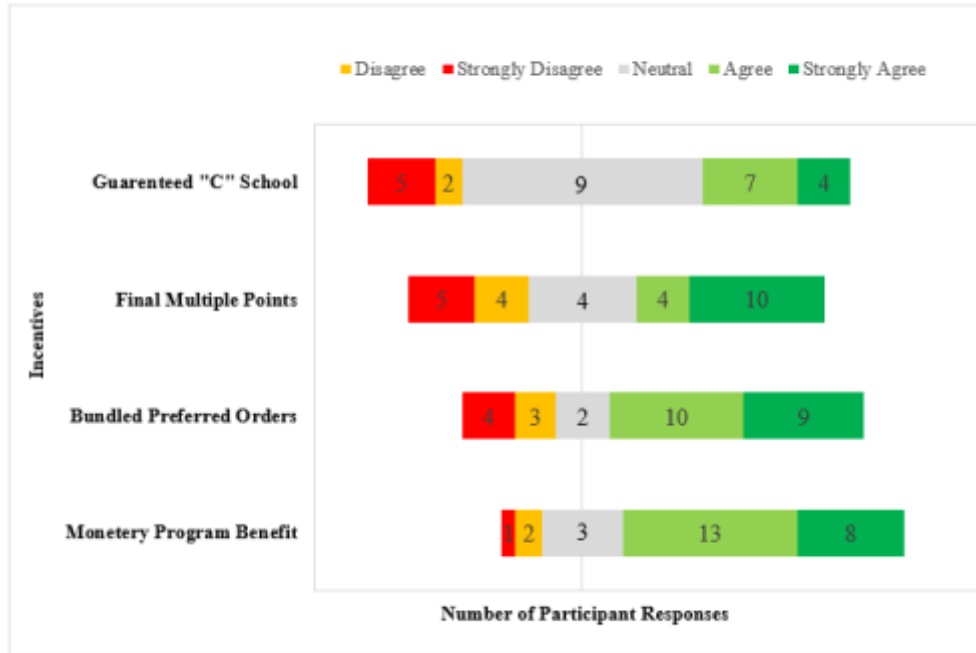


Figure 22. Enlisted Detailer Overall Incentive Features

Next, we wanted to explore whether part of the issue for accepting assignment to a geographically remote location was that members were unaware of what their follow-on tour would be, and that lack of stability in one geographical area prevented them from potentially accepting this type of duty. Based on the five-point Likert Scale, Table 12 shows a monetary incentive was the most popular option with an average of 3.93. The second most accepted option was the ability to guarantee a set of bundled preferred orders, which had a 3.61 favorable result.

Table 12. Enlisted Detailer Overall Incentive Features

	<u>Overall Incentive Features*</u>				
	All	Male	Female	Aviation	Non-Aviation
Guaranteed "C" School	3.11	2.91	4.25	2.67	3.24
Final Multiple Points	3.37	3.43	3.00	3.33	3.38
Bundled Preferred Orders	3.61	3.54	4.00	3.33	3.68
Monetary Program Benefit	3.93	3.78	4.75	3.83	3.95

*n=30

Detailers were not as likely to recommend multiple promotion points or a “C” school, as identified in Table 12. We believe this may reflect a detailer’s potential bias from already achieving significant promotion and career goals. We believe a junior sailor would be extremely interested in both of these categories to boost their chances of advancement and career training that is also valuable in the civilian market. This is evidenced by the female detailer’s favorable response, considering they identified themselves in the E5–6 pay band.

The data identified in Table 12 shows that female detailers were consistently more likely to recommend most incentives compared to their male counterparts, which leads us to conclude they would be more willing to accept an incentive. Aviation detailers were unlikely to recommend anything other than a monetary benefit compared to their peers, which is also significant and may indicate that offering any other benefit may not be effective for the aviation community, and specifically for the geographically remote locations, such as NAS Lemoore.

When it came to determining the minimum fair amount of money that should be paid per month to each sailor, we divided the results into three subgroups, based on the member’s paygrade. Figure 23 shows monetary incentives on a scale from \$0 to \$900 were offered, with a final option to identify if the detailer did not think any monetary benefit would be effective. The aviation community overwhelmingly supported higher bonus amounts compared to detailer’s in other communities.

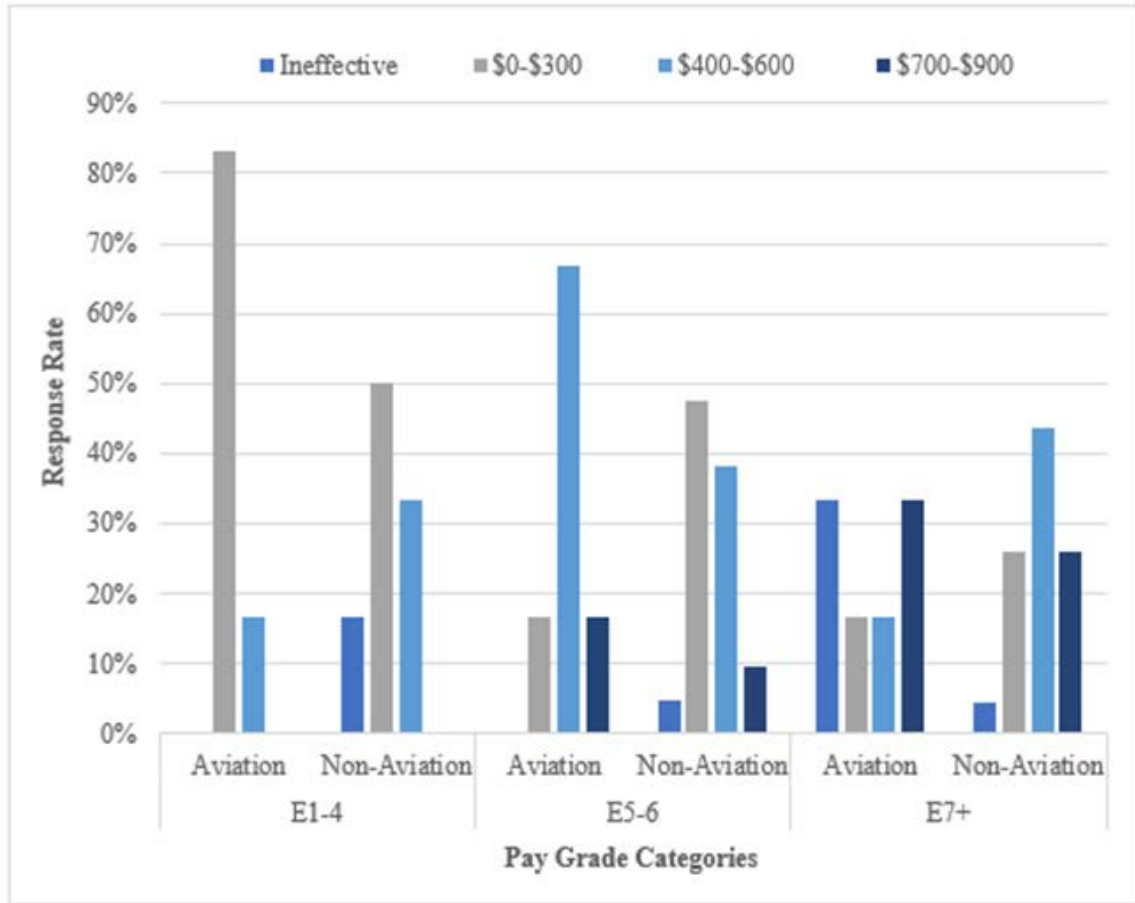


Figure 23. Enlisted Detailer Monetary Benefit Amount

As shown in Table 13, detailers felt junior Sailors would best respond to an incentive around \$273 per month, and the aviation community agreed. For the E5–6 group, detailers felt an increase to an average of \$385 was appropriate; the aviation detailers response differed with a higher rate of \$517. For the senior enlisted E–7 and above, detailers increased the effective incentive to \$462 a month, while the aviation community maintained a similar premium with an average of \$600 monthly. We are not able to explain this increase compared to their peers, but will acknowledge that the aviation community has operated with a structured monetary incentive plan (AIP/SDIP), offering similar amounts of compensation.

Table 13. Monetary Program Benefit

Monetary Program Benefit*

		<u>E1-4</u>				
		Overall	Male	Female	Aviation	Non-Aviation
Ineffective		15%	18%	0%	0%	17%
	0-300	65%	64%	75%	83%	50%
	400-600	35%	36%	25%	17%	33%
	700-900	0%	0%	0%	0%	0%
	Average	\$273	\$273	\$275	\$300	\$265

		<u>E5-6</u>				
		Overall	Male	Female	Aviation	Non-Aviation
Ineffective		4%	5%	0%	0%	5%
	0-300	42%	41%	50%	17%	48%
	400-600	46%	45%	50%	67%	38%
	700-900	12%	14%	0%	17%	10%
	Average	\$385	\$386	\$375	\$517	\$345

		<u>E7-9</u>				
		Overall	Male	Female	Aviation	Non-Aviation
Ineffective		12%	14%	0%	33%	4%
	0-300	27%	27%	25%	17%	26%
	400-600	42%	41%	50%	17%	43%
	700-900	31%	32%	25%	33%	26%
	Average	\$462	\$455	\$500	\$600	\$436

*n=30

We were interested to note that the male and female perspectives were similarly aligned to the monetary incentive features. Figure 24 displays that the comparison between the two genders is negligible.

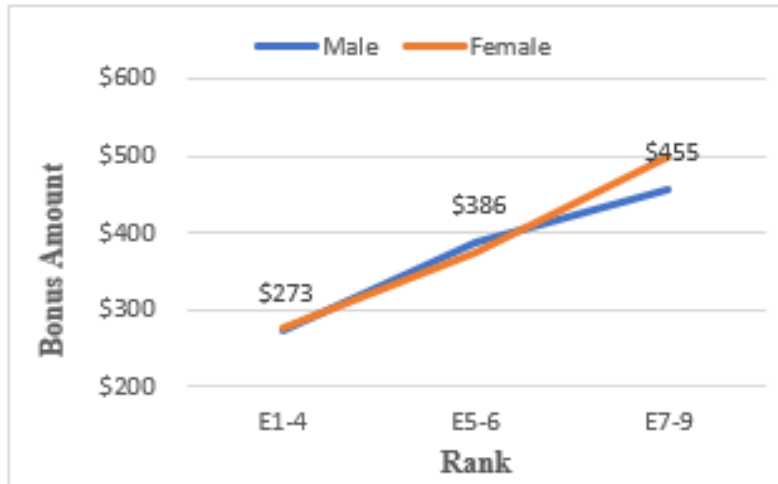


Figure 24. Bonus Amount by Gender

The final section of the survey allowed an opportunity for the detailers to discuss any other incentives they felt could add value to our research. Table 14 displays the 26 usable results we received, broken down into five major categories. It should be noted that some participants offered multiple recommendations, while others offered constructive criticism with no tangible incentives.

Table 14. Detailer Open-Ended Incentive Options

Open Ended Incentive Options*

Monetary		Non-Monetary	
Incentive	Frequency	Incentive	Frequency
Specific Bonus	2	Advancement	2
General Monetary	1	Advancement Points	5
BAH/COLA	1	Non-Chargable Leave	1
Orders		Base	
Incentive	Frequency	Incentive	Frequency
Tour Length Reduction	1	Community College	1
Bundled Orders	1		
Negative Responses			
Comment	Frequency		
Nothing Will Work	6		
Orders are Orders	2		
Relocate Base/Platform	2		
Sailor Education	1		

*n=26

The responses were distributed in the following manner: non-monetary (31%), monetary (15%), orders (8%), and base (4%). Further examination revealed advancement and advancement points emerged as the most popular with seven responses. Monetary compensation followed, with four different mentions across the specific bonus, general monetary, and BAH/COLA incentive categories. The next most popular response was having the ability to shorten a tour length or receive a guaranteed set of follow-on preferred bundled orders. These answers are in line with our literature review and survey results. Sailors are looking for monetary compensation, promotion opportunity, and geographical stability. Not surprisingly, we did receive 42% of negative comments citing that no solution or incentive would work. As noted in Table 14, we were unable to tie them to a viable path for reconciliation within the scope of this project.

THIS PAGE INTENTIONALLY LEFT BLANK

V. CONCLUSION

A. RESEARCH QUESTIONS

- (1) Primary Question: Do incentives increase voluntary assignment in hard-to-fill locations?

Yes. The data indicates that incentives may increase voluntary assignment to a geographically remote or hard-to-fill locations. This is primarily due to the high response rate in the survey along with an 84% appeal for Sailors willingness to accept this type of billet if they received an incentive. Our research concludes that an incentive is a worthwhile investment to manage the NAE's talent pool and support required inventory and future retention of our best and brightest.

- (2) Secondary Question: Is there variation in the detailer's methodology during the assignment process?

Yes. Variation exists for each individual Sailors during the detailing process. The detailer's primary goal is to assign a qualified Sailor to each available billet. Sailors are assigned to locations based on the detailers individual methodology under the construct of Naval regulations, policies, and NPC business rules. Detailers consider a Sailor's preferences, and try to meet their expectations, while balancing competing interests to find the best overall fit.

B. FINAL ANALYSIS

The analysis reveals that incentives may be an effective tool in improving volunteer assignments to hard-to-fill billets in geographically remote locations. The enlisted preference survey identified males and females react differently to various incentives. Additionally, pay grade categories E1-4, E5-6, and E7-9 have subtle distinct preferences on location features and incentives. Junior Sailors are on average 18-22 years old, in paygrades E1-4, and are mostly single. Mid-grade Sailors are on average 20-31 years old, in paygrades E5-6, and are mostly married. Senior Sailors are on average of 31-45 years old, in paygrades E7-9, and have more than one dependent.

Additionally, female detailers are three times less likely to be married and two and a half times less likely to have children compared to their male peers. Variations in assignment methodology among detailers does exist when matching Sailors to geographically remote billets do to individual Sailor preferences. Detailers must select a qualified Sailor who meets all eligibility requirements and adheres to all applicable policies and procedures, while optimizing fit between the Navy and Sailor. Significant mention was made that once Sailors have signed their enlistment contract, they are obligated to execute orders that have been originally agreed upon between the Sailor and the detailer. We acknowledge the needs of the Navy when necessary, but forcing Sailors into geographically remote billets lowers satisfaction and potentially retention.

Due to gender and pay grade preferences, we conclude that policies should consider tailoring incentives to optimize the likelihood of voluntary assignment to geographically remote areas. By offering the exact incentives that Sailors desire, the Navy is not only likely to retain sailors, but potentially be the most cost-effective option for the Navy. In a financially constricted time, and as Sailor's preferences change, the Navy must seek incentive alternatives. The importance of an evolving incentive policy is critical to maintaining the inventory and manpower distribution goals across the NAE, which will support a competitive advantage.

1. Location Preferences

Base services or metropolitan services in geographically remote are important considerations in duty preferences. The location feature responses in the Enlisted Preference Survey reveal that Sailors strongly prefer having abundant outside activities, being able to transition to civilian life, and being co-located with friends and family. Additionally, Sailors are passionate about taking care of their dependents, factors such as having good K-12 schools, abundant job opportunities for spouses, and having good civilian health care were identified as a high priority when selecting a duty station. These critical factors are even more intensified when Sailors are assigned to geographically remote areas. The Navy must invest in base infrastructure at a comparable value in fleet concentration areas to support retention goals.

Junior single Sailors primarily reside on base and rely mainly on base services for activities, food, medical treatment, and connections with other Sailors. Naval installations that have thriving support services, promote Sailor morale and well-being. Conversely, naval installations that lack these services create additional hardships. Unfortunately, naval installations in geographically remote areas often have smaller budgets and offer fewer services compared to larger naval bases. This is primarily due to funding constraints, or fewer community opportunities. Additionally, these privatized services are associated with higher costs to maximize profit, and to the Sailor's detriment. Increasing installation services in geographically remote areas will not only provide more services for Sailors, but will support the morale and well-being of all Sailors assigned to these locations. Moreover, these services will provide an incentive, especially for junior single Sailors, and ultimately can lead to an increase in retention across the NAE.

2. Incentive Preferences

a. Enlisted Sailor Preferences

Sailors mainly preferred monetary compensation and bundled orders, compared to final multiple points towards advancement or a guaranteed "C" school when asked which incentives would most increase voluntary assignment to a remote location. The strong response to the monetary benefit and bundled orders is in-line with our literature review and supported by the significant demographic factors of the respondents. 85% of Junior Sailors in paygrades E1–4 do not have children and are mostly attracted to job and career stability. They prefer bundled orders with a follow-on tour to an area of their choice. Mid-grade Sailor's in paygrades E5–6 are split between having children (52%) and no children (48%) and are mainly attracted to job and career stability. These Sailors prefer both bundled orders with a follow-on tour to an area of choice and a monetary bonus. Eighty-nine percent of Senior Sailor's in paygrades E7–9 have children and are attracted to security, stability, and having additional spending power to support their career and families. These Sailors are mostly attracted to monetary bonuses.

When determining the monthly compensation, Sailors clearly prefer higher bonuses when asked. 81% of Junior Sailors required \$400–\$900 per month, and of that

81%, 48% required \$700–\$900 per month. Mid-grade Sailors were most attracted to a higher bonuses as 93% required \$400–\$900 per month, and of that 93%, 60% required \$700–\$900. Senior Sailors required a lower bonus than mid-grade Sailors, with 84% requiring \$400–\$900 per month, and of that 84%, 48% required \$700–\$900.

b. Detailers Incentive Preferences

Detailers overwhelmingly preferred monetary compensation and bundled orders compared to multiple advancement points or a guaranteed “C” school when asked which incentives would most increase voluntary assignment to a remote location. The strong response to the monetary benefit and bundled orders is in-line with our literature review and evidenced by the respondents’ significant demographic factors. With 80% of detailers having at least one dependent, detailer’s perspectives are rooted in providing stability for their families.

Alternatively, even though there may be some bias across detailers who have already achieved significant promotion and career goals. Interestingly, there was little support for the advancement points or a guaranteed “C” school. We believe junior sailors would accept these opportunities for advancement and career training that is also valuable in the civilian market.

Female detailers consistently rated most incentives higher than their male counterparts, which leads us to believe they would be more willing to accept such an incentive themselves. Detailers believed that more money was needed to incentivize Sailors to accept a remote duty station. Aviation detailers were unlikely to recommend anything other than a monetary benefit. Considering there have been AIP/SDIP policies that have financially compensated those who are willing to serve in geographically remote areas, such as NAS Lemoore, a precedent has been established. For this reason, we believe that offering any other benefit may not be effective for the aviation community, compared to a monetary bonus.

When determining the monthly compensation for each sailor, the aviation community overwhelming supported higher bonuses compared to detailers in other communities. Non-aviation detailers felt junior Sailors would volunteer for \$265 per

month, compared to the aviation communities' \$300. For the E5–6 group, all detailers felt an increase to an average of \$345 was appropriate, compared to the aviation detailer's \$517. For E–7 and above detailers, they reported \$436 a month would be an effective incentive, compared to aviation's average of \$600, with 33% of the aviation detailers selecting at least \$700 per month.

c. Combined Incentive Preferences

This research confirms that incentives can provide an effective means of increasing voluntary assignment to hard-to-fill locations, especially those in geographically remote areas. The Navy must continue using both monetary and non-monetary incentives, based on the literature review and the results of our surveys, to attract Sailors to select jobs in these locations. The survey results also reveal that Sailors prefer to select from a broad range of incentives, as not every Sailor prefers the same incentive or at the same amount; some may be willing to clear the market at a lower amount. This would be an opportunity for the Navy to reduce the economic rent inherent in paying a fixed incentive cost.

From the detailer's perspective, most of the challenges they faced stemmed from their inability to meet Sailor's expectations, or the Sailor and their commands lack of education about the assignment process. The most effective incentive programs rely on Sailors being informed of the current policies and having the ability to voice their preferences. Detailers do agree with aviation Sailors that a mixed incentive package combining monetary and non-monetary incentives would be most efficient in meeting their goals and those of the Navy and Sailors.

When we compare enlisted Sailors to their detailer's preferences, as it relates to monetary compensations, there is a consensus that as Sailors gain seniority and experience, the amount of compensation increases. Each pay band commands a specific payment range with the most senior managers receiving the highest compensation. When considering non-monetary incentives, there were differing preferences rooted by pay bands. Junior Sailors prefer geographic stability, using bundled orders, more than monetary incentives. More senior aviation Sailors and their detailers prefer monetary

incentives over bundled orders, or any other incentive listed in the survey. Multiple points towards advancement and a guaranteed “C” School were unpopular among senior survey respondents. We believe this reflects that senior Sailors have established their career paths and likely attained multiple Naval Enlisted Classification codes from the “C” Schools they have attended.

Our analysis of the results from both surveys and relevant literature concludes that the Navy must provide Sailors and detailers a mixture of incentives from what to choose. We believe this is the most efficient method to evenly distribute the force across the NAE. We conclude this will have a positive effect on job satisfaction and increase the likelihood of voluntarily assignment to geographically remote areas.

3. Detailer Variation

We can also conclude that significant variation is present in the methodology detailers use to assign Sailors to meet the needs of the Navy and a Sailor’s preferences while remaining within the legal and policy boundaries in which they must operate. Seventy-six percent of detailers report they do not assign members the same way each time a Sailor is detailed, due to the varying circumstances and preferences attributed to each member.

According to the detailers, other than timing of the member’s PRD, performance and qualifications were the most significant factors influencing consideration to assigned Sailors, if there were not EFMP or dual military concerns for the member. Outside of the Sailor’s control, the detailers value whether the billet was a hot fill and career enhancing for the member. All other factors were rated low, which is in line with business rules and support equity among Sailors in the assignment process. One unexpected result was the neutral response for a highly ranked command in the CMS/ID cycle, signaling that there may be a missed matching opportunity for the command and the Sailor holding all other factors constant.

Additionally, the Navy should optimize a solution that is most effective in the distribution process that will even out the force. Lastly, the Navy should continue to refine policy in order to adjust incentives at every opportunity to maximize effectiveness.

4. Detailer Friction

Ninety-three percent of detailers have been challenged, either formally or informally, identifying significant friction in the assignment process. It is not known if the challenges were substantiated, or if the detailer's decision was reversed. Detailers cite that meeting Sailor's expectations combined with a Sailor's lack of understanding of the assignment process were their biggest challenges.

5. Discounting Effects

The Navy must take full advantage of all the resources it has to identify top performers, including differentiating between Sailors who behave time-consistently and forward looking compared to those who are time-inconsistent and more near term focused. Research has shown that those who behave in a time-consistent, forward looking manner are more likely to perform through a challenge and seek the reward later, something service in the Navy demands. As individual data becomes more available, so must the behavioral economic aspects that contributes to their decision making, overall performance, and longevity in the Navy. Moreover, those that are time-consistent and forward looking can provide long-term career stability, as they are generally higher performers who are loyal to the Navy.

Identifying the Sailors who are time inconsistent and near-term focused may also help eliminate those that have a higher propensity to commit crimes, have substance abuse issues, domestic violence, gun decking maintenance, and a host of other challenges that are not easily resolved, and weaken command morale and overall efficiency.

6. Hawthorne Effect

As discussed in the literature review, the Hawthorne Effect is a potential bias that may have altered our results. There was considerable effort to minimize this effect through the use of disclaimers and the survey being anonymous, but in certain contexts, such as monetary incentives, it is impossible to eliminate. As an example, the Enlisted Preferences Survey found 62% of the responses to the open-ended question pointed to requesting a monetary benefit. Of that group, 50% felt that an increase in BAH or COLA

should be provided. A Sailor who feels that the BAH should be increased by \$500 to meet the area's high cost of living may add that \$500 to the amount they feel they should be incentivized under AIP and SDIP. This distorts the amount that each program should offer as they are compliments, not substitutes. Unfortunately, the data was not able to discern between the monetary values, or explain the mindset of many survey participants, but when all the information is consolidated and analyzed, trends do emerge.

VI. RECOMMENDATIONS

A. RECOMMENDATIONS

To meet the needs of the Naval Aviation Enterprise, we offer six independent recommendations as possible solutions to the problems identified in this research. We believe from the research we conducted through our literature review, survey collection and analysis combined with the implementation of our recommendations will better manage our talent through increases in job satisfaction, work-life balance and long-term retention.

1. Merit-Based Fixed-Incentive Option

Offer a fixed incentive system that establishes a merit-based monetary compensation for Sailors who are willing to accept a voluntary assignment to a geographically remote or hard-to-fill billet. A multiplier can be used in conjunction with the current AIP/SDIP policy.

- Early Promote multiplier—3.0 (can be raised to meet retention needs)
- Must Promote multiplier—2.0 (can be raised to meet retention needs)
- Promotable multiplier—1.0 (can be raised to meet retention needs)

2. Mixed-Incentives Option

Offer a blended incentive system that offers differentiating compensation packages for Sailors willing to accept orders to the same hard-to-fill billets based on their preferences. These packages could consist of monetary and non-monetary incentives that allow flexibility for maximum effectiveness. For example:

- Option 1—25% monetary bonus + bundled preferred orders
- Option 2—50% monetary bonus + non-chargeable leave period
- Option 3—75% monetary bonus + advancement points

Option 4—Custom blend of incentives that meet Sailor’s needs

3. Time-Consistent Incentive

Offer a time-consistent, forward-looking incentive that incorporates delayed gratification to allow members to self-identify as long-term oriented. Sailors who select such an option would more likely behave in a time-consistent manner and demonstrate sustained superior performance over their career. As a Sailor approaches their EAOS, and is asked to make a decision to remain in naval service, the Navy could target their retention efforts on the time-consistent members.

- Option 1—Monetary Bonus of (\$250 per month)
- Option 2—Thrift Savings Plan Contribution of (\$350 per month)

4. Detailer Optimization Tool

We believe the implementation of an optimization tool that uses artificial intelligence and/or machine learning algorithms will exponentially improve the MyNavy Assignment detailing framework. Both Sailors and reviewing commands could rank factors based on their preferences. This will allow detailers to empower Sailors to have buy-in to the process, and make the best decision for themselves and their families, while also meeting the needs of the Navy and an even distribution of the force.

5. Increased Investment in Base Support Services

Being stationed in a geographically remote area presents certain challenges in obtaining typical base services. In these cases, the Navy must provide a government alternative to ensure that the needs of a Sailor and their family are met. This includes adequate and affordable housing, sufficient medical providers, and shopping outlets for food, gas, and other necessities. These services are more than an investment, but can be viewed as incentives themselves, especially if they exceed expectations. Modernization efforts to these services, such as a premier Navy Exchange or newly renovated barracks, are significant quality of life improvements that can impact overall satisfaction.

Over time, some of the base services have been transitioned to private companies with mixed results. Due to the limited available options, or being in a geographically remote area, these private companies operate for profit and may not be in the best interest of their constituents. The Navy must provide significant oversight if a privatized option is in place, to ensure the needs of each Sailor and their family are being met.

The following recommendations are opportunities to increase the appeal of a geographically remote area, such as NAS Lemoore:

- Barracks meeting the needs of the junior Sailors
- Free WIFI in the barracks and MWR locations
- Ensure there is reliable transportation for junior enlisted Sailors who are living in the barracks to their place of duty.
- A variety of Healthy food options for OPS Side (potential galley)
- Either open a second gate on the operations side or establish a means to flow commercial traffic separately through the operations gate.
- Invest in a Single Sailor Program designed to target MWR activities to unmarried Sailors
- Increase community partnerships with local towns to increase networking activities and fellowship opportunities for Sailors and develop stronger community ties
- Invest in spouse career opportunities and activities

6. Augment NAE Vacant Billets Using Navy Reserve Force Members

We recommend using reserve Sailors to augment the NAE's vacant billets if a shortfall exists. The Navy Reserve Force is comprised of qualified Sailors who possess relevant experience and may provide short-term relief to critical vacancies. The definite recall program and other short-term active duty for training programs utilize a reserve

Sailor option to be more cost effective. This is because the reserve benefits package differs from the active-duty compensation costs. This also provides meaningful career opportunities for reserve Sailors to remain qualified and proficient while supporting fleet-wide operations. Operational Support Officers are already in place and assigned to each geographical area. They serve as a liaison to coordinate integration of the reserve forces members to support the active component.

We also recommend increasing awareness to active duty commands of which Operational Support Officers are assigned to their geographical area. This allows each active duty command to request direct reserve support when critical inventory shortages are needed.

B. FURTHER RESEARCH

- Evaluate behavioral economic concepts such as exponential and hyperbolic discounting as an incentive methodology to distinguish time-consistent Sailors and target retention efforts.
- Cost Benefit Analysis to implement a time in service multiplier, (similarly connected to early retirement) count a 36-month tour as a 48-month tour.
- Cost Benefit Analysis for monetary and non-monetary incentives
 - Replacing Sailors after attrition
 - Based on merit or applied equally
 - Analysis for relocating to Lemoore
 - Realigning aviation billets in Lemoore
 - Cost of Living (BAH/COLA) in Lemoore
 - Air and water quality in Lemoore
 - Remote base services on first-term retention
- Dependent location policies (ability to elect BAH location)

- Base housing and civilian housing availability (Critical Housing Location) in Lemoore
- Correct portioning the correct amount of monetary or non-monetary incentive is just as important as providing the incentive further research needs to be completed to determine what is the right amount for the right Sailor something based on the prize structure an incentive structure
- Establish volunteer assignment (must select orders 9 month prior to PRD)

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX A. ASSIGNMENT INCENTIVE PAY ELIGIBILITY

Source: NPC (2019a)

AIP ELIGIBILITY CHART						
						Approved: 15 October 2019
COUNTRY	LOCATION	COMMAND TITLE	UIC	RATING / QUALIFICATION	PAYGRADE	MAX BID RATE
Australia	Alice Springs	NIOD Alice Springs	32224	CTR	E5-6	\$550
				CTT	E7-8	\$600
				YN	E5-6	\$550
Bahrain	Manama	NIOC Bahrain	48035	CTI	E5-E6	\$350
Various	MD	OFFICE OF NAVAL INTELLIGENCE SUPPORT CENTER OPERATION SEA DUTY COMP	32998	NEC 708B (STS/STG)	E7-E9	\$1,000
	CT	COMMANDER SUBMARINE 15 SUBMARINE SURVEILLANCE EQUIPMENT PROGRAM (COMSUBRON 15 SSEP)	40058			
	CT	CSUBGR 2	42914			
	HI	SSEP PAC SURV	42916			
	HI	SSEP PAC	42917			
	GUAM	COMMANDER, SUBMARINE SQUADRON 15 (COMSUBRON 15)	43709			
	JP	NAVY COMMAND AND CONTROL SYSTEM SUBMARINE GROUP 7	43741			
	MD	ONI SUB COMP	48909			
	CA	UWDC Det SAN DIEGO	53221			
	DC	TECHANALCEN DC	53262			
	CA	FARTACACINT SAN DIEGO	53271			
	JP	FAR TEC DET YOKOSUKA	53273			
	BAHRAIN	FAR TEC DET BAHRAIN	54080			
	NAPLES	FAR TEC DET NAPLES 69	54081			
	CA	SUBMARINE SQUADRON 11 SUBASE	55244			
	WA	COMMANDER, SUBMARINE DEVELOPMENT SQUADRON 5 (COMSUBDEVRON 5)	55522			
VA	Commander, Undersea Surveillance	57001				
VA	Commander, Submarine Force Atlantic (COMSUBLANT)	65368				
CT	Tactical Acoustic Intelligence Det	69355				
Guam	Agana	USS FRANK CABLE (AS 40)	45255 ⁽⁹⁾	NEC Q33A (MMW)	E5-8	\$250
				NEC M1DV	E4-9	\$600
		USS EMORY S LAND (AS 39) ⁽¹⁾	45254 ⁽¹⁾	NEC M1DV	E4-9	\$600
				NEC MMDV	E6-9	\$800
		Naval Special Warfare Unit One	46987	NEC O26A (SO)		
United States	NY/SC	Nuclear Power Training Unit	Various ⁽²⁾	Various ⁽³⁾	E5-9	\$166.67 ⁽⁴⁾
	Fallon, NV	STRIKE FIGHTER WING PACIFIC DET FALLON	55153	NEC E20A (AE)	E-7	\$700
	Lemoore, CA	STRIKE FIGHTER WING PACIFIC DET LEMOORE	Various ⁽⁵⁾	NEC E19A (AD,AE,AM)	E7-8	\$500
				NEC 770B (AD,AE,AM)	E7-8	\$500
	Hawaii	ATC Det Hawaii/ TRADET-3	39564/ 34123	NEC O23A (SO) ⁽⁶⁾	E5-E9	\$1,500
SDVT-1/ NSWG-3 HQ/ NSWG-3 Det. DCS/ NSWG-3 Det. SWCS					08973/ 55446/ 55301/ 55466	E7-E9
Japan	Sasebo	Naval Beach Unit Seven	55621	NEC 701B	E5-6	\$500
				NEC 800A	E7-8	\$500
				NEC 729B	E5-6	\$500
Notes:						
1. AS-39 eligibility begins on Homeport Shift Effective Date for homeport shift to Guam.						
2. UIC's include 47723, 49230, 49410, 43135, 62988, and 62991.						
3. NEC's include N130, N140, N150, N160, N13S, N14S, N15S, N16S, N230, N240, N250, N260, N23S, N24S, N25S, N26S.						
4. Will be paid in lump sum based on tour length.						
5. UIC's include 09063, 09076, 09084, 09092, 09113, 09295, 09558, 09561, 09637, 09678, 09774, 55142, 63923, 63925, 09943, and 55141. Only applies to rates listed.						
6. Must have previously served a minimum of 2 years in an operational NEC 023A billet at SDVT-1 or SDVT-2 for AIP eligibility.						

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX B. SEA DUTY INCENTIVE PAY ELIGIBILITY

Source: NPC (2019c)

Approved: 25 Nov 2019

Rating/Skill	Pay Grade	Monthly SDIP Rate	Note(s)
All ratings at NAS Lemoore	E4-E5	\$500	1,3
	E6-E9	\$700	1,3
Aircrew Survival Equipmentman (PR)	E5-E6	\$600	1,
Aviation Boatswain's Mate (AB)	E-9	\$700	1
Aviation Boatswain's Mate- Equipment (ABE)	E-8	\$700	1
ABE	E-5/4/3	\$400	1,b
Aviation Boatswain's Mate- Fuels (ABF)	E-8	\$700	1
ABF	E-5/4/3	\$400	1,b
Aviation Boatswain's Mate-Handling (ABH)	E-8	\$700	1
ABH	E-5/4/3	\$400	1,b
Aviation Electrician's Mate (AE)	E-5/4/3	\$400	1,d
Aviation Electronic's Technician (AT) NAS Lemoore only	E-8	\$700	1,c
Aviation Machinist's Mate (AD) NAS Lemoore only	E-8	\$700	1,c
Aviation Ordnanceman	E-5/4/3	\$400	1,b
Aviation Support Equipment Technicians (AS)	E-5	\$600	1,a
Aviation Structural Mechanic (AM)	E-4/3	\$400	1,d
Aviation Structural Mechanic Equipment (AME)	E-5/4/3	\$400	1,d
Naval Aircrewman Mechanical (AWF)	E-5/4/3	\$400	1,d
Naval Aircrewman Mechanical (AWF) (NEC G25A)	E-7/6/5	\$700	2,c
Naval Aircrewman Operator (AWO)	E-5/4/3	\$400	1,d
Naval Aircrewman Tactical Helicopter (AWR)	E-4/3	\$400	1,d
Naval Aircrewman Helicopter (AWS)	E-4/3	\$400	1,d
Naval Aircrewman Avionics (AWV)	E-5/4/3	\$400	1,d
Aviation Maintenance Administrationman (AZ)	E-5/4/3	\$400	1,d
Boatswain's Mate (BM)	E-5/4/3	\$400	1,b
Builder (BU)	E-5	\$400	1,d
Construction Mechanic (CM)	E-5	\$400	1,b
Culinary Specialist (CS)	E-5/4/3	\$400	1,b
Culinary Specialist Subsurface (CSS)	E-7/6	\$750	1
CSS	E-5/4/3	\$400	1,b
Damage Controlman (DC)	E-5/4/3	\$400	1,b
Engineering Department Master Chief (EDMC) (NEC N32Z) (MM, EM, ET)	E-9/8	\$1,000	1
Machinist's Mate (MMN) (ELT) (SS) (NEC N160/N16S)	E-6/5	\$500	1
MMN (NEC N25S)	E-7	\$1,000	1
Machinist's Mate (MM)	E-5/4/3	\$400	1,b
Engineman (EN)	E-5/4/3	\$400	1,b
EN (NEC 747B)	E-9/8/7	\$1,000	1
Equipment Operator	E-5	\$400	1,b
Electrician's Mate (EM)	E-5/4/3	\$400	1,b
Electrician's Mate (EMN) (NEC N24S)	E-7	\$1,000	1,a
EMN (NEC N14S)	E-7	\$1,000	1,d
Electronics Technician (ET) ETR (SS) (COMM/1002)	E-8/7	\$600	1
ET	E-5/4/3	\$400	1,d
ETR (SS) (COMM/1002) (NEC T11A, T13A)	E-6	\$500	1
ETR	E-5/4/3	\$400	1,d
ETV (SS) (NAV/1001) T18A, T20A	E-8/7	\$900	1
ETV T18A, T20A	E-6	\$500	1
ETV T16A, T31A	E-8/7/6	\$500	1
Fire Controlman (FC)	E-4/3	\$400	1,b
FC (NEC V41A)	E-7	\$700	1
Fire Controlman Aegis (FCA)	E-4/3	\$400	1,b
FCA (NEC V08A/V56A)	E-9/8	\$750	1

Rating/Skill	Pay Grade	Monthly SDIP Rate	Note(s)
FCA (NEC V07A, V12A, V49A, V53A, V54A, V55A, V58A, V59A, V60A, V62A, V63A, V65A, V66A, V67A, V68A, V73A, V74A and V75A)	E-6	\$500	1
Fire Controlman Aegis (FCA) (NEC V04A, V06A, V69A, and V71A)	E-5	\$750	1
Fire Control Technician (FT) (RCN 0800)	E-8/7	\$500	1
FT	E-5/4/3	\$400	1,d
Gas Turbine Systems Technician (GS)	E-8	\$750	1
Gas Turbine Systems Technician Electrical (GSE)	E-6	\$600	1
GSE	E-4/3	\$400	1,b
Gas Turbine Systems Technician Mechanical (GSM)	E-5/4/3	\$400	1,b
Gunner's Mate (GM)	E-5/4/3	\$400	1,b
Hospitalman (HM) (IDC) (NEC L01A, L02A, L28A)	E-9/8/7/6/5	\$750	1,4
HM NEC L10A	E-9/8/7/6/5	\$500	1
HM NEC L11A	E-6/5/4/3	\$500	1
Hull Technician (HT) (NEC U53A)	E-5/4	\$500	1
HT	E-5/4/3	\$400	1,d
Interior Communications Electrician (IC)	E-6	\$600	1
IC	E-5/4/3	\$400	1,b
Information Systems Technician Submarines (ITS) (NEC H08A)	E-8/7/6	\$1,000	1
ITS NEC 742A	E-8/7/6	\$1,000	1
ITS	E-4/3	\$400	1,d
Logistic Specialist (LS) (Surface)	E-8	\$700	1
Logistics Specialist (LS)	E-5/4/3	\$400	1,d
Logistic Specialist (LS) (SS)	E-7/6	\$750	1
LSS	E-5/4/3	\$400	1,d
Machinist's Mate Auxiliary (MMA)	E-5/4/3	\$400	1,d
Navy Counselor (NC)	E-6	\$500	1
Operations Specialist (OS)	E-5/4/3	\$400	1,b
OS (NEC W16A)	E-6/5	\$500	1
OS NEC W17A	E-7/6	\$1,000	1,a
OS NEC W18A	E-6	\$750	1,a
OS NEC W18A	E-5	\$500	1,a
Personnel Specialist (PS)	E-7	\$700	1
PS	E-6	\$800	1
Quarter Master (QM)	E-5/4/3	\$400	1,b
QM	E-6	\$600	1
QM NEC W12A	E-7	\$750	1
Retail Services Specialist (RS)	E-5/4/3	\$400	1,b
Sonar Technician (STG)	E-5/4/3	\$400	1,b
STG (NEC V56B)	E-6/5	\$750	1
Sonar Technician Subsurface (STS)	E-4/3	\$400	1,d
Steelworker (SW)	E-5	\$400	1,d
Torpedoman's Mate	E-4/3	\$400	1,d

Recent additions/reductions to SDIP eligibility chart:

- a. 11 July 2019
- b. 7 October 2019
- c. 15 October 2019
- d. 25 November 2019

Notes:

1. For Sailors in active duty billets only.
2. For Sailors in FTS billets only.
3. Only for Sailors on type 2/4 sea duty for rotational purposes.
4. Operational Billets only for L02A and L28A.

APPENDIX C. ENLISTED SAILOR PREFERENCE SURVEY

This questionnaire is completely voluntary and should take no longer than *10 minutes* to complete.

Thank you for taking the time to participate in this survey. The information gathered in this survey will be utilized in a research project conducted at Naval Postgraduate School to determine actual Sailor preferences for one job location over another and what incentives can be used to increase voluntary assignment to certain locations. Information gathered will be used to recommend improvements to the placement and assignment process for enlisted Sailors in the aviation community. Thank you for participating.

Please answer the following questions as if you were currently in your detailing window. All responses will be kept anonymous. *Please answer as accurately as possible.*

Demographics. Please circle one answer.

1. What is your gender? Male Female
2. What is your current marital status?
Single Married Separated (legally or physically) Divorced Widowed
3. How many children do you have under the age of 18 years old?
0 1 2 3 4 5 6+
4. What is your current paygrade? E1-4 E5-6 E7-9
5. How many years of service do you currently have?
Less than 5 5-10 10-15 15-20 20-25 Greater than 25
6. What number tour are you currently serving? 1st 2nd 3rd 4th 5th+
7. What type duty are you currently serving? Sea Shore
8. Are you currently receiving a monetary incentive such as Assignment Incentive Pay (AIP), or Sea Duty Incentive Pay (SDIP) for your current assignment?
Yes No Not sure

a. If you answered yes, is the monetary compensation amount adequate for the location?

N/A Fair Lower than needed Higher than needed

b. What is the amount of AIP or SDIP you receive per month?

9. Would you be willing to receive a monetary or non-monetary incentive to voluntarily select a job in a location such as China Lake, CA; Lemoore, CA; or Fallon, NV for a future assignment?

Yes No Not sure

Location Features: These are the features that are related to the location of your next set of orders. **Please circle one number for each question.**

Please rate the following attributes to the degree of desirability to you when detailing for a new set of orders:

1 = worst

2 = bad

3 = neither bad or good

4 = good

5 = best

Please circle the appropriate level for your desirability.

1. A location that has seasonal climate changes (i.e., summer, winter, etc.)

1 2 3 4 5

2. A location that is within one day's drive to relatives (i.e., siblings, parents, children).

1 2 3 4 5

3. A location that offers a high variety of activities for singles and families (i.e., camping, parks, sports, nightlife, shopping, sporting events, restaurants).

1 2 3 4 5

4. A location that is close to the ocean.

1 2 3 4 5

5. A location that has a lot of civilian job opportunities so that you can transition from the Navy to civilian life.

1 2 3 4 5

6. A job that is stationed overseas
1 2 3 4 5

Outside the Job Features: These are the features that relate to your desires for you and/or your family outside of the job. **Please circle one number for each question.**

Please rate the following attributes to the degree of desirability to you when detailing for a new set of orders:

- 1 = worst**
2 = bad
3 = neither bad or good
4 = good
5 = best

Please circle the appropriate level for your desirability.

1. A job in a location where my civilian spouse can find a job.
1 2 3 4 5
2. A job in a location that I can co-locate with my military spouse.
1 2 3 4 5
3. A job in a location where I can find additional employment (i.e., a second job).
1 2 3 4 5
4. A job in a location that has a Naval Medical Treatment Facility
1 2 3 4 5
5. A job in a location that has access to civilian health care providers.
1 2 3 4 5
6. A job in a location that has choice child-care facilities
1 2 3 4 5
7. A job in a location that I can choose good schools for my children.
1 2 3 4 5
8. A job in a location that has good colleges or universities for myself or my family.
1 2 3 4 5

9. A job in a location that has numerous sports or social activities for myself or my family.
- 1 2 3 4 5

Incentive Features: These are the features that related to the location of your next set of orders. **Please circle one number for each question.**

Please rate the following attributes to the degree of desirability to you when detailing for a new set of orders:

- 1 = worst**
2 = bad
3 = neither bad or good
4 = good
5 = best

Please circle the appropriate level for your desirability.

1. Would you go to a job in a less desirable location that provides a compensating monetary bonus, such as AIP or SDIP?
- 1 2 3 4 5
2. What is the minimum fair amount of money (per month) to select a job in an area such as China Lake, CA; Fallon, NV; or Lemoore, CA? **(Select n/a if you would not choose any of these locations.)**
- n/a \$0 \$100 \$200 \$300 \$400 \$500 \$600 \$700 \$800 \$900
3. What is your desirability on selecting a job in an area such as China Lake, CA; Fallon, NV; or Lemoore, CA that provides compensating final multiple points towards your next advancement to Petty Officer or promotion to Chief, Senior Chief, or Master Chief.
- 1 2 3 4 5
4. How many advancement/promotion credits would require you to choose a job in a remote area such as China Lake, CA; Fallon, NV; or Lemoore, CA? **(Please answer accurately. Selected n/a if you would not choose this.)**
- n/a 0 points 1 point 2 points 3 points 4 points 5 points 6 points > 6 points
5. Would you consider a job in an area such as China Lake, CA; Fallon, NV; or Lemoore, CA which guarantees you to a “C” School of your choice.
- 1 2 3 4 5

6. Would you consider a job in an area such as China Lake, CA; Fallon, NV; or Lemoore, CA which guarantees you to select orders to a geographical area of your choice after your next assignment.

1 2 3 4 5

7. A job in an area such as China Lake, CA; Fallon, NV; or Lemoore, CA where you can bundle these set of orders with a follow-on tour to a geographical area of your choice.

1 2 3 4 5

8. Please list any other incentives you desire in order to consider a job in a remote area such as China Lake, CA; Fallon, NV; or Lemoore, CA:

9. How much of your “other” incentive would require you to choose a job in a remote area such as China Lake, CA; Fallon, NV; or Lemoore, CA?

Thank you for completing this survey!

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX D. ENLISTED DETAILER SURVEY

This questionnaire is completely voluntary and should take no longer than **10 minutes** to complete.

Thank you for taking the time to participate in this survey. The information gathered in this survey will be utilized in a research project conducted at Naval Postgraduate School to determine actual Sailor preferences for one job location over another and what incentives can be used to increase voluntary assignment to certain locations. Information gathered will be used to recommend improvements to the placement and assignment process for enlisted Sailors in the aviation community. Thank you for participating.

Please answer the following questions as if you were currently detailing Sailors. All responses will be kept anonymous. **Please answer as accurately as possible.**

Demographics. Please circle one answer.

1. What is your gender? Male Female
2. What is your current marital status?
Single Married Separated (legally or physically) Divorced Widowed
3. How many children do you have under the age of 18 years old?
0 1 2 3 4 5+
4. What is your current paygrade? E5-6 E7-9 Other
5. What number tour are you currently serving? 2nd 3rd 4th 5th 6th 7th+
6. How many years of service do you currently have?
Less than 5 5-10 10-15 15-20 20+
7. How many years have you been a detailer? (All previous tours included)
Less than 1 Between 1-3 More than 3
8. Which PERS-4 community are you currently assigned to?
(PERS-404) Enlisted Aviation Assignments

- (PERS-405) Surface Deck/Admin/Security/Supply Assignments
- (PERS-406) Surface Combat Systems
- (PERS-407) Hospital Corpsman Assignment
- (PERS-408) Information Warfare Community (CT/IS/IT)
- Other

9. On average, how many Sailors are you typically detailing each month?
 Less than 25 Between 26–75 Between 76 – 100

Detailing Methodology: These are the methods with which you detail Sailors and the factors that you consider when assigning members to billets. **Please list one answer for each question.**

Please circle the answer.

1. When detailing members, do you use the same methods to assign each member to a job? Yes No

Please select numbers 1 to 5, where 1 is lowest importance and 5 is the highest importance.

2. Please rate the importance of considering each of the following factors when detailing a Sailor.

- 1 = lowest importance**
- 2 = low importance**
- 3 = neither low or high importance**
- 4 = high importance**
- 5 = highest importance**

Sailor's Preference	1 2 3 4 5
PRD/EAOS	1 2 3 4 5
Marital status	1 2 3 4 5
Number of dependents	1 2 3 4 5
EFMP status	1 2 3 4 5
Spouse collocation	1 2 3 4 5
Single parent	1 2 3 4 5
Career enhancing	1 2 3 4 5
Command ranked highly in CMS/ID cycle	1 2 3 4 5

Hot fill billet	1 2 3 4 5
Remote geographical location	1 2 3 4 5
Specific qualifications	1 2 3 4 5
Performance factors (NJP, admin, PRT)	1 2 3 4 5

Detailing Challenges: These are the challenges that you face every detailing cycle.

Please circle yes or no for each question.

- Are you the decision maker in most cases where a Sailor gets assigned?
Yes No
- Have you been **informally** challenged by a member who disagreed with the orders they received?
Yes No No, but my recommendations normally get approved Other
- Have you been **formally** challenged by a member who disagreed with the orders they received?
Yes No
- What effect does the detailing process have on a member's decision to reenlist?
Critical Some None
- Would you benefit from a machine learning program that assisted in the detailing process by scoring a Sailor's preferences/qualifications/needs of the Navy and provides a recommended best match(s)?
Yes No Unsure
- What do you see as the biggest challenge with working with a Sailor in the detailing process? _____
- What do you see as the biggest challenge in the overall detailing process?

Assignment Incentives Features: These are the features that relate to the location of a job when detailing a Sailor into their next set of orders.

Please circle one number for each question.

Please rate the following attributes to the degree of desirability that you feel will be most effective in detailing a Sailor for a new set of orders:

- 1 = worst
- 2 = bad
- 3 = neither bad or good
- 4 = good
- 5 = best

Please circle the appropriate level of effectiveness

1. Providing a compensating monetary bonus, such as AIP or SDIP to incentivize a Sailor to a job in a less desirable location?
1 2 3 4 5

2. What is the minimum fair amount of money (per month) to provide an **apprentice** Sailor (E-3/4) in selecting a job (sea or shore) in an area such as China Lake, CA; Fallon, NV; or Lemoore, CA?
\$0 \$100 \$200 \$300 \$400 \$500 \$600 \$700 \$800 \$900
I do not think this will be effective

3. What is the minimum fair amount of money (per month) to provide a **journeyman** (E-5/6) Sailor in selecting a job (sea or shore) in an area such as China Lake, CA; Fallon, NV; or Lemoore, CA?
\$0 \$100 \$200 \$300 \$400 \$500 \$600 \$700 \$800 \$900
I do not think this will be effective

4. What is the minimum fair amount of money (per month) to provide a **master** (E-7/9) Sailor in selecting a job (sea or shore) in an area such as China Lake, CA; Fallon, NV; or Lemoore, CA?
\$0 \$100 \$200 \$300 \$400 \$500 \$600 \$700 \$800 \$900
I do not think this will be effective

5. Level of effectiveness in providing a Sailor a compensating final multiple point(s) towards advancement to Petty Officer or promotion to Chief, Senior Chief, or Master Chief to get a Sailors to voluntarily accept a job in a location such as China Lake, CA; Fallon, NV; or Lemoore, CA.
1 2 3 4 5

6. Level of effectiveness in providing a Sailor a guaranteed “C” School of their choice to get them to voluntarily accept a job in an area such as China Lake, CA; Fallon, NV; or Lemoore, CA.

1 2 3 4 5

7. Could bundling orders be an effective detailing tool to incentivize Sailors to remain on active duty? (Bundling orders provides continuity where Sailors know where they are going for two consecutive tours.)

1 2 3 4 5

8. Level of effectiveness in providing a Sailor a follow-on tour to a geographical area of their choice if they voluntarily accepted a job in an area such as China Lake, CA; Fallon, NV; or Lemoore, CA.

1 2 3 4 5

9. Please list any other incentives that you feel will be effective in getting Sailors to voluntarily accept orders to a remote area such as China Lake, CA; Fallon, NV; or Lemoore, CA:

Thank you for completing this survey!

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF REFERENCES

- Baruch, Y., & Holtom, B. C. (2008). Survey response rate levels and trends in organizational research. *Human Relations*, *61*(8), 1139–1160.
- Berthelot, J. M., Nizard, J., & Maugars, Y. (2019). The Negative Hawthorne Effect: Explaining pain overexpression. *Joint Bone Spine*, *86*(4), 445–449.
- Buelow, A. (2010). *Simulation of enlisted Sailor assignment process to explore the cost of non-monetary incentives* [Master's thesis, Naval Postgraduate School]. NPS Archive: Calhoun. <https://calhoun.nps.edu/handle/10945/5390>
- Candrea, P. J. (2017). *National defense budgeting and financial Management: Policy and practice*. Charlotte, NC: Information Age Publishing.
- Christensen, E., Golding, H., & Houck, L. (2002). *Hard-to-fill billets, individual assignment preferences, and continuation*. Alexandria, VA: Center for Naval Analyses.
- Commander Navy Installations Command (CNIC). (n.d.-a). Morale, Welfare and Recreation. Retrieved January 20, 2020, from <https://www.navymwr.org/>
- Commander Navy Installations Command (CNIC). (n.d.-b). Navy Child and Youth Programs, Our Mission. Retrieved January 19, 2020, from <https://www.navycyp.org/about-us/mission>
- Commander Navy Installations Command (CNIC). (n.d.-c). *Fleet and Family Support Center*. Retrieved January 20, 2020. https://www.cnic.navy.mil/ffr/family_readiness/fleet_and_family_support_program.html
- Department of Defense (DOD). (2016, May 19). *Leave and liberty policy and procedures*. <https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/132706p.pdf?ver=2019-07-01-093149-060>
- Department of Defense (DOD). (2017). *Profile of the military community*. <https://download.militaryonesource.mil/12038/MOS/Reports/2017-demographics-report.pdf>
- Department of the Navy (DoN). (2015, June 24) *Navy Total Force Manpower policies and procedures* (Chief of Naval Operations Instruction 1000.16L). <https://www.secnav.navy.mil/doni/Directives/01000%20Military%20Personnel%20Support/0101%20General%20Military%20Personnel%20Records/1000.16L%20With%20CH-2.pdf>

- Department of the Navy (DoN). (2019, April 1). *Selective reenlistment bonus program* (Chief of Naval Operations Instruction 1160.8B). <https://www.secnav.navy.mil/doni/Directives/01000%20Military%20Personnel%20Support/01100%20General%20Recruiting%20Records/1160.8B.pdf>
- Farrel, B. S. (2017). *Military compensation: Additional actions are needed to better manage special and incentive pay programs* (GAO-17-39). Government Accountability Office.
- Hansen, S., Pizzini, M., & Brien, S. (2018). *Cutting commissaries: Approaches to downsizing a government program*. Institute of Management Accountants.
- Harkins, G. (2019, September 25). *The Navy just got fighter jet readiness above 80%. The challenge will be keeping it there*. Military.com. <https://www.military.com/daily-news/2019/09/25/navy-just-got-fighter-jet-readiness-above-80-challenge-will-be-keeping-it-there.html>
- Hein, K. 1998. This is what we want. *Incentive*, 172(10), 40.
- Lazear, E. P., & Gibbs, M. (2015). *Personnel economics in practice*. John Wiley & Sons.
- Navy Personnel Command (NPC). (2006, December 7). Policy decision memorandum 003–06 Assignment Incentive Pay (AIP) Program. Retrieved from <https://www.public.navy.mil/bupers-npc/career/payandbenefits/Documents/TABFAIPPDMofDec06.pdf>
- Navy Personnel Command (NPC). (2015, June 18). *Meritorious Advancement Program (MAP)*. [https://www.public.navy.mil/bupers-npc/reference / messages/Documents2/NAV2015/NAV15141.txt](https://www.public.navy.mil/bupers-npc/reference/messages/Documents2/NAV2015/NAV15141.txt)
- Navy Personnel Command (NPC). (2017a, September 29). *Overseas Tour Extension Incentives Program (OTEIP)*. MILPERSMAN 1306–300. Retrieved from <https://www.public.navy.mil/bupers-npc/reference/milpersman/1000/1300Assignment/Documents/1306-300.pdf>
- Navy Personnel Command (NPC). (2017b, May 3). *SDIP Policy decision memorandum 001–17 - program update*. Retrieved from <https://www.public.navy.mil/bupers-npc/career/payandbenefits/Documents/SDIP%20PDM%20001%2017.pdf>
- Navy Personnel Command (NPC). (2018, Dec. 20). *Advancement policy update*. <https://www.public.navy.mil/bupers-npc/reference/messages/Documents/NAVADMINS/NAV2018/NAV18312.txt>.
- Navy Personnel Command (NPC). (2019a, October 15). *Assignment Incentive Pay (AIP) eligibility chart*. <https://www.public.navy.mil/bupers-npc/career/payandbenefits/Documents/AIP%20Eligibility%20Chart%2024%20Jan%202020.pdf>

- Navy Personnel Command (NPC). (2019b). *Announcement of active duty enlisted advancement to position program*. <https://www.public.navy.mil/bupers-npc/reference/messages/Documents/NAVADMINS/NAV2019/NAV19230.txt>.
- Navy Personnel Command (NPC). (2019c, November 25). *Sea Duty Incentive Pay (SDIP) eligibility chart*. <https://www.public.navy.mil/bupers-npc/career/payandbenefits/Pages/sdip.aspx>
- Navy Personnel Command (NPC). (2019d, December 4). *Enlisted detailing*. <https://www.public.navy.mil/bupers-npc/enlisted/detailing/Pages/default2.aspx>
- Navy Personnel Command (NPC). (2020a, February 18). *Exceptional Family Member (EFMP)*. <https://www.public.navy.mil/BUPERS-NPC/SUPPORT/EFM/Pages/default.aspx>
- Navy Personnel Command (NPC). (2020b, February 3). *Hometown Area Recruiting Program (HARP), Officer Hometown Area Recruiting Program (OHARP), Bluejacket Hometown Area Recruiting Program (BHARP) and Senior Minority Assistance to Recruiting Program (SMARP)*. <https://www.public.navy.mil/bupers-npc/reference/messages/Documents/NAVADMINS/NAV2020/NAV20027.txt>
- Office of Talent Optimization. (2018, December 31). *2018 Navy personal and professional choices survey summary*. [https://www.public.navy.mil/bupers-npc/support/21st_Century_Sailor/inclusion/Documents/2018 Personal and Professional Choices Survey Summary.pdf](https://www.public.navy.mil/bupers-npc/support/21st_Century_Sailor/inclusion/Documents/2018%20Personal%20and%20Professional%20Choices%20Survey%20Summary.pdf).
- Oliver, R. (1983). *Why is the Colonel Called “Kernal”? The origin of the ranks and rank insignia now used by the United States Armed Forces*. Office of History. <https://www.history.navy.mil/research/library/online-reading-room/title-list-alphabetically/w/naval-traditions-names-of-rank/introduction.html>
- Schehl, M., & Imbukwa, K. (2019, April 15). *CNAF turns to NPS to take on naval aviation readiness*. https://my.nps.edu/stories-archive/-/asset_publisher/A2LdkKO1w8D1/content/cnaf-turns-to-nps-to-take-on-naval-aviation-readiness?inheritRedirect=false
- Secretary of the Navy. (2019, January 16). *Department of the Navy (DON) policy on parenthood and pregnancy (SECNAV Instruction 100.10B)*. <https://www.secnav.navy.mil/doni/Directives/01000%20Military%20Personnel%20Support/01-01%20General%20Military%20Personnel%20Records/1000.10B.pdf>
- Sparks, S. D. (2011). Study reveals brain biology behind self-control. *Education Week*, 31(4), 1–20.
- Stitt, R. D. (2009). *Identifying the cost of non-monetary incentives (ICONIC)*. <https://doi.org/10.21236/ADA514253>

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