



Calhoun: The NPS Institutional Archive

Reports and Technical Reports

All Technical Reports Collection

2014-12

Comparison of Women's Policies in Six International Navies

Eitelberg, Mark J.

Monterey, California. Naval Postgraduate School

http://hdl.handle.net/10945/45545



Calhoun is a project of the Dudley Knox Library at NPS, furthering the precepts and goals of open government and government transparency. All information contained herein has been approved for release by the NPS Public Affairs Officer.

Dudley Knox Library / Naval Postgraduate School 411 Dyer Road / 1 University Circle Monterey, California USA 93943



NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

COMPARISON OF WOMEN'S POLICIES IN SIX INTERNATIONAL NAVIES

by

Mark J. Eitelberg, Kathryn J. Aten, Michael K. Smith

December 2014

Approved for public release; distribution is unlimited

Prepared for:
Chief of Naval Personnel
Office of Women's Policy (OPNAV N134W)



REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this 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 Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.

| 1. REPORT DATE (DD-MM-YYYY) | 2. REPORT TYPE | 3. DATES COVERED (From-To) |
|--|----------------------------------|-------------------------------|
| 16-12-2014 | Technical Report | January-December 2014 |
| 4. TITLE AND SUBTITLE | 5a. CONTRACT NUMBER | |
| Comparison of Women's Policies in Six International Navies | | 5b. GRANT NUMBER |
| | | 5c, PROGRAM ELEMENT NUMBER |
| 6. AUTHOR(S) | 5d. PROJECT NUMBER | |
| Mark J. Eitelberg, Kathryn J. Aten, I | 5e. TASK NUMBER | |
| | 5f. WORK UNIT NUMBER | |
| 7. PERFORMING ORGANIZATI | 8. PERFORMING | |
| Graduate School of Business and Pu | ORGANIZATION REPORT | |
| Naval Postgraduate School | NUMBER | |
| Monterey, CA 93943-5000 | NPS-GSBPP-15-001 | |
| 9. SPONSORING / MONITORIN | 10. SPONSOR/MONITOR'S ACRONYM(S) | |
| Office of Women's Policy (OPNAV | | |
| Chief of Naval Personnel | 11. SPONSOR/MONITOR'S | |
| 701 South Courthouse Road (Bldg. 1 | REPORT NUMBER(S) | |
| Arlington, VA 22204 | REFORT NUMBER(S) | |

12. DISTRIBUTION / AVAILABILITY STATEMENT

Approved for public release; distribution is unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

The present study compares policies, programs, and practices relating to women in six international navies. Navies from the following nations are included: the United States, Australia, Brazil, Canada, Sweden, and the United Kingdom. Information is drawn from answers by representatives of the six international navies to a detailed questionnaire fielded from May through September 2014. The questionnaire covers eight topic areas: General Information; Maternity/Paternity Issues; Deployments; Assignment; Marriage; Career Path & Development; Navy Policy Development; and Other Information. Additionally, project researchers organized and advised three Master's thesis projects at the Naval Postgraduate School; these are reported separately. Questionnaire responses are catalogued and compared in 23 tables. Results reveal a similar emphasis on family, the flexible workplace, and various initiatives to encourage the recruiting and retention of highly-qualified women. Selected "best practices" are also identified. A preliminary factors model is introduced for future use in identifying and comparing international policies and practices. Recommendations for further research include expanding the study to include more international navies, continuing to evaluate Life-Work Balance and the flexible workplace, refining the factors model for practical application, and comparing the policies of international navies on women's equity and safety.

15. SUBJECT TERMS

US Navy; Women's Policies; Gender Integration; Navy Recruiting; Navy Retention; International Defense Studies

| 16. SECURITY CLASSIFICATION OF: | | 17. LIMITATION | 18. NUMBER | 19a. NAME OF | |
|---------------------------------|--------------|----------------|-------------|--------------|----------------------------|
| a. REPORT | b. ABSTRACT | c. THIS PAGE | OF ABSTRACT | OF PAGES | RESPONSIBLE PERSON |
| | | | **** | 115 | Katherine Aten |
| Unclassified | Unclassified | Unclassified | UU | 115 | 19b. TELEPHONE |
| | | | | | NUMBER (include area code) |
| | | | | | 831-656-2644 |

Standard Form 298 (Rev. 8-98) Prescribed by ANSI Std. Z39.18 THIS PAGE INTENTIONALLY LEFT BLANK

NAVAL POSTGRADUATE SCHOOL Monterey, California 93943-5000

| Ronald A. Route | Douglas A. Hensler |
|-----------------|--------------------|
| President | Provost |

The report entitled "Comparison of Women's Policies in Six International Navies" was prepared for the Chief of Naval Personnel, Office of Women's Policy (N134W) and funded by the Chief of Naval Personnel, US Department of the Navy. The views expressed here are those of the authors and should not be construed as an official policy, position, or decision of the US Naval Postgraduate School, research sponsor, or US Government.

Further distribution of all or part of this report is authorized.

This report was prepared by:

Mark J. Eitelberg Kathryn J. Aten Michael K. Smith Professor Assistant Professor Captain, AM, RANR

Reviewed by: Released by:

William R. Gates, Dean

Graduate School of Business & Public Policy

Dean of Research

THIS PAGE INTENTIONALLY LEFT BLANK

ABSTRACT

The present study compares policies, programs, and practices relating to women in six international navies. Navies from the following nations are included: the United States, Australia, Brazil, Canada, Sweden, and the United Kingdom. Information is drawn from answers by representatives of the six international navies to a detailed questionnaire fielded from May through September 2014. The questionnaire covers eight topic areas: General Information; Maternity/Paternity Issues; Deployments; Assignment; Marriage; Career Path & Development; Navy Policy Development; and Other Information. Additionally, project researchers organized and advised three Master's thesis projects at the Naval Postgraduate School; these are reported separately. Questionnaire responses are catalogued and compared in 23 tables. Results reveal a similar emphasis on family, the flexible workplace, and various initiatives to encourage the recruiting and retention of highly-qualified women. Selected "best practices" are also identified. A preliminary factors model is introduced for future use in identifying and comparing international policies and practices. Recommendations for further research include expanding the study to include more international navies, continuing to evaluate Life-Work Balance and the flexible workplace, refining the factors model for practical application, and comparing the policies of international navies on women's equity and safety.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

| I. BACKGROUND | 1 |
|--|------|
| A. STUDY OBJECTIVES | 1 |
| B. METHODOLOGY | |
| C. BRIEF OVERVIEW OF THE REPORT | |
| II. COMPARATIVE RESULTS | |
| A. GENERAL INFORMATION | 0 |
| 1. Navy Population and Percentage of Women | |
| 2. Female Accessions | |
| 3. Occupational Areas with Highest Representation of Women | |
| 4. High-Ranking Women Leaders in the Navy | |
| 5. Percentage of Women with Children and Single Parents | |
| a. Number of Single Parents | . 21 |
| B. LIFE | |
| 1. Maternity/Paternity Benefits | . 24 |
| 2. Maternity Medical Issues | |
| 3. Marriage and Divorce | . 36 |
| 4. Mentoring | . 43 |
| 5. Flexibility | |
| C. WORK | |
| 1. Habitability | |
| 2. Deployments: Differences, Limitations, and Closed Occupations | |
| 3. Physical Standards | |
| 4. Career Path and Development | |
| 5. Equity/Safety | |
| III. CONCLUSIONS AND RECOMMENDATIONS | . 67 |
| A. NOTABLE SIMILARITIES AND DIFFERENCES BETWEEN NAVIES | . 67 |
| 1. Family First (or a Close Second) | . 68 |
| 2. Flexible Workplace | . 69 |
| 3. Mentoring | . 70 |
| 4. Notable Initiatives | |
| B. CONSIDERATIONS WHEN COMPARING NAVIES | |
| C. RECOMMENDATIONS FOR FURTHER RESEARCH | |
| 1. Expand the Study to Include More Navies | |
| 2. Focus on Life-Work Balance | |
| 3And the Flexible Workplace | |
| 4. Explore Selected Best Practices | |
| 5. Further Develop the Factors Model | |
| 6. Pursue Safety First | |
| APPENDIX A. INTERNATIONAL NAVIES QUESTIONNAIRE | . 85 |
| APPENDIX B. GENDER PARTICIPATION IN ROYAL AUSTRALIAN NAVY | . 93 |
| LIST OF REFERENCES | . 97 |

| INTITAL DISTRIBUTION LIST 103 | INITIAL DISTRIBUTION LIST | 103 |
|-------------------------------|---------------------------|-----|
|-------------------------------|---------------------------|-----|

LIST OF TABLES AND FIGURE

| Table 1. | Broad Categories of Policy Interest and Component Areas | 9 |
|-----------|---|----------|
| Table 2. | Navy Population and Percentage Women | 10 |
| Table 3. | Female Accessions (Recruits) | 14 |
| Table 4. | Occupational Areas with Highest Representation of Women | 18 |
| Table 5. | High-Ranking Women Leaders in the Navy | 20 |
| Table 6. | Percentage of Navy Women with Children and Single Parents | 23 |
| Table 7. | Number of Navy Women and Men Who are Single Parents | 24 |
| Table 8. | Maternity Leave & Related Compensation | 26 |
| Table 9. | Parental Leave & Compensation | |
| Table 10. | Adoption Leave & Compensation | 32 |
| Table 11. | Infertility Treatments | 34 |
| Table 12. | Surrogacy & Egg-Harvesting Policies | |
| Table 13. | Postpartum & Adoption Operational Deferment | 37 |
| Table 14. | Percentage of Navy Personnel in a Dual-Service Marriage by Ger | nder. 38 |
| Table 15. | Dual-Service Marriage | 41 |
| Table 16. | Divorce | 43 |
| Table 17. | Formal Mentoring for Women | |
| Table 18. | Other Relevant Policies, Practices, Developments | |
| Table 19. | Navy Shipboard Living Conditions (Habitability) | 51 |
| Table 20. | Deployments: Differences, Limitations, Closed Occupations | 52 |
| Table 21. | Physical Standards | 54 |
| Table 22. | Officer Career Milestones and Flexibility | |
| Table 23. | Occupational Time Commitment for Officers | 59 |
| Table 24. | "Golden Path" to Career Progression for Women Officers | 61 |
| Table 25. | Retention Incentives and Related Studies | 62 |
| | | |
| Figure 1. | Factors that Influence National Policies toward Women in the Mi | litary74 |

THIS PAGE INTENTIONALLY LEFT BLANK

I. BACKGROUND

The present study is based on the fundamental belief that the US Navy can improve its policies, programs, and practices as they relate to women by collecting and evaluating information on the navies of other nations. Clearly, this is not a new idea. Allied militaries have been exchanging information for decades in the modern era through a variety of public and private organizations, professional societies, educational institutions, international political and military alliances, and numerous other formal and informal networks. For instance, one very successful and longstanding venue for exchanging defense information is The Technical Cooperation Program (TTCP), among the US and four other nations, "to enhance national defense and reduce costs" by providing "a formal framework which scientists and technologists can use to share information amongst one another in a quick and easy fashion" (TTCP, 2007, p. 5). This research follows in the long tradition of seeking organizational improvement by studying the experiences and practices of other nations.

A. STUDY OBJECTIVES

The impetus for the present project originated with the Office of Women's Policy (N134W) in the Office of the Chief of Naval Operations (OPNAV). Navy leaders in OPNAV N134W, recognizing the value of comparing information across allied navies, had established an informal network with several other countries. After accumulating various materials from other nations, it became obvious that the US Navy might benefit from a more systematic approach for categorizing and analyzing information to identify certain "best practices." The following statement by OPNAV 134W (2013) captures the primary purpose of the study most effectively:

Understanding best practices and initiatives with regard to women's policies and those that most closely affect women in military and civilian careers aids decision-making in the US Navy. The Office of Women's Policy (OPNAV N134W) belongs to forums that compare policies and programs across corporate America and academia, but do not have any projects that capture the policies and programs in our sister navies across the globe. OPNAV N134W has met with representatives from Brazil, Australia, and the United Kingdom and has gained some understanding of their policies and programs, but would benefit from an organized study

that provides an in-depth comparison of like policies across all navies. For example, understanding maternity leave, career and workplace flexibility, combat integration, mentorship, etc. across sister navies would help inform decision makers. The historically low retention rate of women in the US Navy has become a growing concern, especially as we focus on the contributing factors for attrition. Recent attempts to curtail the loss of talent have seen slight successes, but, unfortunately, the number of women choosing to remain in their naval career beyond a minimum service requirement (MSR) is not encouraging. As the US Navy grapples with attracting women, increasing the propensity of women to serve, and recruiting and retaining women, lessons learned from other navies are helpful. (p. 3)

From the outset of the study, two areas were identified as most important in evaluating information on the navies of other nations. First, as observed in the above statement, is studying the approaches applied by other navies toward retaining high-performing women officers and enlisted personnel. Second is evaluating how other navies—through personnel policies, programs, or practices—create a working environment and lifestyle that attracts talented young women who might consider joining. With this in mind, researchers set out to answer three main questions:

- 1. What policies, programs, and practices are used by other navies to increase or sustain female retention?
- 2. What are the best policies, programs, and practices likely to attract women to join and remain in the US Navy?
- 3. What are the "lessons learned" from integrating women into ground combat, submarines, and other platforms?

B. METHODOLOGY

Working closely with OPNAV 134W, project researchers originally considered inviting ten countries to participate in the study. These countries were chosen based on the characteristics of their navies, factors known to influence policies relating to women in those navies (see Figure 1 in Section III), and previously-established relations between OPNAV 134W or project researchers and naval representatives from the nations themselves. Further, nations were selected so they would include a group with (a) different end-goals and perspectives driving the integration of women and (b) different degrees of gender integration. Finally, several nations were chosen because they had additional characteristics believed to be of interest in the comparative analysis.

Project researchers, with the assistance of OPNAV 134W, then developed a detailed questionnaire in Excel spreadsheet format that could be used to collect information from each of the participating countries. The questionnaire was designed in several iterations by researchers and OPNAV 134W, adding and deleting questions and topics to obtain effective coverage of relevant areas yet keep the questionnaire easily manageable for respondents. The final version of the Excel spreadsheet questionnaire was divided into eight general topics and various subtopics, with a total of 46 questions. Two types of responses to questions were requested: factual information and a brief description of "key changes, dates, and outcomes related to the policy, if known."

To pretest the questionnaire and illustrate the scope and detail of requested answers, representatives of OPNAV 134W provided responses to all questions for the US Navy, along with examples of supporting descriptions, directly on the questionnaire that would be sent to participating navies. The final version of the questionnaire is presented in Appendix A to this report.

Researchers eventually decided to limit the number of nations to seven, from the original ten, recognizing the exploratory nature of the present study. Since the initial call for information was basically untested in this format, it was felt that future efforts could expand upon the present study to include other nations, using the questionnaire as a model, if the process and instrument proved successful. In May 2014, OPNAV N134W invited the seven selected nations to participate in the study. Navy representatives from six of the seven nations responded to the call for information between June and September 2014. The seventh nation was dropped from the study after not responding during the allotted time. The six participating nations and their navies are as follows:

- United States (US Navy, host and organizer)
- Australia (Royal Australian Navy)
- Brazil (Brazilian Navy; Marinha do Brasil)
- Canada (Royal Canadian Navy)
- Sweden (Swedish Navy; Marinen)
- United Kingdom (Royal Navy)

In addition to the call for information from selected nations, researchers organized and advised three related Master's thesis projects at the Naval Postgraduate School (NPS). These include:

- Stakeholder Analysis of Integrating Women into Ground Combat Units, by Charles R. Drennan (2014)
- Dual-Service Couples: Officer Retention in the Navy and Marine Corps
 While Trying to Balance Career and Family (Working Title), by Nathalie
 C. Kocis and Kimberly J. Sonntag (forthcoming)
- Life-Work Balance and Retention of Female Surface Warfare Officers in the US Navy (Working Title), by Audra R. Vance (forthcoming)

The results of the thesis projects are reported separately by the respective authors.

C. BRIEF OVERVIEW OF THE REPORT

For general information, each participating nation was asked first in the questionnaire to provide information on the number of personnel in its navy, the percentage of women in the navy's officer and enlisted ranks, and historical dates marking key changes for women in the nation's navy. Most of this information is reported in Section II, although researchers decided to exclude historical dates, since the responses varied considerably from one nation to another and were deemed to be of limited value in comparing international navies' policies. Nevertheless, the discussion of results in Section II attempts to provide context for each topic area by incorporating other sources of background information, both historical and current, on the participating nations and their navies. Since the ultimate goal of the study is to possibly improve policies affecting women in the US Navy, the vast majority of contextual material focuses on issues of importance or interest in the United States.

Section II includes 23 tables drawn from answers to the questionnaire. Factual errors and inconsistencies may appear in these tables, since the information comes from individuals using various published and unpublished sources that may likewise be incorrect, incomplete, or out of date. Additionally, it was obvious from certain answers that respondents may have misunderstood the meaning of terms used in the question. Project researchers were unable to do much fact-checking, so most of the responses are essentially left as submitted, with some minor editing.

Section III of the report presents a few notable findings from an initial analysis of the results. This is followed by a discussion of factors that would help to explain why certain policies affecting women in the navy of one country might differ from those of another. The applied value here is in better understanding the reasons for policy

differences as well as in identifying successful initiatives that might be transferable from one nation's navy to the next. Section III then concludes with a brief discussion of recommendations for further research

THIS PAGE INTENTIONALLY LEFT BLANK

II. COMPARATIVE RESULTS

The call for data from international allies yielded a rich collection of information on many subjects of interest to the US Navy as well as to the nations that participated. As noted in Section I, representatives of the selected navies were asked to fill out an Excel spreadsheet that was divided into eight general topics and various subtopics, as shown below:

- General Information
 - o Size
 - o Percentage Women
 - o History
- Maternity/Paternity Issues
 - o Maternity Leave (yes/no)
 - o Maternity Leave (length/limitations)
 - o Maternity Leave (summary)
 - o Maternity Leave (compensation)
 - o Paternity Leave (yes/no)
 - o Paternity Leave (length/limitations)
 - o Paternity Leave (summary)
 - o Paternity Leave (compensation)
 - o Adoption Leave (yes/no)
 - o Adoption Leave (length/limitations)
 - o Adoption Leave (summary)
 - o Adoption Leave (compensation)
 - In-Vitro Fertilization (IVF)/Assisted Reproductive Technologies (ART) Policies
 - o Surrogacy/Egg Harvesting Policies
 - o Operational/Adoption Deferment
- Deployments
 - o Shipboard Living Conditions (habitability)
 - o Differences/Disparities
 - o Limitations for Women
 - o Closed Occupations
- Assignment
 - o Physical Standards (summary)
 - o Physical Standards (studies)
 - o Current Flag Officer/General Officer (FOGO) Women (officer)
 - o Current High-Ranking Women (enlisted)

- o Accession Rates of Women (officer)
- o Accession Rates of Women (enlisted)

Marriage

- o Dual-Military Couple Marriage (rates/percentage)
- o Dual-Military Couple Co-location Policies
- o Members with Children (percentage women)
- Members with Children (percentage single parents)
- o Divorce Rate (overall)
- o Divorce Rate (women)
- o Single Parents (family care plans)
- Career Path & Development
 - o Formal Mentoring Program (yes/no)
 - o Formal Mentoring Program (drivers)
 - o Occupational Commitment Requirements
 - o Propensity of Women in Certain Career Fields
 - o Retention Incentives (yes/no)
 - o Retention Incentives (studies)
 - o "Golden Path" Type Career Progression
 - o Ability to Choose Own Career Path
 - o Promotion Policies (key timelines or milestones)
- Navy Policy Development
 - o Other Policies, Practices, or Developments
- Other Information

Information submitted on the spreadsheets by the six participating navies, including the US Navy, was summarized and entered in 23 separate tables created to address areas of interest to researchers and policy makers. One of these tables, designed to summarize information on "History" (i.e., "When did women first fill regular roles in your Navy?") was deemed unmanageable; this information was not included in the report. As the information on the spreadsheets was being summarized for entry into tables, it became apparent that the main topic areas and corresponding subtopics could be organized into three broad categories to simplify analysis and reporting. Two of these broad categories are Life and Work, following a major theme of two Master's thesis projects conducted in connection with the present study. The third category is called General Information. The distribution of the various component areas by these three categories is displayed below in Table 1.

Table 1. **Broad Categories of Policy Interest and Component Areas**

| GENERAL INFORMATION | LIFE | WORK |
|---|---------------------------------|----------------------|
| Navy Population & Percentage of | Maternity/Paternity | Habitability |
| Women | Benefits | |
| Female Accessions (Recruits) | Maternity Medical Issues | Deployments |
| Female Representation in Occupations | Marriage & Divorce | Phys. Standards |
| High-Ranking Women Leaders in Navy | Mentoring | Career Path |
| Percentage of Navy Women with | Flexibility | Equity/Safety |
| Children | | |
| Number of Single Parents | | |

The comparison of information obtained from spreadsheets is presented by these three broader categories and component areas. The amount of data obtained from six international navies on such a wide array of general topics and subtopics makes it difficult to identify similarities and differences, trends, and other common threads without some organizing framework. The designation of component areas here is based on its primary focus for comparative analysis. Given the nature of the data, each separate category and component area includes elements of others. The broad category of General Information is examined first.

A. GENERAL INFORMATION

1. Navy Population and Percentage of Women

Table 2 shows population data reported by representatives of each nation's navy in June–September 2014. A representative of the US Navy reported a total of 382,461 active duty and full-time support personnel. This includes 68,394 officers and 317,866 enlisted personnel in the US Navy's total force. Women accounted for 17 percent of officers, 18 percent of enlisted personnel, and 18 percent of all US Navy personnel. Although numbers of women were not reported, these percentages indicate (roughly) the following: 11,627 female officers and 57,216 female enlisted personnel for a total of 68,843 female personnel. According to an annual Department of Defense (DoD) report, *Population Representation in the Military Services, Fiscal Year 2012*, women accounted for 17 percent (44,457) of active component enlisted members in the Navy at the end of Fiscal Year (FY) 2012 and 16.7 percent (8,611) of active duty officers (DoD, 2013a).

Table 2. Navy Population and Percentage Women

| | - | _ | |
|-------------------------------------|---------------------------|---|--|
| United States | | | |
| Number (Active & Full-time Support) | | Percentage Women | |
| Officer Total Force: 68,394 | | 17 | |
| Enlisted Total Force: | 317,866 | 18 | |
| Navy Total: | 382,461 | 18 | |
| | | | |
| <u>Australia</u> | | | |
| Number Nur | mber Women | Percentage Women | |
| Total: 13,706 Off | icers: 657 | 18.5 (Total) | |
| Sail | ors (Enlisted): 1,872 | | |
| D | | | |
| Brazil Number | | Percentage Women | |
| Officer Total Force: | 7 552 | 21 | |
| Enlisted Total Force: | | 5 | |
| | <i>'</i> | 7 | |
| Navy Total: 59,423 | | / | |
| Canada ^a | | | |
| Number Number | | Percentage Women | |
| Officer: N/A | | 12.0 | |
| Enlisted: N/A | | 7.2 | |
| Total Navy Affiliation: 12,028 | | 8.4 | |
| | | | |
| Sweden ^b | | | |
| Number | | Percentage Women | |
| Officer Total Force: | 1,488 | 4.4 | |
| Enlisted Total Force: | 513 | 17.9 | |
| Navy Total: | 2,001 | 9.2 | |
| | | | |
| United Kingdom ^c | | | |
| Number (Royal Navy & Royal Marines) | | Percentage Women | |
| Officer Total Force: | 6,804 | 10.0 | |
| Ratings (Enlisted): | 26,804 | 8.8 | |
| RN & RM Total: | RN & RM Total: 33,608 9.1 | | |
| | | | |
| COLIDOR, Information | | rangaantativas from referenced nation June Contember 20 | |

SOURCE: Information provided by military representatives from referenced nation, June–September, 2014.

^a In the Canadian Armed Forces, military members wearing an Air Force or Army uniform can be employed by the Navy and serve in naval operations. Those wearing a Navy uniform may likewise serve with another service.

^b Does not include 7 women who serve as civilians.

^c In "Feminized Branches" (where women are permitted to serve), percentages of women are as follows: Officers, 13.4 percent; Ratings (Enlisted), 13.9 percent; and Total, 13.7 percent.

That same year, women accounted for 23 percent of newly-commissioned, active-duty officers and 23 percent of active component enlisted recruits in the Navy (DoD, 2013a). At the end of the previous year, FY2011, women comprised the same proportion (23 percent) of new enlisted recruits and 24 percent of newly-commissioned, active-duty officers (DoD, 2012). At the start of the new century, at the end of FY 2001, the proportion of female recruits was about 18 percent; ten years before that, at the end of FY 1991, women accounted for 9.3 percent of new enlisted recruits (DoD, 2002a). The proportions of newly-commissioned Navy female officers in those years were 18.9 percent (FY 2001) and 16.4 percent (FY 1991) (DoD, 2002a).

Clearly, the proportions of women among Navy commissioned officers and enlisted personnel are increasing, and the rate of increase over the past 20 years or more is greater in the enlisted ranks than in the officer corps. Another way of looking at this trend is to observe that, in FY 1991, women comprised 9.7 percent of Navy active-duty enlisted personnel, nearly half the proportion of 20 years later; at the same time, the percentage of active-duty commissioned officers in the Navy of some 20 years ago (11.6 percent) is roughly two-thirds of what is reported for 2014 in Table 2 (DoD, 2002). It is also interesting to note that the proportions of women in the US Navy of 2014 are quite balanced between the enlisted force and the officer corps, a relationship that has continued for at least the past 20 years: for example, women comprised about 12 percent of Navy enlisted personnel in 1991 and 12 percent of enlisted personnel the same year (DoD, 2002a).

Based on the information submitted, as shown in Table 2, the US Navy is considerably larger than the navies of the five other nations. Size is known to influence organizational culture and flexibility, as discussed below. This difference should thus be taken into account when drawing from the experiences of other nations. Indeed, the largest Navy among the other nations is found in Brazil, where the total Navy force (including 15,000 marines) is just below 60,000; this is less than one-sixth the size of the US Navy. The Royal Navy and Royal Marines of the United Kingdom have a combined total of 33,608 personnel, less than one-tenth the size of the US Navy alone. The Royal Australian Navy and Royal Canadian Navy have a total of 13,706 and 12,028 personnel, respectively. The Swedish Navy is, by far, the smallest with 2,001 personnel. Thus, the

total of US Navy officers alone is greater than the entire naval force of any nation shown in Table 2; and the US Navy's total force is over three times larger than the combined total of naval personnel in Australia, Brazil, Canada, Sweden, and United Kingdom.

It is interesting to observe differences in the officer-to-enlisted ratios in Table 2. Two nations did not report numbers of officers and enlisted personnel. Among the four that reported numbers, note the following differences in officers as a percentage of the total force: Brazil, 12.7 percent; United States, 17.9 percent; United Kingdom, 20.2 percent; and Sweden, 74.3 percent (where the number of officers is almost three times higher than that of enlisted personnel).

Among the six navies examined, Brazil has the highest proportion of female officers, at 21 percent. This is followed by Australia (20 percent), the United States (17 percent), Canada (12 percent), United Kingdom (10 percent), and Sweden (4.4 percent). On the enlisted side, the United States, Australia, and Sweden have the highest proportions (18 percent), followed by the United Kingdom (8.8 percent), Canada (7.2 percent), and Brazil (5 percent).

The data in Table 2 are important to bear in mind throughout the comparative analysis for at least one very important reason. That is, differences in the sheer magnitude of the US Navy's organization and those of its selected allies can affect differences between the US and other nations in how one compares policies, programs, and practices. A Navy that has 513 enlisted personnel (Sweden) is truly a small community of sailors, where everyone likely knows everyone else as well as their families, and the organization can attend to an individual's personal issues much more closely. Similarly, the United Kingdom has approximately 680 female officers in its Navy, which is about the same as the number (657) in the Royal Australian Navy; this compares with nearly 12,000 female officers in the US Navy.

2. Female Accessions

One way to gauge and project participation by women in the navies of selected nations is to examine gains and losses, that is, the numbers and proportions of women joining and leaving the organization over time. Table 3 compares percentages of women joining the officer and enlisted ranks of each nation's navy. The term "accession" refers to a new recruit (enlisted), typically without prior service, or a newly-commissioned

officer. The figures in Table 3 for the US Navy are supplemented by data from *Population Representation in the Military Services*, *FY 2012* (DoD, 2013a).

As seen in Table 3, women accounted for 11.9 percent of newly-commissioned officers in the US Navy in 1974, one year after the start of America's All-Volunteer Force. This increased steadily to 13.4 percent in 1984, to 16.3 percent in 1994, to 18.9 percent in 2004, and to 23 percent most recently. The US Navy reports that the average proportion of newly-commissioned female officers is 19.6 percent over the past decade. The same trend occurred for the enlisted force, as the proportion of female accessions increased from 7.5 percent in 1974 to 23.2 percent in 2012, with a continuing goal of 23 percent through FY 2015.

The Royal Australian Navy hopes to achieve female representation of 25 percent in both officer and enlisted ranks by 2023. The Australian recruiting goals vary by female representation within occupational categories. For example, categories that have less than 15 percent women have a goal of 25 percent. The recruiting goal increases to 30 percent for categories where the proportion of women is 15–30 percent. At the same time, in categories where the proportion of women exceeds 30 percent, the recruiting goal is expected to maintain the existing rate. These different recruiting objectives are intended to create a more balanced distribution of women across job categories while increasing the overall proportion of women in the Royal Australian Navy.

Table 3. **Female Accessions (Recruits)**

United States^a

***Officer: 1974, 11.9 percent; 1984, 13.4 percent; 1994, 16.3 percent; 2004, 18.9 percent; 2012, 23.0 percent; average percentage over most recent decade, 19.6 percent

***Enlisted: 1974, 7.5 percent; 1984, 10 percent; 1994, 16.8 percent; 2004; 16.7 percent; 2012, 23.2 percent (goal of 23 percent for FY14 and FY15)

<u>Australia</u>l

***Officer: target of 25 percent by 2023; recruiting goals vary by category (see note below)

***Enlisted: target of 25 percent by 2023; recruiting goals vary by category (see note below)

Brazil

***No information provided

Canada

***No information provided

Sweden

***Officer accessions have increased by 112 percent since January 2009: in 2009, a total of 42 female officers; as of August 2014, a total of 89 female officers

***Enlisted accessions have increased by 21 percent since January 2012: in 2012, 77 female recruits; as of August 2014, 93 female recruits

United Kingdom

***Officers: average percentage over most recent decade, 19 percent; this rate has shifted annually between 16 percent and 22 percent, but has remained relatively steady on average

***Enlisted: average percentage over most recent decade, 17 percent; this has decreased from 20 percent in 2003 to 13 percent in 2013

SOURCE: Information provided by military representatives from referenced nation, June–September, 2014. ^a Includes data from Department of Defense (2013a), *Population Representation in the Military Services*, *Fiscal Year 2012*. Washington, DC: Office of the Under Secretary of Defense, Personnel and Readiness. ^b Recruiting goals have been set within recruiting targets by category. That is, for categories with less than

Recruiting goals have been set within recruiting targets by category. That is, for categories with less than 15 percent women, the goal is 25 percent; categories with 15–30 percent have a goal of 30 percent; and categories with greater than 30 percent women are expected to maintain their existing rates.

^c Information provided on promotion rates: "In the Brazilian Navy, accession [promotion] rates are the same for women and men because, once someone begins a career in the Navy, he/she is promoted according to time periods specified in our Career Planning."

In the Royal Navy of the United Kingdom, women have represented, on average, 19 percent of newly-commissioned officers over the past decade. The annual rates have shifted between 16 percent and 19 percent, but have otherwise remained relatively steady. The average proportion of new enlisted recruits who are women over the past ten years is slightly below the rate for officers at 17 percent. The proportion was as high as 20 percent in 2003 and declined significantly to 13 percent in 2013.

Sweden, as observed above, has the smallest navy of the six shown in Table 3. Even so, Sweden reports an increased number of women joining the ranks annually, rising from 42 female officers in 2009 to 89 women as of August 2014. The percentage increase is lower among enlisted personnel, growing from 77 female recruits in 2012 to 93 as of August 2014.

3. Occupational Areas with Highest Representation of Women

As Eitelberg (1988) writes in *Manpower for Military Occupations*, a classic study of the US military's job-placement standards and their historical impact on participation by different demographic groups:

One measure of progress for women in the military has been the extent to which their participation has increased in jobs traditionally held by men—that is, how far and how fast they have moved out of service-oriented positions and into fields considered technical or mechanical. As it so happens, using this measure of progress or equal opportunity, women have indeed "come a long way" in a relatively short time. (p. 165)

Eitelberg (1988) continues:

In 1972, fewer than one out of ten enlisted women were assigned to a nontraditional job. At the time, the military's doors were just being opened a little wider to women—as the proportion of sexually-integrated job specialties increased from 35 percent to over 80 percent. By 1976, women were allowed to serve in all but "combat" positions, and the proportion of women assigned to scientific, technical, mechanical, or blue-collar specialties had grown to over 40 percent. (p. 165)

"Even though women are integrated in greater numbers and in a wider variety of general job categories," finds Eitelberg (1988), "they are still greatly overrepresented or greatly underrepresented in many subcategories or component fields; and they are missing altogether from other areas such as Infantry and Shipboard Inertial Navigation"

(p. 165). In the enlisted force at the time of the study, women filled over 30 percent of the military's 67,000 positions in the Administration/General field; women accounted for over one-third of the military's Dental Care personnel and over 20 percent of all personnel assigned to dozens of traditionally-female occupations within the DoD occupational categories of "Medical and Dental Specialists" and "Administrative Specialists and Clerks" (Eitelberg, 1988, p. 166).

In a brief discussion of increasing popular support for removing combat restrictions on women, which can limit job opportunities and avenues for career advancement, Eitelberg (1988) quotes from a 1971 book titled *Careers for Women in Uniform* to provide historical perspective. He offers the passage without editorial comment, as it shows clearly on its own how the role of women in the US military expanded so markedly throughout the 1970s and early 1980s:

Today, approximately 41,000 uniformed ladies of the armed forces are stationed throughout the world....They hold jobs of every conceivable nature. A woman might be a secretary in an office in Washington, an air traffic controller in an airport tower in California, an aerospace nurse for astronauts at Cape Kennedy or working in public relations in New York City....They do not just replace men; they compete equally with them for jobs and promotions. Nowhere in American society do women have more equal job opportunities than in the military services (quoted in Eitelberg, 1988, p. 168).

When this general description of women in the US military was published, over 90 percent were serving in traditionally-female roles (medical/dental and administrative positions) and most of the rest (more than 4 percent) were serving in communications and intelligence (Binkin & Eitelberg, 1986). Obviously, *these* are not "jobs of every conceivable nature," nor were women competing equally with men for jobs and promotion, although that was certainly a formally-stated organizational objective.

By contrast, at the end of FY 2012, focusing on the US Navy alone, women accounted for the following proportions of Navy enlisted personnel in nontraditionally-female occupations: Seamanship Specialties (general military and warfare roles), 16 percent; Electronics, 13 percent; Electrical, 14 percent; Craftsmen, 14 percent; and Other Technical, 6 percent (DoD, 2013a). Further, the highest concentration of Navy enlisted women, at 23 percent, was in the DoD-defined occupational category of "Electrical."

This is the same occupational category with the highest concentration of male enlisted personnel, 29 percent (DoD, 2013a).

At the end of FY 2012, women represented 38 percent of Navy officers assigned to Health Care and 21 percent assigned to Administration, two traditionally-female areas. Women also accounted for 16 percent of Navy officers assigned to Intelligence and 19 percent of the Navy's Scientists and Professionals. Yet, women also comprised over 8 percent of the Navy's Tactical Officers and 6 percent of officers assigned to Engineering and Maintenance, two very nontraditional fields (DoD, 2013a).

A useful gauge for evaluating and projecting women officers' representation in traditionally-male fields is female enrollment in STEM, a widely-used acronym for the academic disciplines of science, technology, engineering, and mathematics. The National Science Foundation (NSF) tabulates and reports statistics on women's participation in STEM at various educational levels as well as data on employed female scientists and engineers by occupation and highest academic degree (National Science Foundation, 2013). For example, most recent NSF data show the following: as of 2011, women represented about 19 percent of undergraduates enrolled in engineering programs; in 2012, women represented half of all graduate students enrolled in science curricula, 25 percent of graduate students in computer sciences, and over 33 percent of those studying mathematics and statistics or the physical sciences (National Science Foundation, 2013). In 2010, college-educated women with any degree accounted for 27 percent of persons employed in science and engineering occupations (National Science Foundation, 2013).

Information on the US Navy is otherwise limited in Table 4. As seen here, Australia submitted the most detailed information as an addendum, titled "Gender Participation in Royal Australian Navy." (This document appears in Appendix B of the report.) Not surprisingly for Australia, as well as the other nations in Table 3, including the US Navy, female officers tend to be concentrated in Health Care and Administration (or Management). Enlisted women are similarly concentrated in certain traditionally-female occupations, although movement toward nontraditional fields is also quite apparent, particularly in the United States, Australia, Canada and, to a lesser extent (from information submitted), the United Kingdom.

Table 4. Occupational Areas with Highest Representation of Women

United States^a

***Officer: Nurse Corps, where women account for 33%; roughly 46% of female officers in the Navy are assigned to Health Care occupations

***Enlisted: Legalman, where women account for 66%; most (23%) female enlisted personnel are assigned to jobs in the "Electrical" area, followed by "Administrators" (13%) and "Communications" (13%)

Australia^b

***Officer (includes Trained and Training Force, Midshipman to Commander): Management Executive (similar to Human Resources), Legal, Dental, and Nursing, where women account for over 50%; followed by Maritime Logistics Officer and Training Systems, between 30–50% of officers with Primary Qualification; women are most *under* represented (less than 10%) in Weapons Electronics, Weapons Electronics Armament, Mechanical Engineer Submarines, Aviation Warfare Officer, and Pilots ***Sailor (enlisted, includes Trained and Training Force, Recruit to Chief Petty Officer): Maritime Logistics Steward (hospitality), Medical, Maritime Logistics-Personnel, and Dental, where women account for over 50%; followed by Maritime Logistics-Supply Chain, Electronics Warfare, Naval Police Coxswain, Imagery Specialist, Communication Information Specialist, and Cryptologic Linguist, between 30–50% of sailors in occupational category; women are most *under* represented in Aircrewman, Marine Technician, Electronics Technician, Marine Technician Submariner, Aviation Technician Avionics, Aviation Technician Airframes, and Acoustic Warfare Analyst. No female Clearance Divers (similar to US Navy SEALs), although open to qualified women.

Brazil

***Officer: Medical Corps (25.0%)

***Enlisted: Nursing (21.4%)

Canada

***Canadian Armed Forces (Overall): Nursing (76%) and Court Reporter (100%)

***Occupations Managed by the Navy: Steward (15%) and Marine System Engineer (13%)

Sweden

***Officer: Management (23%)

***Enlisted: Communication & Control (30%)

United Kingdom

***Officer: Alexandra Royal Navy Nursing Service (67%); Dental Services (43%); and Logistics (25%)

***Ratings (Enlisted): Medical (46%) and Logistics (26%)

SOURCE: Information provided by military representatives from referenced nation, June–September, 2014

^a Includes data from Department of Defense (2013a). *Population Representation in the Military Services, FY2012*. Washington, DC: Office of the Under Secretary of Defense, Personnel and Readiness.

^b See report on "Gender Participation in Royal Australian Navy" in Appendix B for further details as of April 2014.

^c It should be noted that the Canadian Armed Forces and Navy operate under a "one service" concept. Thus, non-Navy personnel can serve within the Navy and onboard ships. Similarly, Navy personnel can work for the Army, Air Force, or in joint operations.

4. High-Ranking Women Leaders in the Navy

Another measure of progress for women in any organization is the number and proportion serving in the highest levels of management. Unlike civilian organizations, the US military services almost exclusively "grow their own"; that is, they hire from within, using a promotion and career advancement process defined by law and regulation. From today's newly-enlisted recruits and newly-commissioned officers come the senior leaders of tomorrow, but "tomorrow" would be 15, 20, or perhaps more years into the future. In military vernacular, this is called the leadership "pipeline." Thus, as stated in DoD's 2002 study, *Career Progression of Minority and Women Officers*:

Aside from direct appointments—for persons who are professionally qualified in medicine or other health fields, in law, and as chaplains—commissioned officers begin their military career at the lowest grade. No one is "hired" to be a major or colonel or admiral. Senior positions in the organization's rank structure are filled through a system that advances personnel strictly from within, based on time in service, ability, and performance criteria. Thus, the military's majors, colonels, and admirals must be a subset of the human resources that enter the system at its origin. (DoD, 2002b, p. 2)

With this understanding, along with the fact that women's expanded role in the military is a relatively recent phenomenon, one would expect to see increasing numbers of women in high-ranking positions, but still finding women somewhat underrepresented in the highest echelons of the organization. This tends to be the case in the US Navy as well as in the navies of the other five nations shown in Table 5.

As seen in Table 5, the US Navy reports having 31 female flag officers in 2014, which is noticeably higher than the number (22) reported by DoD (2013a) at the end of FY 2012. The same DoD report shows the number of male flag officers as 215. Consequently, in 2012, 0.5 percent of male Navy officers were at the flag level, compared with 0.26 percent for female Navy officers.

At the same time, Australia reports having one female admiral and one commodore; Canada has two women flag/general officers; and no women are currently serving as flag officers in the navies of Sweden or the United Kingdom. As a general observation of the data reported in Table 5, one could say that women are definitely serving in high-ranking positions, both as officers and as enlisted personnel; however,

women continue to be underrepresented as a proportion of those serving and, apparently, they have not yet broken completely through the so-termed "glass ceiling."

Table 5. **High-Ranking Women Leaders in the Navy**

```
United States
***Flag Officers (07–09): 31
                                          ***Force Master Chief: 2 (11%)
***Fleet Master Chief: 2 (50%)
                                          ***Command Master Chief (Major Command at sea): 4
***Command Master Chief: 48 (10%)
                                          ***Master Chief (normative-level assignment tour): 12
***Command Senior Chief (squadrons, ships, ashore): 3 (6%)
Australia
***Rear Admiral (08): 1 (Medical)
                                          ***Warrant Officer (Tier A): 12
***Commodore (07): 1 (Medical)
                                          ***Warrant Officer (Tier B): 2
***Captain (06): 18
                                          ***Chief Petty Officer: 88
Brazil
***Commanding positions in the Navy: 2
                                          ***Enlisted: Not available
Canada
***General Officer/Flag Officer with Sea DEU: 2 (Background of both is Logistics), representing 9.1%
***Chief Petty Officer 1st Class (RegF with Sea DEU: 3 (1 each from Naval Ops, MP, and Logistics)),
representing 2.2%
Sweden
***Captain: 1
                                          ***Commander: 1
                                                                   ***Lieutenant Commander: 17
***Lieutenant: 16
                                          ***Sub Lieutenant: 17
                                                                   ***Acting Sub Lieutenant: 24
***Head of Section (OF4): 1
                                          ***Flotilla Leader (OF5): 1
United Kingdom
***Captain (OF5): 10 (2.6%)
                                          ***Commander (OF4): (4.3%)
***Warrant Officer First Class: 30 (5%)
                                          ***Chief Petty Officer: 170 (5%)
***Command Warrant Officer: 1 (20%)
                                          ***Executive Warrant Officer at sea: 2
```

SOURCE: Information provided by military representatives from referenced nation, June–September, 2014. ^a Women in Warrant Officer First Class and Chief Petty Officer positions are predominantly medical and then Logistics. Women have one of only five positions as Command Warrant Officer, a senior Warrant Officer (WO1) assignment.

5. Percentage of Women with Children and Single Parents

The final area of interest under General Information is the percentage of women with children in each international navy. This area is designated as General Information rather than a Life topic since it does not relate directly to any particular navy policy, program, or practice examined in the present analysis; it is mainly a demographic descriptor of the women currently serving in each nation's navy, although the information itself is obviously important when examining policies that affect parenting.

Table 5 shows the percentage of women who have a child within each nation's navy. As seen here, three nations did not provide data on the topic. The United Kingdom reported that 6 percent of women in the Royal Navy are single and have parental responsibility.

Among the nations that did report on this topic, two numbers seem most interesting. First is the high proportion of women in the Brazilian Navy's officer corps who are parents: 62 percent. This is more than double the percentage of female parents in the US Navy's officer ranks. Nevertheless, in numerical terms, the Brazilian data translate to approximately 983 female officers who have responsibility for a child; for the US Navy, the number of female officers with a child would be about 3,488. Second, the US Navy response is questionable; as shown, the response indicates that 70 percent of female officers with a child are single mothers.

On the enlisted side, the number of women with a child in the US Navy would be roughly 21,170 (based on 37 percent). In the Brazilian Navy, the number would be 545. Further, in terms of percentages as well as numbers, the US Navy has many more women who are single parents, as reported and shown in Table 6.

a. Number of Single Parents

Single parenthood is treated here as General Information, although it obviously relates to issues and policies under the Life designation. Single parents, with rare exceptions, are generally not permitted to join the US military. Procedures differ by service, but the primary intent is consistent across components to ensure that new members do not maintain legal custody of a child as a single parent, which would limit their geographical transferability or eligibility for rapid deployment. A useful reference on the broader topic of deployments and parenthood is *Report on the Impact of*

Deployment of Members of the Armed Forces on Their Dependent Children, a DoD report to Congress that examines recent experiences and their effects on the well-being of military children (DoD, 2010).

As seen in Table 7, limited information is available on members who are single parents. Even for the US Navy, numbers are reported as estimates, likely due to the limitations of existing databases. One source of data for the US Navy is the 2010 Navy Pregnancy and Parenthood Survey, administered by Navy Personnel Research, Studies, and Technology (NPRST) in the fall of 2010 (NPRST, 2011, p. 1). Since the original category mentions the Family Care Plan (documentation to ensure that a child receives proper care if a member is deployed, mobilized, or otherwise unavailable), it is assumed that numbers reported here could also be extracted from this source. In any case, the numbers for the US Navy in Tables 6 and 7 seem to conflict. As noted above, the information reported in Table 6 on single mothers does not correspond with what is reported in Table 7, suggesting that the question posed in the survey may have been misinterpreted.

It is also interesting to note here that the men who are single parents reported as being in the US Navy (14,000) outnumber their female counterparts by well over double. The 2010 Pregnancy and Parenthood Survey and other sources indicate that women are more likely than men to have custody of their children. Interestingly, "over half of enlisted women were unmarried when their child was born"; at the same time, about half of women officers in the Navy are single mothers as a result of divorce (NPRST, 2011, p. 2). It should be noted that the Defense Manpower Data Center (DMDC) maintains a "Family File" that is updated monthly. DoD records on parenthood merge personnel data from the Master and Loss Files with information from the Defense Enrollment Eligibility Reporting System (DEERS). This file could be used to update or validate the numbers reported here for the US Navy.

 Table 6.
 Percentage of Navy Women with Children and Single Parents

| United States | | | | |
|--|--|------------------------------------|--|--|
| Percentage of | Women with Children | Percentage of Women Single Parents | | |
| Officer: | 30 | Officer: 21 | | |
| Enlisted: | 37 | Enlisted: 16 | | |
| | | | | |
| <u>Australia</u> | | | | |
| Percentage of | Women with Children | Percentage of Women Single Parents | | |
| | | | | |
| Officer: | 5 | Officer: 1 | | |
| Enlisted: | 3 | Enlisted: 1 | | |
| | | | | |
| <u>Brazil</u> | | | | |
| Percentage of | Women with Children | Percentage of Women Single Parents | | |
| | | 0.00 | | |
| | 62 | Officer: 11 | | |
| Enlisted: | 21 | Enlisted: 6 | | |
| <u></u> | | | | |
| <u>Canada</u> | estantad umdan tha Driveau Act | | | |
| Illiorniation pi | rotected under the Privacy Act | | | |
| Sweden | | | | |
| No data availa | hla | | | |
| No data avanable | | | | |
| United Kingdom | | | | |
| | United Kingdom No data available | | | |
| | Overall, 6 percent of women are single and have parental responsibility for a child. | | | |
| overail, o percent of women are single and have parental responsionity for a clinic. | | | | |
| | | | | |

SOURCE: Information provided by military representatives from referenced nation, June–September, 2014.

Table 7. **Number of Navy Women and Men Who are Single Parents**

United States

***Women: 6,000 single parents ***Men: 14,000 single parents

<u>Australia</u>

***Minimal data available

Brazil

***Women: 293 single parents
***Men: 5,252 single parents

Canada

***Information protected under the Privacy Act

Sweden

***No information in personnel database

United Kingdom^a

***Women: 181 who are unmarried and have parental responsibility for a child

***Men: 137 who are unmarried and have parental responsibility for a child

SOURCE: Information provided by military representatives from referenced nation, June–September, 2014. ^a It is not known whether parents are single. Thus, the numbers are for unmarried with parental responsibility.

B. LIFE

The Life category focuses on a navy's policies, programs and practices that can have a direct impact on how women members might seek to balance their personal life with their military career. As discussed in two Master's thesis projects conducted in connection with the present study, the US Navy is very interested in supporting its members, women and men alike, in achieving Life-Work Balance (Kocis & Sonntag, forthcoming; Vance, forthcoming). Members who are able to achieve such balance tend to feel happier and more fulfilled, and would not feel pressured to choose between their personal or family needs and their career aspirations. In the end, Life-Work balance helps to improve personnel retention, since most people will strive to "put family first"; and, if forced to choose between the demands of Life and Work, most will seek to find a job that affords greater balance or flexibility or perhaps weighs more favorably on Life's side.

1. Maternity/Paternity Benefits

Almost two thirds of the US Navy's female enlisted recruits (without prior service) tend to be between the ages of 18 and 20 years. In FY 2012, 30 percent of these female recruits were 18 years old, likely right out of high school (DoD, 2013a). The US

Navy's male recruits tend to be slightly older, with 25 percent at the age of 18 years when enlisted in FY 2012 (DoD, 2013a). For the US Navy's enlisted force as a whole, over three-quarters of women were younger than 30 years old; for all enlisted men, two thirds were under 30 years of age. Clearly, this is a relatively young force, and a large one at that, when compared with any other organization in the nation or the world. Additionally, this means that the vast majority of the US Navy's enlisted women and men are at the prime age of starting or raising a family.

At the same time, nearly 70 percent of newly-commissioned officers in the US Navy during FY 2012 were 21–26 years old; over half were 21–23 years old. For the Navy's officer corps as a whole, half were under the age of 35 years, again at the prime age of starting or supporting a family; nearly 86 percent of officers were younger than 45 years old, many of them with family responsibilities in addition to those of the Navy (DoD, 2013a). DoD-wide, the mean age of active-component commissioned officers was 34.5 years, about the same as it has been for at least the past 25 years (DoD, 2013a).

The relatively young age of the US Navy's members means that the organization must deal with the competing family demands of officer and enlisted personnel, including issues related to maternity and paternity, traditional or otherwise. The Navy's 2010 Pregnancy and Parenthood Survey indicates that "about 9 percent of enlisted women and 6 percent of officer women are pregnant at any point-in-time...and about 13 percent of Navy women were pregnant in the previous fiscal year" (NPRST, 2011, p. 2). It is interesting to note here that, according to the same survey, "about half of enlisted women indicate their sea/shore rotation is good for family planning"; further, although a large majority of respondents were pleased with the Navy's operational deferment policy for women in post-delivery (12 months), about one-third felt that an operational deferment for fathers would "motivate them to remain in the Navy" (NPRST, 2011, p. 2).

In the US Navy, as shown in Table 8, "maternity leave" is included under the wider category of Convalescent Leave (CONVL). Up to six weeks (or 42 days) is available; the US Navy calls it a "minimum," meaning that leave can be extended, if necessary, by a Health Care Provider. As seen in Table 8, mothers tend to take another 10 days of regular leave, which brings the average period of leave following birth to

between 7 and 8 weeks. Convalescent Leave for maternity is non-chargeable (it does not count as regular leave) and is paid.

The US Navy's maternity leave policy is based on a DoD Instruction. Table 8 shows that the US military's leave policy is *far less generous* than the policies of the five other navies examined. For example, Australia allows 52 weeks of absence, including 14 weeks of paid maternity leave, which is *double* the number of days available to US Navy women through standard CONVL. Indeed, in Australia, a woman can increase her time off by another two weeks, for a total of 66, by taking advantage of parental leave. Additionally, a new mother can receive paid travel (at Commonwealth expense) and 18 additional weeks of leave (at the national minimum wage) through the Australian government's Paid Parental Leave program.

 Table 8.
 Maternity Leave & Related Compensation

United States^a

- ***Known as Convalescent Leave (CONLV), not "Maternity Leave"
- ***CONLV is a minimum of 42 days unless extended by Health Care Provider; mothers usually (on average) take another 10 days of regular leave
- ***Time off available for related education classes such as: Prenatal Services, Budget for Baby Program, New Parent Support: Lactation/Breastfeeding, etc.
- ***OPNAVINST 6000.1D assigns a collateral duty position, "Command Advisor on Pregnancy and Parenthood" (CAPP), who serves as a resource for new parents at each command ***Maternity leave is non-chargeable, paid leave

<u>Aus</u>tralia^b

- ***Maternity leave provided: 52 weeks absence which includes 14 weeks of paid maternity leave associated with pregnancy where member was 20 weeks pregnant before the expected date of birth; remainder of 52-weeks absence can be made up of other types of leave, including Leave Without Pay or Long Service Leave (for example); parental leave can be added to take a total of 66 weeks
- ***Maternity leave is an entitlement; approval is an administrative formality
- ***Maternity leave is paid up to 14 weeks
- ***Member without dependents entitled to return trip, at Commonwealth expense, to location of extended family; Australian Government Paid Parental Leave scheme, in addition to ADF scheme, provides 18 additional weeks of leave paid at National Minimum Wage (\$622/week in 2014), as long as certain conditions are met.

Brazil

***Maternity leave is provided: a minimum of 120 days with option to take another 60 days of regular leave; parental services are available; maternity leave is non-chargeable, paid leave

Canada

- ***Maternity leave provided: "as with other working Canadians, members can take up to 17 weeks of maternity leave and up to 35 weeks of parental leave"
- ***Time off available for related events or activities at the commanding officer's discretion
- ***Members are paid through the Government of Canada's Employment Insurance Program; the Government tops up the Employment Insurance benefits to 93% of one's salary for the full time on maternity leave

Sweden

- ***Maternity leave is provided: 12 months; this is the same for all parents in Sweden
- ***Time off to visit antenatal (prenatal) clinic and parental education; this is the same for all parents in Sweden
- ***Maternity leave is paid leave

United Kingdom^c

- ***Maternity leave is provided: 52 weeks maximum, divided as 26 weeks of Ordinary Maternity Leave and 26 weeks of Additional Maternity Leave; usually followed by annual leave accrued during OML/AML ***Reasonable time off is available, with pay, to attend prenatal care appointments, including relaxation classes, parent-craft classes, and medical examinations; additionally, attendance at prenatal and postnatal coaching sessions/classes are counted as duty and paid; on return to work, facilities are provided for breastfeeding or expressing milk, as well as time during the work day
- ***Women have the right to leave service upon pregnancy, if they wish; the UK Armed Forces Maternity Report (released publicly each year) shows that nearly 97% of women in 2011 opted to return to work; this compares with a low of 80% in 2004.
- ***In 2013, a number of maternity initiatives were tested in Portsmouth, UK and are currently being implemented at other base ports and air stations. These include: Maternity Coaching sessions (aimed at maternity returners and to improve retention); introduction of maternity divisional officer positions (to improve support and contact during a member's pregnancy and maternity); maternity physical training (to help maintain a base level of fitness during pregnancy and maternity, while easing a member's return to work and preparedness for fitness testing); the Maternity Buddies scheme (to provide pregnant members with a "role model" of a woman who has returned to work successfully and someone who can further support and advise the member)
- ***The Naval Nanny Service was introduced in 2013 to provide emergency/short-notice childcare through a registered nanny agency, enabling both parents to fulfill duty commitments; this reassures maternity returners that childcare is available on short notice, if needed
- ***Maternity leave is paid through the Armed Forces Occupational Maternity scheme: OML, 26 weeks of full pay; AML, 13 weeks of UK government statutory pay (roughly £136/week), followed by 13 weeks of unpaid leave; this requires a 12-month Return of Service by the member

SOURCE: Information provided by military representatives from referenced nation, June-September, 2014.

In Brazil, a new mother is permitted to take at least 120 days (over 17 weeks) of non-chargeable, paid leave, and she can take another 60 days of regular leave, if available. This is the same number of weeks (17) permitted for new mothers in Canada's Navy, as it is with "other working Canadians" across the country. Canada's military members are paid through Canada's Employment Insurance Program. As noted in the table, the Canadian government then pays the difference up to 93 percent of the person's salary for full-time compensation. Similarly, Sweden's program for its military members is based on a national scheme that addresses the needs of all parents in the country. In Sweden, a new mother can take a full year of leave, which is apparently paid.

Maternity leave benefits are perhaps most interesting, and most generous, in the UK. Here, a new mother can take up to 52 weeks of leave, divided equally between

^a Use of regular leave based on results from 2012 Pregnancy and Parenthood Survey.

^b Pay and Conditions Manual 5.4.2 Division 2 provides entitlements; also see 5.4.13 and 5.4.18.

^c JSP 760 Chapters 20 & 22 (Tri-Service Regulations for Leave and Other Types of Absences).

Ordinary Maternity Leave and Additional Maternity Leave. Under Ordinary leave, the new mother receives full pay for 26 weeks (*over four times* longer than paid leave in the US Navy); the next 13 weeks of leave, under Additional, is paid through the UK government's statutory pay program at a fixed rate; and the final 13 weeks of leave is unpaid. Many other benefits are also offered in the UK, including the right to leave service upon pregnancy and later return. Of the women who left service after becoming pregnant, the UK reports that between 80 percent (in 2004) and 97 percent (in 2011) returned to work. Another benefit, introduced in 2013, is the Naval Nanny Service, which provides emergency/short-notice childcare services through a registered nanny agency. Also in 2013, the UK began testing a number of other initiatives, which are summarized in Table 8.

All in all, from the information provided, the US Navy has the most frugal benefits package for women who are pregnant or new mothers. Nations that provide the most generous benefits have programs that are supplemented by or otherwise tied to nationwide occupational insurance or health services. It is interesting to note that the UK's paid leave program requires a 12-month return of service by the member. It is not clear if this is somehow connected to the high percentage of women who are reported to have returned to service after opting out. In any case, maternity leave and other benefits are important factors on the Life side of Life-Work Balance, and areas that the US Navy should continue to explore through the experiences of other nations.

Another related area of interest is paternity leave. One may ask, why should a US Navy study of its female members be interested in paternity leave? The short answer is that parents are partners; treatment of one by an employer affects the other. Further, parents will decide jointly how their children should be raised and if the family unit would be better off with a stay-at-home parent or with two-earner income and childcare. Consequently, the US Navy's policy toward a new father can influence the family's quality of life and related decisions about continued service in a demanding occupation. From the US Navy's perspective, paternity policies are especially important when both parents are serving in the military.

In the US military, "Paternity Leave" is now called "Parental Leave," to be more inclusive and cover same-sex married couples. A married service member on active duty

whose spouse gives birth is permitted to take 10 days of non-chargeable, paid leave within one year of the child's birth. The spouse of a woman who gives birth is also offered time off, job permitting, to take various educational classes.

Parental leave is typically far less generous than maternity leave in all countries, although the US Navy's plan is again less generous than several of the other countries examined here. An obvious exception is Brazil, where a spouse is entitled to 5 days of non-chargeable, paid leave. On the other hand, four nations offer much longer periods of leave that are unpaid. For example, Australia provides 14 days of paid leave (compared with 10 in the US Navy), along with the possibility of a lot more, as long as paid and unpaid leave do not exceed 66 weeks (well over a year). In addition, members can double the 14 days of paid leave by taking half-pay for each of 28 days of leave.

Table 9. **Parental Leave & Compensation**

United States^a

- ***Paternity leave is now called "Parental Leave" (to include same-sex married couples)
- ***Parental leave: 10 days of non-chargeable, paid leave; a married service member on active duty whose spouse gives birth shall receive 10 days to be used within one year of the child's birth
- ***Time off is available for educational classes such as Prenatal Services, Budget for Baby Program, and New Parent Support

Australia

- ***Parental leave has two components, paid and unpaid
- ***Parental leave of two weeks (14 days) may be granted to a member who meets the following conditions: be on continuous, full-time service; be a parent of, or assume full responsibility for, a newborn or adopted dependent child; and not be entitled to paid Maternity Leave
- ***Unpaid parental leave may be granted, but total paid and unpaid cannot exceed 66 weeks
- ***Parental leave generally follows birth or adoption of a newborn child; other leave types can be used to cover attendance at events or activities deemed appropriate by supervisors/commanding officers
- ***RAN's parental leave covers fathers of children as well as parents of adopted children
- ***Parental leave is paid up to 2 weeks or 14 calendar days; leave may be taken at half-pay, extending absence to 28 days; a member may also take unpaid leave up to a total of 66 weeks of absence with combined paid and unpaid leave

Brazil

- ***Paternity leave: 5 days of non-chargeable, paid leave
- ***Events or activities associated with pregnancy/birth: not applicable

Canada

- ***Paternity leave: up to 35 weeks can be taken by mother, father, or both (not to exceed 35 weeks of leave combined for both parents)
- ***Time off to participate in events or activities is at the discretion of the commanding officer
- ***Paternity leave is paid with benefits through the Government of Canada's Employment Insurance Program; Government tops up the Employment Insurance benefits to 93% of one's salary for the full time on paternity leave

Sweden

- ***Parental leave: 10 days of chargeable leave per child from The Swedish Social Insurance Agency, to be used within 60 days after the child's homecoming
- ***Length of Parental Leave is 360 days; 2 months must be taken by the father; parents can divide leave ***Events or activities associated with pregnancy/birth: not applicable

United Kingdom^b

- ***Two types of Paternity Leave are offered: *Ordinary Paternity Leave* or OPL (paternal parent is entitled to 2 weeks of leave, with full pay, to be taken within the first 56 days of a child's birth; can be deferred by the commanding officer for operational reasons, but must be given as soon as possible thereafter); and *Additional Paternity Leave* or APL (paternal parent may take up to 26 weeks within the first year of the child's life, provided that the mother/adopter has returned to work before the expiration of statutory maternity leave; can be deferred for operational reasons and personnel can be recalled from APL, but the balance must be restored when operationally possible
- ***OPL is paid at full pay rate
- ***Time off to participate in associated events or activities is not yet in policy, but likely to be paid to attend two pre-natal appointments (based on policy change effective in 2015)

SOURCE: Information provided by military representatives from referenced nation, June-September, 2014.

- ^a Paternity leave established 14 October 2008 through National Defense Authorization Act. Renamed
- "Parental Leave" in 2014.
- ^b JSP 760 Chapters 20, 22 (Tri-Service Regulations for Leave and Other Types of Absences).

Canada's program is also a little different in how it allows up to 35 total weeks of leave, which can be divided between parents. This is likely a national entitlement (or would relate to dual-service military couples). As with maternity leave, benefits come from the Canadian Employment Insurance Program, with the government supplementing up to 93 percent of a person's full-time salary while on paternity leave.

In the UK, paternity leave is divided similarly to maternity leave between Ordinary and Additional. Ordinary leave is paid in full for up to 2 weeks of leave. Under Additional, a paternal parent is allowed to increase leave, under specific conditions, without special compensation.

A third type of leave for new parents is Adoption Leave. In the US Navy, a member can be authorized by a commanding officer to take 21 days of non-chargeable, paid leave for a qualifying adoption. Certain reimbursable adoption expenses are also available. As noted in Table 9, a special provision is set for dual-service couples, allowing only one member to receive adoption leave. The reason for this is not stated, leaving open the question of why a dual-service couple would not be allowed to simply share the 21 days. This would provide improved flexibility and better support the needs of a dual-service couple.

Table 10. Adoption Leave & Compensation

United States

***Adoption Leave: up to 21 days of non-chargeable, paid leave can be authorized by a commanding officer for any service member adopting a child in a qualifying adoption; only one member of a dual-service couple is eligible to receive adoption leave; and adoption leave is contingent on the service member's unit mission, specific operational circumstances, and the member's billet

***Reimbursable adoption expenses are available

***Time off available to attend the same types of events or activities as for maternal and parental leave

Australia^a

- ***Adoption Leave is covered under Parental Leave; Parental Leave provisions apply (up to 2 weeks or 14 calendar days of paid leave)
- ***As for Parental Leave, total parental absence is up to 66 weeks; for dual-serving members, the combined total absence is limited to 66 weeks
- ***As for Parental Leave, other forms of leave or short leave from duty are available to facilitate attendance at appointments, events, or other related activities

Brazil

****Adoption Leave: 90 days of non-chargeable, paid leave is available when child is up to 1 year and 30 days old; 30 days of non-chargeable, paid leave when child is up to 12 years old

***For male members adopting, leave has the same number of days as Paternity Leave

***Events or activities associated with adoption: not applicable

Canada

***Adoption Leave: 52 weeks of paid leave combined for both parents

***Time off to participate in events or activities is at the discretion of the commanding officer

Sweden

***Adoption Leave: 10 days of chargeable, paid leave combined for both parents

***Time off available to attend related events or activities: 21 hours of education, non-chargeable

United Kingdom^b

***Adoption Leave: primary adopter is entitled to Adoption Leave, similar to Maternity entitlement; for adoptive couples, co-adopter entitled to Ordinary Paternity Leave (OPL) and Additional Paternity Leave (APL); deferral of, or recall from, APL is possible due to operational reasons in a major emergency ***Reasonable paid time off for primary adopter to attend pre-adoption appointments; co-adopter entitled to paid leave to attend two pre-adoption appointments (these new policies likely to be implemented in 2015)

***Primary adopter paid leave same as Maternity pay; co-adopter paid leave same as Paternity pay

SOURCE: Information provided by military representatives from referenced nation, June–September, 2014. ^a Pay and Conditions Manual 5.5.3-7.

^b JSP 760 Chapters 21-22; Couples who enter into surrogacy agreements will receive same as for Adoption (2015)

Canada offers a way for parents of adopted children to share leave; again, this is likely based on a wider provision nationally, similar to Parental Leave, since the reported information does not specifically address dual-service couples. Similarly, in Australia, Adoption Leave is basically the same as Parental Leave. Australia does stipulate that dual-service couples can split their total absence up to a total of 66 weeks. Shared leave is likewise available in Sweden, although the total time is a lot less, at 10 days of

chargeable (as opposed to non-chargeable) paid leave. In contrast to Sweden, Brazil offers a very generous 90 days of non-chargeable paid leave when the adopted child is about 13 months old or younger, and 30 days when an adopted child is up to 12 years old. When a male member in Brazil adopts, leave is treated the same as Paternity Leave.

The UK's program differentiates between a primary and secondary adopter. It is not altogether clear how the two are different, although it appears that it might relate to gender. That is, a primary adopter is paid the same as under Maternity Leave; a secondary adopter is paid the same as under Paternity Leave. Further, as with Paternity and Maternity Leave, the UK system divides leave into two categories, Ordinary and Additional.

2. Maternity Medical Issues

Another subcategory of Maternity/Paternity relates to the support female members of a navy receive with respect to reproductive issues or postpartum recovery. Three tables are presented that combine the fairly limited information provided by countries on these topics. These are grouped here as representing the medical side of maternity/paternity.

On the topic of infertility treatments, as seen in Table 11, three nations provided no information. For the US Navy, the only support mentioned involves referral for evaluation and treatment, usually performed at a local Military Treatment Facility. In Canada, eligible persons are entitled to an evaluation. The information provided by Canada indicates that a number of specific procedures (enumerated in Table 11) are available and funded by the Canadian Forces Health Services. According to information supplied by Canada, "experimental or controversial procedures not covered by provincial health plans" are typically funded by the Canadian Forces Health Services. Additionally, coverage is not provided when a person's infertility is a result of voluntary sterilization.

No mention of funding appears in the UK's information; support is offered in the form of "assistance" to access treatment by the National Health Service. At the same time, the Royal Navy will attempt to support the effort by providing geographical or occupational stability for a total of 6 months while the member is undergoing evaluation or treatment. Further, members who experience an injury that affects their fertility are

given up to three full cycles of in-vitro fertilization treatment, apparently at no cost through the National Health Service.

Table 11. **Infertility Treatments**

United States

***Members may request referral for infertility evaluation and treatment, usually performed at local Military Treatment Facility (MTF); not all services for infertility are available at every MTF

Australia

No information provided

Brazil

Not applicable

Canada

***Eligible persons entitled to investigation of infertility

***The following procedures are available: artificial insemination (for diagnosed condition only); In-Vitro Fertilization or IVF (with funding only under these conditions: [a] infertility due to bilateral Fallopian tube obstruction, [b] a maximum of three cycles, and [c] serving members only); medication as an adjunct to IVF when bilateral tube obstruction criteria are met; and intra-cytoplasmic sperm injection for male factor infertility (for a maximum of three cycles and only for serving members)

***Experimental or controversial procedures not covered by provincial health care plans are not usually funded by Canadian Forces Health Services

***Investigation and procedures for infertility are not funded when the infertility is due to voluntary sterilization

Sweden

No Navy policies

United Kingdom^a

***Assistance given to members and spouses, civil partners, and partners to access treatment provided by National Health Service

***A minimum period of employment/geographical stability is offered for related procedures (6 months total); stability for further attempts is at the discretion of assigning authority

***Members who experience an injury that affects fertility are entitled to up to three full cycles of In-Vitro Fertilization treatment.

SOURCE: Information provided by military representatives from referenced nation, June–September, 2014. ^a References: 2009DIN01-104 Career Management of Serving Personnel who are accessing (or wife, civil partner, or partner is accessing) Assisted Conception Services provided by the NHS; 2013Din01-158 Arrangements for NHS infertility treatment where Armed Forces Compensation Scheme award applies.

Table 12, Surrogacy & Egg-Harvesting Policies, is almost blank, with four nations providing no information and only the UK addressing several related issues. The UK's Royal Navy does not prevent women members from acting as surrogate mothers, although it is illegal to accept pay. In the US Navy, surrogacy would not be known unless revealed, and any arrangements would be considered an external business relationship. As in the UK, if the member is a surrogate in the US Navy, she is still pregnant and

would be entitled to maternity benefits. Essentially, this is new territory for the militaries of all nations. If cases remain limited, as they likely are now, it is doubtful that any policies would be introduced in the near future.

Table 12. Surrogacy & Egg-Harvesting Policies

United States

***Not authorized; potential loss of time from official duties and risk of complications

***Considered external business relationship

Australia

***No information provided

<u>Brazil</u>

***No information provided

Canada

***No information provided

Sweden

***No information provided

United Kingdom

- ***Member would not be prevented from acting as surrogate mother (although it is illegal under UK laws to be paid for surrogacy)
- ***Member who gives birth as a surrogate would be entitled to maternity benefits
- ***Member would not be prevented from donating egg (although illegal for donor to be paid)
- ***Medical categories and deployability are managed during surrogacy and egg donation

SOURCE: Information provided by military representatives from referenced nation, June–September, 2014.

Postpartum is defined as the period following the birth of a child. The postpartum period is commonly defined as the first 6 weeks after childbirth. The term is often used to describe a medical illness, postpartum depression, which may affect 15 percent or more women who give birth. A more mild form of depression may affect as many as 70 percent of new mothers (American Psychiatric Association, 2014). The depression typically occurs within the first 3 months, but has been diagnosed in women after many months or as much as a year following childbirth. This is perhaps one reason—along with the need for new mothers to generally adjust and care for an infant—why the US Navy

defers new mothers from all transfers to operational assignments for 12 months following delivery.

In the same way, as shown in Table 13, women in the US Navy who place a child up for adoption are entitled to 12 months of postpartum deferment. These members, although they do not have the responsibility for child care, can experience even more severe symptoms of depression, compounded by the sense of loss. The deferment period also gives new mothers an opportunity to restore their physical fitness to operational standards. Additionally, members who adopt a child are authorized 4 months of operational deferment.

3. Marriage and Divorce

When the draft ended in 1973, about 39 percent of active component enlisted members in the US Navy were married. This increased to 46 percent by 1984, peaked at 56 percent in 1996, declined to 44 percent in 2001, then rose again and settled at around 50 percent for the past decade (DoD, 2013a). Currently, the proportion of married personnel in the Navy's enlisted force is just slightly higher than the proportion of civilians aged 18–44 years old who are married. This proportion is higher than in the Marine Corps and lower than in the Army and Air Force (DoD, 2013a). It is also interesting to note in DoD's annual report, 2012 Demographics Report: Profile of the Military Community, that as enlisted pay grade increases, so does the proportion of Navy members who are married: E1–E4, 30 percent married; E5–E6, 65 percent married; and E7–E9, 84 percent married (DoD, 2013b, p. 44).

DoD reports that, at the end of FY 2012, just fewer than half (48 percent) of female officers in the Navy's officer corps (active component) were married. This compares with roughly 72 percent of their male counterparts—24 percentage points *higher* than the proportion of female married officers (DoD, 2013b). For further comparison, the proportion of married civilian women who are of similar age and education—female college graduates between the ages of 21 and 49 years—is 10 percentage points *higher* (at 58 percent) than the proportion of female officers in the Navy who are married (DoD, 2013b). Thus, although almost half of female officers in the Navy are married, this proportion is considerably below that of their male counterparts as well as that of a demographically similar population of civilian women. The obvious

question is, why? And, for Navy decision makers who are interested in attracting the most highly-qualified new female officers, and then retaining them through a full career, one must ask if the organization's demands or policies discourage female members from pursuing their life choices or family goals.

Table 13. Postpartum & Adoption Operational Deferment

United States^a

- ***Postpartum service women are deferred from all transfers to operational assignments for 12 months following delivery
- ***Service women who place a child up for adoption are entitled to 12 months of postpartum deferment to support the mental health of the mother, prevent/treat postpartum depression, and allow time to return to physical fitness standards
- ***Members who adopt a child are authorized 4 months of operational deferment
- ***For dual-service couples who adopt a child, only one service member can be granted an operational deferment

Australia

***No information provided

Brazil

***No information provided

Canada

***No information provided

Sweden

***No information provided

United Kingdom

***No information provided

SOURCE: Information provided by military representatives from referenced nation, June–September, 2014. ^a Newly-drafted OPNAVINST 6000.1D extends the length of the operational deferment for adoption from 4 months to 6 months.

According to DoD's 2012 Demographics Report, 56 percent of the US Navy's male active-duty personnel (officers and enlisted combined) were married as of September 2012 (DoD, 2013b). This compares with 37 percent of Navy women who were married (DoD, 2013b). The same report shows that 2,761 officers (5.2 percent of all Navy officers) were in a dual-service marriage; the comparable proportion of Navy enlisted personnel was slightly lower at 4.7 percent (12,371 personnel). Dual-service marriages (also called dual-military marriages) as a proportion of married personnel were as follows: 7.6 percent for Navy officers and 9.6 percent for enlisted personnel.

Substantial differences are found when the data on dual-service marriages are examined by gender, as seen in Table 14.

Table 14. Percentage of Navy Personnel in a Dual-Service Marriage by Gender

| GENDER | NAVY ACTIVE DUTY | MARRIED NAVY ACTIVE DUTY |
|--------|------------------|--------------------------|
| Men | 2.9 | 5.1 |
| Women | 14.4 | 39.4 |
| Total | 4.4 | 9.1 |

Source: Derived from DoD, 2013b, pp. 47–48.

Table 14 shows that almost 40 percent of married women in the US Navy have a spouse who is also serving in the military. Among married men, the proportion in a dual-service marriage is 34 percentage points lower. Trend data from 2005 through 2012 indicate that the proportion of Navy enlisted personnel who are in a dual-service marriage has declined gradually by about 1 percentage point, while the proportion of officers in a dual-service marriage over the same period has remained relatively more stable (DoD, 2013b, p. 51).

Dual-service marriages are hardly new to the US Navy, as Leeds writes in her 1988 NPS Master's thesis, *Dual Navy Couples: Their Assignment and Retention* (Leeds, 1988). "Navy members have been marrying each other for nearly as long as women have served in the Navy," observes Leeds (1988, p. 1). For example, in 1977 it was estimated that the Navy had 3,000 dual-Navy couples; by 1987, that figure had increased to over 10,000 along with a substantial increase in the number of Navy women (Leeds, 1988, p. 1). The increased number of dual-Navy couples was especially apparent among officers, as Leeds (1988) reports:

While the ratio of enlisted dual Navy couples per enlisted woman rose by 4.5 percentage points from 1980 through 1987, the ratio for officers jumped by 8.5 percentage points....This increasing rate of growth, along with increased accessions of women, resulted in a two-to-three-fold increase in the numbers of dual Navy couples in the officer ranks over the 7-year period. (p. 2)

Dual-Navy marriages have created challenges for the organization's personnel policy makers for decades. These challenges come in the way of balancing a couple's desire for colocation with the career progression of each spouse, employing each spouse in a way that serves the best interests of the Navy, and encouraging the career longevity

of those who are talented and capable performers. Leeds (1988) quotes from a 1978 book on *Military Families: Adaptation to Change*:

Military planners in all service branches are becoming concerned about the effects of dual-career couples...upon the operational mission. The Navy, although generally supportive of dual-career couples, is finding it more difficult to assign couples jointly due to the requirement for periodic sea duty for males, the uniqueness of many Navy specialties, and the limitations placed on women in combat-type jobs. (p. 5)

Added to this is a "new twist," as Suter (1979) writes in an NPS Master's thesis published nearly 40 years ago: "The military organization now has to consider the needs of a non-traditional family and, if conflicts are not resolved satisfactorily, the organization may lose one and possibly two productive members" (p. 17).

It is easy to see how dual-service marriages can be difficult for a couple as well as for their family. The military and the family are both described as "greedy" institutions for the demands they place on members. When these two greedy institutions pull on a person, it tends to be in opposite directions. Balancing the demands of family and career can be difficult regardless of the career; balancing a *military* career with one's family rises to an entirely new level, and when both spouses are in the same situation, the stress of fulfilling family responsibilities is heightened. A marriage can also become even more strained as both spouses are struggling, and sometimes competing, to balance their personal and family needs with those of their partner and two military careers.

Trend data indicate that divorce rates in the Navy have increased over the past decade or more. (Note that these are annual rates, from one year to the next, not indicative of all military members who have experienced a divorce over time.) Among Navy enlisted personnel, 2.6 percent divorced in 2000, rising to 3.2 percent in 2005, 3.8 percent in 2010, 4.0 percent in 2011, and then declining slightly to 3.9 percent in 2012 (DoD, 2013b, p. 52). Navy officers have had lower divorce rates over this period, and these rates have varied from 1.1 percent in 2000, to a high of 2.1 percent in 2005, to 1.8 percent in 2012 (DoD, 2013b, p. 52).

A study of *Families Under Stress* by RAND in 2007 found that enlisted women are "far more likely to dissolve their marriage than are female officers or men of any rank, and this difference is stable over time" (Karney & Crown, 2007, p. 92). This is

particularly evident in the Navy. At the same time, since 1997, female officers in the Navy are more likely, on average, to experience divorce than are enlisted men, and much more likely than are their male counterparts—and this trend is similar across military services. Karney and Crown (2007) write: "The analyses reported thus far reveal gender to be more powerfully associated with the dissolution of military marriages than rank or service" (p. 96). The authors then ask: "Could the high rates of dual-military marriage among female service members account for the elevated rates of marital dissolution experienced by females?" (p. 96).

The RAND researchers then compared marital dissolution in dual-service marriages with dissolution in marriages between military members and civilians. The results, covering 1996 through 2005, revealed the following: the highest rates of dissolution consistently occurred among women married to civilian spouses, and the higher rates of women married to civilians than to another military member held true for both female enlisted personnel and officers. This led the researchers to conclude that "differences in rates of dual-military marriage do not appear to account for the consistent gender differences in rates of marital dissolution within the military" (Karney & Crown, 2007, p. 99). Still, female enlisted personnel and officers married to another military member had rates of marital dissolution that were higher than those of their male counterparts, regardless of type, civilian or dual-service.

The "implications of marriage for the performance of service members remains unclear," write Karney and Crown (2007), but "the effect of marriage on retention decisions is well-established: Those whose family lives are more satisfying are more likely to remain in the service than those whose family lives are less satisfying" (p. 161). It is this fundamental understanding that has led to such interest in studying marriages among women in the Navy as well as the underlying causes and implications of divorce.

Tables 15 and 16 display the information provided by international navies on dual-service marriages and divorce, respectively. As seen in Table 15, the US Navy reports that 6 percent of all officers, male and female, are in a dual-service marriage. This figure is somewhat lower than what DoD reported for 2012 (7.6 percent, as noted above). According to Table 15, approximately 40 percent of all married Navy female officers, as

well as roughly 30 percent of Navy female enlisted personnel, are in a dual-service marriage.

Table 15. **Dual-Service Marriage**

United States

- ***All Officers (male and female): 6% (1,684)
- ***Female Officers comprise 20% of all Navy officers in a dual-service marriage
- ***40% of all married Navy female officers are in a dual-service marriage
- ***All Enlisted (male and female): 3% (6,827)
- ***Female Enlisted comprise 13% of all Navy enlisted personnel in a dual-service marriage
- ***30% of all married Navy female enlisted personnel are in a dual-service marriage
- ***Detailers attempt to co-locate dual-service couples whenever possible; needs of the Navy dictate
- ***Co-location may mean that one or both members serve in a job that does not benefit career progression

Australia

- ***16% of women Officers in the Royal Australian Navy (RAN) are in a dual-service marriage or interdependent relationship
- ***9% of women in Other Ranks (Enlisted) in RAN are in a dual-service marriage or interdependent relationship
- ***ADF Posting Policy for dual-service couples has been recently canceled and is due to be replaced by a new chapter in MILPERSMAN; available when issued

Brazil

- ***23% of women are in a dual-service marriage
- ***No special policy related to dual-service co-location

Canada

***No information "readily available"

Sweden

***No information in personnel database

United Kingdom^a

- ***Service women married (or in a civil partnership) with another service person: 511 (17% of all women in the Royal Navy (RN))
- ***63% (181) of all married (or civil-partnered) female officers in the RN are in a dual-service marriage/partnership
- ***63% (330) of all married (or civil-partnered) female enlisted in the RN are in a dual-service marriage/partnership

SOURCE: Information provided by military representatives from referenced nation, June–September, 2014. ^a Civil partnerships are legal agreements between same-sex couples.

The US Navy attempts to accommodate dual-service couples, whenever possible, by assigning them to the same location (called co-location). It is interesting to observe here, as the US Navy states in Table 15, that co-location may involve a sacrifice or trade-off between one's marriage/family and career. That is, co-location may mean that one or both members of a dual-service marriage may serve in a position that does not benefit their career. Of course, unstated here is the fact that a member's marriage to a civilian

may require a similar trade-off, especially if the civilian spouse is unable or unwilling to leave his or her job and relocate with the military spouse. When a member is relocated, so goes the family and the "trailing spouse"; if the member leaves behind a family with children in school or a spouse who is firmly tied to a job, the member relocates alone voluntarily as a "geographic bachelor" (or "geo-bach" in military vernacular). In addition, there is always the possibility that the member will be assigned to an unaccompanied tour in an area where a family is not permitted. Geographically-separated families and spouses can create challenges, concerns, and added stress for all involved.

The proportions of Navy women in a dual-service marriage are also relatively high in other nations that provided information. In the Royal Australian Navy, for example, 16 percent of female officers are in a dual-service marriage (Table 15). In the Brazilian Navy, 23 percent of women are in a dual-service marriage, and in the UK's Royal Navy, 63 percent of married (or civil-partnered) female officers and the same percentage of married female enlisted personnel are in a dual-service marriage or partnership.

The percentages of divorced personnel shown in Table 16 are not explained; nor were sources provided for data by the participating nations. This makes it difficult to compare rates across nations, particularly when one rate, such as 5.6 percent in Brazil, likely includes more than one year, while the US Navy reports an annual rate for an unknown year. Likewise, Australia reports percentages of persons who have "divorce" as their current status and much higher rates for members who have had a divorce while in service.

A number of Master's theses at the Naval Postgraduate School (NPS) have explored some aspect of divorce in the US military, including a groundbreaking 1991 study by Wallace and Rose (1991) titled *Divorce and Family Support Services: Problems and Prospects*. The authors found "a significant difference between the marriage and divorce rates of Navy people, the other services, and the general US population" (Wallace & Rose, 1991, p. 114). Further, the authors discovered that Navy and military marriage rates are "two- to three-times higher [than in the civilian population] among seventeen-to-twenty-year-olds," and "divorce rates are lower for military men, but much higher for military women" (Wallace & Rose, 1991, p. 114). As it was almost 25 years

ago when Wallace and Rose published their findings, clearly, more research is needed on marriage and divorce in the US Navy, especially as it relates to women.

Table 16. **Divorce**

United States

***Divorce rate (annual overall): Officer, 1.8%; Enlisted, 3.0%

***Rates for women in Navy "not available"

Australia

***Navy members (overall) who have "Divorce" as current status: Officer, 3%; Enlisted, 2%

***Navy members who have had a divorce or dissolution of an ADF-recognized partnership during ADF service (permanent or reserve): Officer, 17%; Enlisted, 14%

Brazil

***Divorce rate (overall): Officer, 5.6%; Enlisted, 2.1%

***Rates for women in Navy: Officer, 3.0%; Enlisted, 0.3%

Canada

***Information protected under the Privacy Act

Sweden

***No information in personnel database

United Kingdom

***Divorce Rate (annual overall): Officer, 0.78%; Ratings (Enlisted), 1.09%

***Rates for women in Navy: Officers, 0.88%; Ratings (Enlisted), 0.99%

SOURCE: Information provided by military representatives from referenced nation, June–September, 2014.

4. Mentoring

Of the six international navies that participated in the project, only the Royal Australian Navy has a formal, organization-wide mentoring program for women. In fact, as shown in Table 17, Australia reports that it offers several programs through the Navy Women's Leadership Strategy. One of these, the Navy Women's Mentoring Program, was originally established to assist recruiting and retention of women for the Navy, and retention still remains a key focus of the initiative. The ultimate objective of these programs is to encourage increased participation rates by women and to help prepare them for senior leadership positions. A comment about the mentoring programs from the Australian submission is worth repeating: "Navy will retain more women and become a more balanced and diverse workforce which will, in turn, result in a more sustainable Navy."

Table 17. Formal Mentoring for Women

United States

- ***No Navy-wide program
- ***Commands/units have programs; affinity groups, such as Sea Services Leadership Association, also provide mentoring and aid in retaining female personnel

Australia

- ***Several programs exist under the Navy Women's Leadership Strategy, including the Navy Women's Mentoring Program, the Navy Women's Leadership Development Program, and the Navy Women's Networking Forum
- ***Over-arching objective: increase female participation rate within the Royal Australian Navy, including Senior Leadership
- ***Navy Women's Mentoring Program originally established under a recruiting and retention initiative; retention remains a key focus
- ***"Navy will retain more women and become a more balanced and diverse workforce which will, in turn, result in a more sustainable Navy."

Brazil

***Not applicable

Canada

- ***No Navy-wide program
- ***Mentoring is available through the divisional system

Sweden

***Not applicable

United Kingdom

- ***No Navy-wide program
- ***Individual trades and diversity networks offer mentoring
- ***Trade-specific mentoring is focused on professional advancement and development
- ***Diversity network mentoring is focused on personal development, performance, advancement, and retention before the end of an initial commission (12 years for Royal Navy officers and 8 years for Royal Marine officers)

SOURCE: Information provided by military representatives from referenced nation, June-September, 2014.

5. Flexibility

Flexibility is *the* key aspect of a working environment that promotes Life-Work balance for all employees, regardless of their demographic. For example, in 2003, the Alfred P. Sloan Foundation established a National Workplace Flexibility Initiative, a collaborative effort "to shape workplace flexibility as a compelling national issue—providing an essential step toward the long-term goal of making workplace flexibility the standard way of working in America" (Alfred P. Sloan Foundation, 2014, para. 1). The Sloan Foundation has funded a wide-reaching effort across a number of institutions, one of which is the Sloan Center on Aging and Work at Boston College. This particular research center is devoted in part to expanding the flexible workplace for older workers.

The Sloan Center at Boston College captures the importance of flexibility for all types of workers in a brief summary of "Why Employees Need Workplace Flexibility":

Research shows that flexible work arrangements may reduce stress because employees working flexibly are more satisfied with their jobs, more satisfied with their lives, and experience better work-family balance....Overall, employees who have a high work-life-fit fare much better than employees who have moderate or low levels of work-life-fit. They are more highly engaged and less likely to look for a new job in the next year, and they enjoy better overall health, better mental health, and lower levels of stress....

Participation in formal arrangements that involve flextime promotes a sense among workers that they have the discretion to fit job-related responsibilities into their broader lives, and this discretion contributes to less stress and burnout. A study of more than 19,000 employees at nine distinct companies (in the pharmaceutical, technical, manufacturing, financial, and professional services sectors and in a university) showed that stress and burnout was lower among workers engaged in all types of workplace flexibility arrangements....Similarly, a study of employees in a large multinational company found that greater levels of flexibility were associated with better health: that is, with less self-reported stress and strain, and better physical health....

Work-family balance has two dimensions: work interference with family and family interference with work. Characteristics of the job and the workplace can have a positive or negative effect on family life, while aspects of an employee's family situation can affect the employee's performance and attitudes toward work....The availability of a variety of flexible work arrangements can help employees maximize work-family balance, which benefits both the employee and the employer. (Sloan Center on Aging & Work, n.d., paras. 2, 3, 7)

Military organizations worldwide have been exploring and experimenting with ways to make service member's jobs more "worker friendly." These organizations have a particularly challenging task, since military jobs are considered to be 24/7, all day, every day, based on the need to be ready at a moment's notice for a national emergency or other pressing requirements. Thus, it is obviously much easier to create a flexible working environment when a nation is at peace. Clearly, missions matter when it comes to an organization's opportunities to support workplace flexibility. It is also generally easier to create organization-wide policies for flexibility in smaller military organizations than in those that are large, diverse, and widely dispersed geographically or at sea. Nevertheless,

the benefits of having a flexible workplace are well-understood, especially among nations with a military that must compete with private industry for highly-qualified employees.

Reduced turnover is a primary objective in creating workplace flexibility. Certainly, organizations want happier, more satisfied, loyal, fully-committed employees, who feel their employer truly cares about their personal wellbeing and that of their family. These employees will be more likely to stay with an organization through the best and worst of times, while those who feel otherwise are at risk for underperforming or leaving to find more suitable employment. The most talented employees will be the first to leave, since they have the best options in the job marketplace. So it goes: when an organization fails to meet the needs of its employees, the best people are the first to depart. In a military organization, which "grows its own" members and leaders of the future, retaining highly-qualified personnel in mid-career is most critical, since this is where the competing demands of life and work tend to be strongest.

Table 18 shows the information provided by international navies on "other relevant policies," a catch-all for any topic not covered elsewhere in the questionnaire. Not surprisingly, flexibility is the common thread for the three nations that responded. The US Navy mentions just one program, currently called the Career Intermission Program, or CIP, which allows 20 officers and 20 enlisted personnel to transfer from active duty to the Individual Ready Reserve (IRR) for up to 3 years. Participants retain full health coverage for themselves and their dependents and also keep certain other benefits along with a small monthly stipend. The Career Intermission Pilot Program (CIPP) was authorized for all US services through the FY 2009 National Defense Authorization Act (NDAA) and extended through the FY 2012 NDAA. The sabbatical incurs an extended service obligation (2 months for every month in the program) upon returning to active duty, and was designed to accommodate high-performing personnel who might need some "time off" for personal reasons. Program designers say that CIP is not intended specifically for women, although slightly more women (52 percent) than men (48 percent) have participated since its inception. As of 2014, the Navy reports that 65 members (28 officers and 37 enlisted personnel) have joined the program, with 21 returned, 27 still on sabbatical, and 17 approved but awaiting transfer (OPNAV Office of Diversity and Inclusion, June 2014).

The Royal Australian Navy (see Table 18) reports having two additional programs not included elsewhere. These are a reduced Initial Minimum Period of Service (IMPS) and a deferred degree scheme. No further details are given.

The UK reports four additional programs. Three of these are intended to provide greater flexibility for parents. The first is a variation of parental leave, which allows parents to take up to 13 weeks of unpaid leave (with restrictions) for each of their children up to the child's 5th birthday. The second program is new, scheduled to begin in April 2015, and allows parents increased flexibility in sharing the first year of childcare. The new program extends nationally and is a response to provisions of the Children and Families Act of 2014. Under the program, parents can split a mother's maternity leave entitlement and are allowed to take it concurrently or otherwise. The leave includes an enhanced occupational pay element comparable to that of maternity leave and can be split between both parents. A third program for parents is the Naval Servicewomen's Network Childcare Voucher scheme, which allows service members to convert part of their salary into childcare vouchers. The portion of salary converted into a voucher is neither taxed as income nor subject to national insurance deductions, so parents can save the equivalent of about \$3,000 USD annually, more or less.

The fourth and final program listed by the UK is the Naval Servicewomen's Network, which was launched in March 2013. The new initiative is intended largely for retention purposes, to support and mentor women so that they stay in service and ultimately reach the senior ranks. The greater objective is to recruit and retain more women for the Royal Navy. The organization sponsors an annual conference, personal development training, and involvement in external events. Apparently, external events are mainly for recruiting potential female applicants, and apparently for nontraditional occupations in the Navy. According to the UK, these events "invest in our people and also externally demonstrate our diversity and careers to external audiences (particularly support of women in engineering/science and school visits." On popular social media, the organization is often listed with its motto or rallying cry: "Navy Servicewomen's Network: Share, Inspire, Empower."

Table 18. Other Relevant Policies, Practices, Developments

United States

***Career Intermission Pilot Program (CIPP), which allows 20 officers and 20 enlisted personnel to transfer from active duty to Individual Ready Reserve (IRR) status for up to 3 years while retaining full health coverage. CIPP authorized under the FY2009 National Defense Authorization Act

<u>Aust</u>ralia

***Policy initiatives to support women in the RAN include reduced Initial Minimum Period of Service (IMPS) and a deferred degree scheme

***The USN-RAN Strategic Workforce and Personnel Steering Group (SWPSG) has provided information on a range of issues, including diversity and inclusion, flexibility and female participation, and implementation of mixed messing in RAN submarines.

Brazil

***Not applicable

Canada

******CAF is governed by the Canadian Human Rights Act, which prohibits, among other things, discrimination based on gender."

Sweden

***Not applicable

United Kingdom

***Parental leave, which allows parents to take up to 13 weeks of unpaid leave (in blocks of 1 week, with a maximum of 4 weeks in 12 months) for each child until the child's 5th birthday; this is unpaid and unreckonable

***Shared Parental Leave will be introduced in April 2015 in response to the Children & Families Bill, intended to allow parents more flexibility in sharing the first year of childcare; mothers must end their maternity leave, then the outstanding entitlement can be split between both parents, who can also take it concurrently; the enhanced occupational pay element will likely be comparable to maternity and split between both parents

***Naval Servicewomen's Network Childcare Voucher scheme allows personnel to convert part of their salary into childcare vouchers (before tax and national insurance contributions are deducted), which can save up to £933 (£1866 for a couple) annually

***The Naval Servicewomen's Network ("Share, Inspire, Empower") was set up in 2013; it includes annual conferences, personal development training, and involvement in external events, "which invest in our people, and also externally demonstrate our diversity and careers to external audiences (particularly support of women in engineering/science and school visits"

SOURCE: Information provided by military representatives from referenced nation, June-September, 2014.

C. WORK

The various areas placed in the Life or Work categories for the present study obviously have certain elements of both. Life events can affect one's work, just as a person's thoughts of work, or the work itself, may linger well past the end of a working day. For many people, life and work are not easily divided. Perhaps the most extreme example in the military is the effect of war on a combatant and the physical or emotional scars that are carried throughout one's life. At the same time, if a military member is

treated unfairly or encounters a hostile working environment, the ensuing mental distress may affect personal and family relationships as well as the member's general health.

1. Habitability

Shipboard living conditions that separate men from women are considered important to women for reasons of safety, comfort, privacy, modesty, morals, and prevailing socio-cultural norms. This is not to say that men do not want the same conditions and for most of the same reasons. In fact, surveys conducted during the 17-year period of "Don't Ask, Don't Tell" (DADT), the US military's policy barring gays and lesbians from serving openly, revealed sizable numbers of male service members who expressed discomfort over sharing showers and sleeping quarters with gays.

In a survey conducted at NPS in November 2012, well after DADT had been eliminated, over 40 percent of US Navy officers, 85 percent of whom were male, said they "would feel uncomfortable having to share my room with a homosexual service member" (Appleman & McLaughlin, 2013, p. 56). This proportion is actually lower than the 52 percent of US Navy officers expressing discomfort in November 2010, at a point just prior to DADT's repeal (Ferguson, 2011). In a focus-group follow-up to the 2012 survey, a Navy officer observed: "So, if I had to share a room with a gay person, it would be the first experience I had doing that. And you could see on a ship where it is close quarters and you are close together a lot" (Appleman & McLaughlin, 2013, pp. 56–57). Another Navy officer compared separating gays and straights with separating genders: "...ultimately, I think the repeal of DADT is going to cause the military to look at their gender separation, period, and make unisex heads and still maybe keep separate berthing. But it doesn't need to be as physically isolated as it is now" (Appleman & McLaughlin, 2013, p. 57).

Coed living facilities have become relatively common on college campuses in the US, where women and men share dormitories, lavatories, common (private) showers, and even dorm rooms in comfort. UCLA's Dykstra Hall, built in 1959, was the first coed university residence in the US (UCLA, 2014, para. 2). (Eventually, all dorms at UCLA would have coed residence halls and buildings.) By the fall of 1970, the trend toward coed dorms had taken hold, as *Life* magazine ran a cover story on "Co-ed Dorms: An Intimate Campus Revolution" (Oberlin College, 2008). In 2008, NBC news reported that

at least two dozen major universities in the US were allowing students to share a room with anyone of their choosing, including a student of the opposite sex. "People are shocked to hear that it's happening and even that it's possible," observed a male university student sharing his room with a female student; but "once you actually live in it, it doesn't actually turn out to be a big deal" (Associated Press, 2008, para. 3).

Someday, the US military may move closer toward having mixed-gender berthing and facilities, which becomes more likely as ground combat restrictions on women are lifted and the number of women serving in those jobs increases. Practicality, changing norms for younger generations, and cost-effectiveness may rule the day, but that day has not yet arrived, as seen in Table 19, Navy Shipboard Living Conditions (Habitability). The US Navy separates berthing and facilities by rank and gender. All new surface ships are built to accommodate women, while other ships are modified—specifically, toilet facilities and changes to ensure female-male privacy in berthing—for enlisted women. Apparently, in Australia, accommodations and ablutions (showers and toilets) in the majority of major fleet units are segregated by gender, with some messes sharing unisex ablutions. The RAN has successfully implemented mixed-messing in all submarines. Sweden reports that facilities are separated by rank (but apparently not gender); further, the Swedish Navy "attempts to separate by gender on modern ships." Swedish subs are relatively small, with 30-person crews, and a lack of privacy is simply accepted when changing, bunking, or showering in small spaces.

The UK's Royal Navy states that its accommodations are separated by gender. On most ships, toilets and showers are also separated, although they need to be shared on small ships using individual cubicles. The UK also notes that a number of older ships cannot be modified for mixed-gender service. These older ships include eight vessels for mine countermeasures and six submarines.

2. Deployments: Differences, Limitations, and Closed Occupations

This category is a catch-all for how women are generally deployed and treated in a nation's navy—that is, if women are limited from serving on any ships, if the timing of their deployment is any different from that of their male counterparts, and whether any occupations are closed to them based on their gender. The US Navy reports that, as of summer 2014, women were assigned to 206 ships, including 135 with female enlisted

personnel and 71 ships with only officers assigned. The US Navy also reports that women and men are treated the same for deployments, except when a woman is pregnant.

Women in the navies of Australia, Canada, and Sweden are permitted to serve on all ship platforms. In the UK, women are limited from serving on certain older ships because it is considered impractical to modify those ships for mixed-gender service. In Brazil, women are not permitted to serve in operational occupations, as defined by a 1997 law. It is assumed that this would restrict women in the Brazilian Navy to serving only on support vessels.

Table 19. Navy Shipboard Living Conditions (Habitability)

United States

***Berthing and facilities separated by rank and gender

***All new surface ships built to accommodate women; other ships receive habitability changes (toilet facilities) to embark enlisted women; no other changes other than to ensure privacy in male-female berthing

<u>Australia</u>

***Women serve on all classes of ships, including subs

***Men and women usually accommodated in messes by rank; officers and sailors (enlisted) usually in combined messes but with cabin/bunk allocation based on gender; some messes have unisex ablutions

***Junior ranks usually segregated by rank and gender (i.e., all-female and all-male messes)

***Subs have used mixed-messing arrangements successfully

Brazil

***No information provided

Canada

***Ships and facilities separated by rank and gender

Sweden

***Facilities are separated by rank

***Navy attempts to separate by gender on modern ships

United Kingdom

***Accommodations are separated by gender

***On most ships, heads and showers separated by rank and gender; on small ships (e.g., mine warfare, patrol), facilities may be shared using individual cubicles

***Some legacy platforms cannot be modified for mixed-gender service; this includes eight Hunt Class mine countermeasures vessels (which can take officers but not enlisted) and six Trafalgar Class subs that are unlikely to be modified due to the typical demographic of the cadre

SOURCE: Information provided by military representatives from referenced nation, June-September, 2014.

Table 20. Deployments: Differences, Limitations, Closed Occupations

United States

- ***206 ships have women assigned; of these, 135 ships have female enlisted personnel and 71 ships have only female officers
- ***Timing of deployments is the same for men and women except in cases of pregnancy
- ***"List of Assignments Closed to Women" can be found in OPNAVINST 1300.17B (OPNAVINST 1300.17C is draft form)

Australia^a

- ***Women can serve on all Royal Australian Navy platforms
- ***No information provided on deployment limitations
- ***No occupations closed to women

Brazil

- ***Women can serve only in non-operational occupations (according to Law No. 9519/26Nov1997)
- ***Timing limitations "not applicable"
- ***Operational occupations are closed to women (see above)

Canada

- ***No limitations on career opportunities for women
- ***Timing of deployments is the same for men and women except in cases of pregnancy
- ***No occupations closed to women

Sweden

- ***Women are not limited from serving on any ships
- ***Timing of deployments is the same for men and women
- ***No occupations closed to women

United Kingdomb

- ***Some legacy platforms cannot accommodate women and are deemed impractical to modify for mixed-gender service (see note below).
- ***Timing of deployments is the same for men and women except in cases of pregnancy; women who discover they are pregnant while at sea are transferred ashore for health and safety; Royal Navy offers 12-month screening from deployments following childbirth
- ***No occupations closed to women except for ground close combat

SOURCE: Information provided by military representatives from referenced nation, June–September, 2014. ^a Gender barriers were lifted on the last restricted employment category (Clearance Diver and Mine Clearance Diving Officer). The first woman MCD officer began training in 2013. To date, no female candidate has completed the training.

^b Legacy platforms include the following: eight Hunt Class mine countermeasures vessels (these can accommodate female officers but not enlisted/ratings) and six Trafalgar Class submarines that are "unlikely to be modified for female service due to the demographic profile of this cadre." Regarding closed occupations, a review of rules on women serving in close ground combat is scheduled for publication in late 2014.

Canada, Sweden, and the UK report that the timing of deployments is the same for both women and men. Australia, Canada, and Sweden state that no occupations are closed to women. In the UK, women are restricted from ground close combat. Of the navies included in Table 20, it appears that Brazil has the most restrictions on assigning women, while Australia, Canada, and Sweden are the most open.

3. Physical Standards

Physical standards are treated separately, although they would relate to deployments, assignments, promotions, and retention. Physical and medical standards are used during the accession process. They are also used to ensure that military personnel remain physically fit while in service. In the present context, international navies were asked to answer two general questions: (1) Does your nation have physical standards and, if so, are they gender-neutral and how were they determined; (2) If your navy has conducted studies to determine gender-neutral physical standards, can they be made available?

The US Navy's Physical Readiness Test (PRT) includes push-ups (maximum in 2 minutes), curl-ups/sit-ups (maximum in 2 minutes), and either running (1.5 miles) or swimming. As the US Navy reports in Table 21, the PRT is gender-normed for both officers and enlisted personnel. Gender norming is often defined as judging women on "less stringent standards" than those of their male counterparts to allow more women to compete with men for jobs in the civilian or military workforce. Indeed, the Brazilian Navy implies the same purpose in its response to the question about gender-based scoring: "There are physical tests that are taken along the career. The requirements in [these] tests will vary depending on the gender. For women is [sic] required lower rates to get through the tests."

The connotation attached to "gender norming" suggests that women are being given an unfair advantage. In fact, the process of norming in test development actually means that an individual's score can be evaluated on the basis of predefined results in a reference population; thus, in gender-norming, one can see how a woman's score compares with the scores of other women in a larger reference population (e.g., all women in the US between the ages of 18 and 24 years or a different population of women depending on the purpose of the testing). The US military's enlistment test, the Armed Forces Qualification Test (AFQT), is a norm-referenced test based on a nationwide administration of the AFQT in 1997 to a sample of American youth between the ages of 18 and 23 years (called the "Profile of American Youth"). Norming of the AFQT allows the military to convert raw scores into percentile scores and determine how a test-taker

performs relative to others in the general population (Sackett, Eitelberg, & Sellman, 2010).

It makes sense to use gender norming on a test of physical readiness, since women and men can be evaluated against other women and men in their respective reference population. A person's age is also taken into consideration, so the results are actually norm-referenced by a combination of age and gender. Thus, on the PRT, a man aged 25–29 years is expected to do at least 34 push-ups and run 1.5 miles in under 14 minutes; a woman aged 25–29 years is expected to do at least 13 push-ups and run 1.5 miles in under 16 minutes and 8 seconds (Navy-PRT.com, 2014).

Table 21. Physical Standards

United States

- ***Physical Readiness Test (PRT) standards are gender-normed for officers and enlisted
- ***Physical performance standards for specific occupations are under review
- ***Navy is validating gender-neutral physical performance standards as part of the "Women in Service Review"

Australia

- ***Physical Fitness Assessment for entry into Navy is gender-normed
- ***Standards for Navy Clearance Diver and Naval Reserve Diver are significantly higher; standards for divers are gender-neutral
- ***Individual Readiness standards (a combination of factors applied to serving members) include a Physical Fitness Assessment based on age and gender
- ***Navy has an Indigenous Development Program of 5 months (twice annually) that assists Indigenous Candidates in meeting requirements (including physical) for entry

Brazil

***Physical tests are required for serving members; these tests are gender-normed ("lower rates [for women] to get through the tests")

Canada

***Canadian Armed Forces (and Royal Canadian Navy) have gender-neutral occupational fitness standards
***Studies to determine physical standards are available upon request

Sweden

- ***Physical Readiness tests are used before personnel attend school or advance in rank
- ***No information provided on norming of standards or studies

United Kingdom

- ***Royal Navy Fitness Test uses "gender-fair" standards ranged for different age groups
- ***Additional strength test under review; the test has gender-neutral standards and is based on occupational requirement to carry firefighting equipment over a set distance
- ***Studies to determine physical standards are available through Institute of Naval Medicine and Captain, Royal Navy Physical Development

SOURCE: Information provided by military representatives from referenced nation, June-September, 2014.

As seen in Table 21, the US Navy is also evaluating performance standards for specific occupations and validating gender-neutral physical performance standards as part of the "Women in Service Review." The review is being conducted by each of the US services as part of DoD's plan to remove existing restrictions on assigning women to combat. Full implementation of the plan to integrate women into ground combat jobs is scheduled for January 2016. (See Burrelli [2013] for a summary of major issues.)

The Royal Australian Navy has individual readiness standards that apply a combination of factors for serving members. These standards include a Physical Fitness Assessment based on age and gender, which is similar to how scores are assessed with the US Navy's PRT. Australia also uses a gender-normed Physical Fitness Assessment to screen for entry into the Navy. Australia reports that the physical standards for Navy Clearance Diver and Naval Reserve Diver are set significantly higher than for other jobs, and these standards are gender-neutral.

Canada reports that occupational fitness standards in the Canadian Armed Forces (including the Royal Canadian Navy) are gender-neutral. Canada appears to be the only nation among those examined that uses gender-neutral standards. The UK's Royal Navy Fitness Test is described as a "gender-fair [i.e., gender-normed] standard, based on maximal VO2 rates, conducted as a 2.4km run or Multi-Stage Fitness Test ('bleep test')." As in the US and Australia, the standards vary for different age groups. The UK also reports that an additional strength test is being studied. The new standard would be "gender-free" (or gender-neutral) and linked to the operational requirement to carry fire-fighting equipment over a set distance.

The recent change to the US Marine Corps Physical Fitness Test (PFT) is worth noting here. In November 2012, the Commandant of the Marine Corps directed that the PFT be modified for female Marines; effective 1 January 2014, pull-ups would replace the flexed-arm hang. This marked the most significant change for a Marine Corps physical fitness test since the Combat Fitness Test was introduced in 2008 (Ryan, 2014). As Sherel Ryan (2014) writes in her NPS Master's thesis:

This policy change would constitute a major shift in fitness for women, particularly those who never worried about increasing their upper-body strength for pull-ups throughout their career....Further, many females may not have worked in a physically-demanding training environment, having

been pigeonholed into a combat service support Military Occupational Specialty (MOS), perpetual garrison billet, and/or a desk job commensurate with the assignment policy of female Marines during the time period in which they joined. These Marines would now be required to complete three pull-ups just to stay in the Marine Corps, and even more to be competitive for promotion. (p. 6)

Several conclusions emerged from Ryan's study, which included a survey of Marines (recruiters, drill instructors, and permanent personnel) assigned to the Marine Corps Eastern Recruiting Region, interviews with fitness experts, and a comprehensive review of previous research. One very revealing result came through the open-ended comments on the survey, provided by almost half of all survey respondents. Here and on the structured survey, respondents expressed concerns about the fairness of the change, the availability of training tools for women, the justification for change, issues relating to female-male physiological differences, and the longer-term, adverse implications for the recruitability, retainability, and promotability of female Marines. As it turned out, the Marine Corps decided to delay implementing the change until the end of 2015, giving women the choice of executing pull-ups or the flexed-arm hang and more time to train before being required to do pull-ups. A message to all Marines in July 2014 states: "Our female Marines have performed well over the last 13 years of war. As our Corps moves forward with research and assessment, our focus will remain on allowing every Marine the opportunity to be successful and establishing a viable career path" (Seck, 2014a, para. 3; USMC Female PFT, 2014, para. 1).

The Marine Corps case offers an instructive example of the unintended consequences, differing opinions, and organizational upheaval that can result from a seemingly simple change to existing physical standards. As military organizations strive to improve their standards, the lesson here is to prepare for change by producing irrefutable evidence to support the action, thoroughly investigating the longer-term consequences, preparing for change through training and education, and extending adequate time for personnel to adjust.

4. Career Path and Development

This subcategory includes the following four areas of interest covered in the call for information from international navies: officer career milestones, occupational time

commitment, a typical (or "golden") path to career progression, and retention incentives. All of these resulted in responses from the international navies, including the US Navy. For example, as seen in Table 22, Officer Career Milestones and Flexibility, the US Navy simply points out that each officer community has its own career milestones, including command billets, joint tours, and other leadership opportunities.

A two-part question was asked here. The first part of the question merely asked about the existence of career milestones, which all nations except Brazil answered, while the second part asked whether the nation's navy has "options for flexibility." Only Australia addressed directly the second part of the question by stating that "building flexibility into continuums and career pathways remains a focus for the RAN"—and that flexibility is available to officers around their training and education opportunities as well as in completing some other career-specific milestones. Canada implies a certain degree of flexibility in pointing out (twice) that occupation-specific requirements, including training for both officers and non-commissioned officers, do not establish a specific time for completion.

Table 22. Officer Career Milestones and Flexibility

United States

***Each community has different milestones, including command billets, joint tours, and other leadership opportunities

Australia

***Each employment category (officers and enlisted) has its own career continuum and milestones
***Flexibility is offered within each continuum around training and education opportunities as well
completing career-specific milestones

***"Building flexibility into continuums and career pathways remains a focus for the RAN"

Brazil

***Not applicable

Canada

***Requirements are generally occupation-specific (qualification boards, command exams, head of department tours, etc.), and there is no specific time

***Some promotion levels require specific training for both officers and non-commissioned members; for example, every officer in Royal Canadian Navy is required to complete the Canadian Armed Forces Joint Officer Development before promotion to Lieutenant Commander (but no specific time)

Sweden

***No career milestones in Navy

***Retirement age is 61 years

United Kingdom

***Promotion is based on merit and potential to be employed in the next higher rank

***Some specialties require specific milestones (e.g., departmental charge position or command) or qualifications achieved prior to being eligible for promotion

SOURCE: Information provided by military representatives from referenced nation, June-September, 2014.

The international navies were also asked to list their occupational time commitments for officers. The US Navy provided an example for the nations to follow by listing the time commitments for three officer communities, as shown in Table 23: Surface Warfare Officer, 5 years after commissioning; Aviator, 6–8 years after winging; and Submarine Officer, 5 years. Australia referred to its requirements for the Initial Minimum Period of Service (IMPS). The most interesting point here is that Australia is considering an IMPS reduction for several officer communities to attract more women, particularly in categories where women are underrepresented.

Table 23. Occupational Time Commitment for Officers

United States

- ***Surface Warfare Officer, 5 years after commissioning
- ***Aviator, 6–8 years after winging
- ***Submarine Officer, 5 years

Australia

- ***Initial Minimum Period of Service (IMPS) established in CN Determination
- ***Initiative is underway to reduce IMPS for a number of categories to attract more women, particularly in areas where women are underrepresented

Brazil

***Not applicable

Canada

***Variable initial engagements are occupation-based (e.g., Maritime Surface and Sub-surface, 8 years; Boatswain, 4 years; and Naval Communicator, 4 years)

Sweden

***No limit

United Kingdom

- ***Officers in initial training can request voluntary withdrawal up to their Premature Termination of Career Training point (typically 30–36 months after entry)
- ***Trained officers can submit a 12-month notice (6 months for Medical and Dental officers) to leave, provided they do not have a return-of-service (ROS) commitment for training received
- ***ROS for initial training of officers is 3 years from completion of specialist professional training; notable exceptions are Aircrew and Medical/Dental, which have a 6-year ROS
- ***Officers who undertake further training incur additional ROS (typically another 3 years); a notable exception is barrister training, which has an ROS of up to 60 months

SOURCE: Information provided by military representatives from referenced nation, June-September, 2014.

Canada's response to the information request mirrors that of the US Navy, except that, apparently, the initial time commitments for surface and submarine officers (8 years) are 3 years longer than in the US Navy (5 years). The UK focuses on voluntary withdrawal and return-of-service (ROS) commitments for initial training (generally 3 years for officers), with two notable exceptions: Aircrew and Medical/Dental, which have a 6-year ROS. In the UK, officers who receive further training incur an additional ROS (usually 3 years), with longer periods in specialized fields. A notable exception here is barrister training, which can incur an additional obligation of up to 5 years.

Another topic of interest relates to whether navy officers have what is called a "golden path," or typical route, toward career advancement. This particular term has been used in both a positive and negative way—indicating that one can take an identifiable path to career success or, in another sense, that only one true path leads to advancement,

and a person has virtually no choice in taking an alternative route. The specific questions for international navies are as follows: "Is there a typical path members follow in order to promote on a 'usual' schedule? If so, will deviation result in a stagnant, unproductive career? Please describe the related policies and practices."

The US Navy reports that enlisted personnel and officers have no typical path to career progression (see Table 24). Yet, the US Navy qualifies this statement by noting that officers in each designator have specific milestones they need to complete to remain competitive for promotion. In general terms, a milestone is a marker signifying achievement. How one reaches a point marking such achievement may vary. A milestone is also, quite literally, a stone that is placed on the side of a road or highway as a marker of distance in miles or, in other words, a milepost. Consequently, a route with milestones could also be viewed as somewhat inflexible, particularly if the shortest distance between milestones is the most advantageous path typically taken to promotion.

Australia, Canada, Sweden, and the UK likewise state that they have no typical path toward career advancement. As in the US Navy, these navies have officer communities where certain milestones or career proficiencies must be met for one to be competitive for promotion. Australia reports that other factors may weigh on a person's progression, including education qualifications and breadth of experience. Further, Australia comments on the difficulties encountered by persons who must balance the responsibilities of their primary occupational community with the demands of a seagoing career—which is particularly difficult for enlisted personnel who have a sea-service obligation at every rank.

Brazil indicates that career paths are the same for men and women, at least within the occupations populated by both genders. It should be noted, however, that women are restricted from serving in operational occupations (see Table 20 above). Consequently, as a group, men have more career paths than do women. One area of recent change for officers occurred at Brazil's Naval Academy, where women were admitted for the first time in 2014. Twelve women, all in supply occupations, became the first to enroll at the academy, which was founded in 1782. According to *Diálogo* (2014), a digital military magazine, Brazil plans to keep twelve openings for women at the academy over each of the succeeding five years.

The fourth and final area of interest under Career Path and Development is Retention Incentives and Related Studies, as shown in Table 25. Here, international navies were asked if they paid bonuses to retain personnel. A follow-up question asked if any studies have been conducted by the nation's navy to determine the effects of retention incentives.

Table 24. "Golden Path" to Career Progression for Women Officers

United States

- ***No typical or "golden path" to career progression for officers or enlisted
- ***Officers in each designator have specific milestones they need to complete to remain competitive for promotion

Australia

- ***No typical path for officers or sailors
- ***Each category has its own specific career milestones and professional competencies that need to be completed; other factors include education qualifications and breadth of experience
- ***Single biggest challenge for Royal Australian Navy is the difficulty for those with primary career responsibilities to balance those responsibilities with a seagoing career; this is particularly difficult for sailors who have a sea service obligation at every rank, and the issue continues to be a focus for RAN

Brazil

***A typical path is taken by both men and women; no gender differences in the career path

Canada

- ***No typical path for members
- ***Each occupation has specific career milestones that need to be met to remain competitive

Sweden

***No typical path for officers or enlisted to follow

United Kingdom

- ***No typical career path for officers or ratings (enlisted) to follow
- ***Each different specialty has indicative progression routes detailing key milestones that must be reached

SOURCE: Information provided by military representatives from referenced nation, June-September, 2014.

The US Navy reports that pay bonuses are offered by the Navy to retain personnel in specific ratings (enlisted) and designators (officers), and that bonuses are also used for retaining personnel in critical Navy Enlisted Classification codes. Australia and the UK state that they also offer retention incentives for specific specialties and skillsets considered critical or in short supply. Australia adds that no pay incentives are used to specifically target retaining women. At the same time, Brazil, Canada, and Sweden report that they do not offer pay bonuses for retaining Navy personnel.

Table 25. Retention Incentives and Related Studies

United States

***Pay bonuses for retention are offered for specific Navy ratings (enlisted) and designators (officers); also for personnel with critical Navy Enlisted Classification (NEC) codes

***Unknown if Navy has conducted studies on the effect of retention incentives

<u>Australia</u>

***Retention incentives are offered for critical employment categories or specific skillsets

***No retention bonuses specifically target women

***Studies on the effect of retention incentives are not available

Brazil

***Not applicable

Canada

***Navy does not offer pay bonuses for retention

***"The Retention Survey examines satisfaction with pay and benefits (including environmental allowances and CAF pensions) in relation to turnover intentions. Results from the 2012 Retention Survey indicated that two-thirds of members were satisfied with pay and benefits. CAF members wearing Air uniforms reported lower satisfaction with pay and benefits than those wearing Sea and Land uniforms. Analyses by environment and gender were not performed."

Sweden

***Not applicable

United Kingdom

***Financial retention incentives are offered for specific specialties and skillsets considered critical or in short supply

***Ministry of Defense has conducted some studies on why people leave or stay, also a literature review on retention incentives, but no studies specifically on the effect of retention incentives

SOURCE: Information provided by military representatives from referenced nation, June-September, 2014.

As for studies of retention bonuses, only the UK mentions related research, yet indicating that no studies have been conducted by the Royal Navy that focus on the effect of these retention incentives. Canada, which does not offer retention bonuses, takes the opportunity to cite results from its 2012 Retention Survey indicating that two-thirds of personnel in the Canadian Armed Forces say they are satisfied with their pay and benefits. Conversely, this means that roughly 33 percent of survey respondents expressed dissatisfaction or no opinion.

5. Equity/Safety

The survey of international navies did not include any questions about policies, programs, or practices on equity or safety in the workplace. This was an oversight. The present discussion is intended to serve as a placeholder to describe briefly why future comparisons of international navies should make these topics a high priority. As used

here, equity refers to efforts that promote equal opportunity for women in a nation's navy. Safety refers to *personal* safety, not to be confused with policies or programs designed to prevent accidents, illnesses, or injuries resulting from unsafe work behavior, conditions, or hazards; safety in the present context refers to organizational policies and programs that reduce the risk of one service member being harmed by another. Personal safety for women members has become an increasingly important focus of attention in the US military over the past decade, and it is likely to remain so for years to come.

In January 2005, after nearly a year of studies and background work, DoD finalized a new policy on the prevention and response to sexual assault. Some months later, the Sexual Assault Prevention and Response Office (SAPRO) became DoD's "single point of authority for sexual assault policy and [providing] oversight to ensure that each of the Service's programs complies with DoD policy" (DoD SAPRO, 2014c, para. 1). The US Navy's Sexual Assault Prevention and Response (SAPR) Program has the following mission statement: "Prevent and respond to sexual assault, eliminating it from our ranks through a balance of focused education, comprehensive response, compassionate advocacy, and just adjudication in order to promote professionalism, respect, and trust, while preserving Navy mission readiness" (Navy Personnel Command, 2014). The US Navy's online SAPR site also presents the program's vision: "Promote and foster a culturally aware and informed Navy respectful of all, intolerant of sexual assault, and supported by a synergistic program of prevention, advocacy, and accountability" (Navy Personnel Command, 2014).

DoD has been required to submit a report to Congress annually on SAPR since 2004. The following year, DoD was directed to submit an annual report to Congress on "Sexual Harassment and Violence at the Military Service Academies." More recently, through the FY 2013 National Defense Authorization Act, DoD was required to submit a special report that "outlines how the established Special Victims Capability will enable the Department of Defense to deliver a distinct, recognizable group of professionals collaborating to provide effective, timely, and responsive worldwide victim support, and a capability to investigate and prosecute allegations of certain special victim offenses including domestic abuse, child abuse and sexual assault" (DoD SAPRO, 2014a).

DoD's FY 2013 Annual Report on Sexual Assault in the Military includes enclosures from each of the US armed services, with data on reports of sexual assault and detailed accounts of each service's efforts on behalf of SAPR. In the US Navy's report, the Executive Summary alone is a lengthy 14 pages (DoD SAPRO, 2014a, Enclosure 3). The entire DoD report is almost 800 pages, which demonstrates the importance attributed to both SAPR and the report itself by the defense community's stakeholders. This can be seen, as well, in the Navy's opening paragraphs (DoD SAPRO, 2014a, Enclosure 3):

Understanding the realities of sexual assault and the conditions under which they occur is a primary, continuous activity. Prevention initiatives continue using a multi-faceted approach focusing on command climate, deterrence, and bystander intervention (BI). Leadership is charged with fostering an environment where behaviors and actions that may lead to sexual assault, as well as sexual assault itself, are not tolerated, condoned or ignored.

Prevention-based practices shifted to a focus on examining the cultural elements present in the military workplace, and assessing whether or not those elements adequately encourage positive and appropriate behavior. These cultural elements included the policies and statements of the command, but more importantly included the values and personal comportment of the entire crew. All Navy commands are expected to create a culture where Sailors will not tolerate questionable or inappropriate behavior, such as sexism, sexual jokes, or innuendo. This type of culture will discourage or help prevent sexual assault. (p. 15)

DoD's findings for FY 2013 show that, service-wide, 5,061 reports of alleged sexual assault were filed. This represents a 50-percent increase over the number of reports (3,374) filed the previous year. Oddly, the increased reporting of sexual assaults is considered a positive outcome, since a majority of cases go unreported for fear of reprisal, shame, embarrassment, or other reason. In FY2012, based on the results of a survey, DoD concluded that approximately 26,000 members of the active-duty military had experienced some form of unwanted sexual contact (6.1 percent of active-duty women and 1.2 percent of active-duty men) (DoD, 2014a, pp. 1–2).

DoD's FY 2014 report was released publicly in December 2014 (DoD, 2014b). Since the Department's estimates regarding the incidence of unwanted sexual contact are based on a biennial survey of active-duty personnel, this was the first year such estimates were available since 2012. The results of the 2014 survey, administered by RAND's

National Defense Research Institute, are reported in *Sexual Assault and Sexual Harassment in the Military* (RAND, 2014). Here, RAND's researchers estimate that "between 18,000 and 22,500 active-duty service members [DoD-wide] can be classified as having experienced one or more sexual assaults in the past year committed against them by other service members, civilians, spouses, or others....This represents approximately 1.0 percent of active-duty men and 4.9 percent of active-duty women" (RAND, 2014, p. vi). When examined by separate component, men in the Navy had the highest incidence (1.48 percent) of sexual assault among all services; women in the Navy had the second-highest incidence (6.48 percent), exceeded only by female Marines (7.86 percent) (RAND, 2014, p. 10). Navy women also had the *highest* incidence, among all services, of "non-penetrative sexual assault" (3.59 percent), reported experiences of a "sexually-hostile work environment" (27.71 percent), experiences of "sexual quid pro quo" (2.22 percent), sexual harassment (27.82 percent), and the combined total of *any* sex-based "military equal opportunity" (MEO) violation (32.16 percent) (RAND, 2014, pp. 12–15, 17).

The US military services have been the focus of considerable negative publicity over the past several years, not only for the number of service women who claim to have been assaulted, but also for the manner in which sexual assault cases are adjudicated internally. The issue has led to hearings and proposed legislation in the US Congress, outcry and complaints by public interest groups, as well as critical reporting by national news media. Just recently, in a *New York Times Magazine* cover story titled "In the Company of Men: Why is it so Hard to Prosecute Sexual Assaults in the Military," a member of Congress is quoted as follows: "The Pentagon brass is really good at coming up to the Hill and saying, 'Zero tolerance,' which is completely meaningless when the conduct continues" (Draper, 2014, p. 52). Less than one week later, the Cable News Network (CNN) reported that female officers onboard the *USS Wyoming* were secretly videoed while showering and changing clothes by a hidden camera at various times over the course of a year (Starr, 2014).

Such negative publicity—through press accounts and personal narratives by women in the Navy or other services—does not reflect favorably on the US military's public image. Clearly, a strong case can be made for including safety in any future

comparison of policies affecting women in international navies. An equally strong case can be presented for including each navy's policies and programs supporting equal opportunity and preventing sexual harassment. Again, these topics are immensely important to recruiting for the US Navy because they can have a strong effect on the decisions of young people to join. The potential impact on retention is fairly obvious, too, since perceptions of unfair treatment based on gender can influence a female member's likelihood of staying in service. Interestingly, perceptions of related problems tend to differ by gender, further underscoring the importance of the issue for women working in an environment where they are a numerical minority. Research at NPS in 2010, for example, suggests that US Navy officers' perceptions of sexual assault and sexual harassment are noticeably different among women than among their male counterparts; further, many male officers tend to downplay the prevalence of problems for women based on their own personal experiences or observations (Bouldin & Grayson, 2010).

III. CONCLUSIONS AND RECOMMENDATIONS

Researchers relied heavily on the participating navies to provide accurate information. Sources to support the information were sometimes included, particularly if the response needed to be explained or required more detailed data than the relatively small space would allow. In certain cases, a responding navy would list an official publication, regulation, or law. Additionally, participating navies were asked to "please provide key changes, dates, outcomes related to the policy, if known." Space was allocated on the spreadsheet for this material, which was rarely included in answers from the respondents. Nevertheless, participating navies submitted a wealth of useful information that would have been difficult and time-consuming to collect separately on each navy.

This section attempts to address a key question of any research project: what did we learn? Moreover, do the results answer the project's main research questions? An overall assessment of the information gathered for the project is divided into two separate sections below: Notable Similarities and Differences between Navies, and Considerations When Comparing International Navies. This is followed by several recommendations for further research.

A. NOTABLE SIMILARITIES AND DIFFERENCES BETWEEN NAVIES

In compiling summary tables, researchers noticed certain similarities and differences in responses from the six participating navies. First, from the abundance of information provided, the most detailed responses generally emphasized how a nation's navy supports new mothers and fathers, essentially underscoring the importance of family. Another theme relates to the importance of offering women greater flexibility in balancing the demands of life with work. Of somewhat lesser emphasis were policies and programs related directly to work, although this may have been influenced by the questionnaire's construction. A brief summary of the researchers' initial impressions is presented below.

1. Family First (or a Close Second)

"Family First" is a phrase we all hear, and may even follow, when it comes to weighing the demands of a job or career against the needs of our family. Thus, a compassionate employer, upon learning that a worker's young child has fallen ill, will instruct the employee to "take as much time as you need—and, please, put your *family* first." It is expected that caring mothers and fathers make sacrifices for their family and that parents' careers be dedicated to providing their children with the best opportunities possible. It is also expected these days that truly caring employers create policies, programs, and practices that promote putting family first, or at least a close second.

At the same time, employers recognize that, even though a large number of their workers have families, many do not. Indeed, if employers had a choice in the matter, they would likely opt for having all single workers without families, which can distract employees from their jobs, lead to lost days of family-related leave, and raise the cost of benefits programs. Just as Leeds (1988) long ago questioned the fairness of US Navy policies that seemed to assist dual-Navy couples at the expense of others, members in different situations—such as singles without dependents, unmarried persons with partners, and childless members married to civilians—need to know that their welfare is equally important to the organization. In simple terms, if special provisions are made for members with families, are others adversely affected as a result? What is the tradeoff, the ripple effect on other workers, and how do family-friendly policies affect the workforce as a whole? These are questions not easily answered by any organization, let alone those of a nation's naval force.

All of the navies participating in the study have policies that recognize the importance of meeting a member's basic family needs. This is most obvious under the broad category of "Life" (Table 1), particularly maternity, parental (paternity), and adoption leave, where participating navies provided as much information as for any other topics on the questionnaire. This also happens to be an area where the US Navy appears generally less generous than other navies in the study. It is beyond the scope of the present study to explore the reasons for these differences. Nevertheless, as noted in Section II, nations that provide more generous maternity/paternity/parental benefits tend to have programs tied to nationwide occupational insurance or health services. Further, as

noted elsewhere in the report (see discussion below), one must always account for variations of scale, organizational structure, and many other factors that differentiate one navy's policies toward women from that of another. Among these is an interesting influence in Canada (also discussed below), where the Canadian Human Rights Act states explicitly that discrimination based on pregnancy or child-birth is defined as sexual discrimination.

2. Flexible Workplace

All participating navies appear to recognize the importance of providing a flexible workplace, although limited obviously by each organization's abilities to achieve it. One of the nations in the study, Brazil, has compulsory military service for men. Another nation, Sweden, only recently (2010) ended its draft-based system. Nations that must rely exclusively on volunteers and compete with the private market for highly-qualified members obviously have a greater challenge. And, with increasing pressure on private and public employers to be more flexible—as witnessed in the US and in other nations—the most desirable employees will raise their expectations and narrow their job choices as more opportunities for employment become available. For military organizations that cannot hire laterally and must "grow their own" trained, experienced, and capable leaders of tomorrow, the point of greatest vulnerability for turnover is in a person's mid-career. It is in mid-career that a military member has all of the skills and experience that are most desirable to other potential employers; it is here, also, that a member's family responsibilities are likely expanding, which places increasing stress on the member to achieve life-work balance.

Military organizations may not be able to compete very effectively with private industry in the type or degree of workplace flexibility they can offer. A creative approach would be needed, and most military organizations are known more for how they stick to their tried-and-true methods of the past than for breaking new ground. Perhaps the greatest irony here is that, after World War II, businesses in the US marveled at the organizational effectiveness of the military and adopted many of its methods. Now, as workplace flexibility continues to become an accepted—and expected—practice in the private sector, militaries find themselves struggling to adapt and adopt the methods of private industry.

One step in this direction for the US Navy has been the Career Intermission Program (CIP), which is discussed in Section II. It does not qualify as workplace flexibility, per se, although it does create increased flexibility in a member's career by allowing time off for what amounts to a sabbatical. As previously noted, it was authorized by law for all services originally in 2009 and then later extended in 2012. As it turns out, the notion of offering a sabbatical for Navy Surface Warfare Officers (SWOs) was explored by RAND in 2004 as a way to retain more SWOs (Yardley, Thie, Brancato, & Abbott, 2004), drawing upon previous research (Thie, Harrell, & Thibault, 2003). Sabbaticals are an old idea, although it should be clear from this progression of analysis to action that new approaches in the military tend to move toward implementation at all deliberate speed. Even at that, the Navy's CIP is quite limited (open to just 20 officers and 20 enlisted personnel annually) and incurs an extended service obligation that doubles the amount of time one spends in the program. The participant retains health coverage along with certain other benefits and a small monthly stipend. The cost to the member is hardly insignificant: a 6-year obligation for 3 years in the program (the maximum allowed) plus a possibly stalled career that must be restarted. Although the program ensures that members are credited for their time in career intermission upon returning to service, thus removing a "penalty" for participating, this feature has not stimulated the level of interest that program designers expected. Perhaps many members are still fearful of losing their competitive edge in a very competitive career environment and do not want to appear any less committed to their jobs than those who work beside them—an emerging trend recently identified internationally (Cameron & Denniss, 2013). Nevertheless, the program does offer a limited number of opportunities for flexibility to those who want it and are willing to pay the price.

3. Mentoring

Mentoring is included here because the study revealed that only *one* of the six participating navies has a formal, organization-wide mentoring program for women. Researchers felt this program was worthy of highlighting as a potential model for other navies to examine. As seen in Section II (Table 17), the Royal Australian Navy (RAN) actually operates several programs under its Navy Women's Leadership Strategy. Since a main objective of the present study is to explore the best practices of other nations in

improving female retention—and Australia's Navy Women's Mentoring Program identifies retention as a "key focus"—it seems logical that US Navy leaders might be interested in further exploring this program. Other RAN programs include the Navy Women's Leadership Development Program and the Navy Women's Networking Forum.

4. Notable Initiatives

At the very end of the questionnaire, the six participating navies were asked to "please list and describe any other relevant policies/practices or developments not included in the questionnaire." As an example of an answer, the US Navy listed the Career Intermission Pilot Program (CIPP, currently known as CIP), along with a brief description. The UK's Royal Navy provided the most detailed response, which includes a brief description of four initiatives: a new parental leave policy; a new program that allows parents more flexibility in sharing parental leave during the first year of childcare; the Naval Servicewomen's Network Childcare Voucher plan, which allows parents to save some money by converting their salary into childcare vouchers; and, perhaps most interesting, the Naval Servicewomen's Network. The Naval Servicewomen's Network is a centralized framework of support activities that appears to benefit the Royal Navy both internally (through conferences, training, networking, and other support activities) and externally (through public relations and school visits).

Additionally, two other UK activities are notable, if only because they stand out as particularly original among the many responses provided in the questionnaire. These appear in Section II, Table 18, Maternity Leave and Related Compensation. First, the UK refers to a group of maternity initiatives tested in Portsmouth, UK in 2013. These included the following: maternity coaching sessions; the creation of maternity divisional officer positions; maternity physical training; and, of special note, the Maternity Buddies program, which provides pregnant members with a "role model" (or mentor/coach) of a woman who has returned to work successfully and can offer advice and other support to the expectant mother. Second, in the same year, the UK introduced the Naval Nanny Service. This service offers emergency or short-notice childcare through a registered nanny agency—thus reassuring new, returning mothers that the RN will help them find reputable childcare quickly, if needed. It is a simple, supportive program that can help

alleviate a returning mother's concerns upon rejoining the navy's workforce while simultaneously demonstrating that the organization cares.

B. CONSIDERATIONS WHEN COMPARING NAVIES

The most obvious issue when comparing the US Navy's policies with those of other nations relates to scale. Basically, on a worldwide scale, the US Navy is big. As previously discussed, the number of personnel in the US Navy is over three times greater than the combined total of navy personnel from the five other nations participating in the present study (see Table 2 above). In terms of female personnel, the US Navy has far more than any of the other navies participating in the study—indeed, all of the other nations have female Navy officers counted in the hundreds, not on the same scale as the roughly 12,000 female officers in the US Navy's total force. So, how does one really compare the policies, programs, and practices of a relatively large navy with those of navies that are much smaller? Are personnel issues more easily resolved in a smaller navy, commensurate with the organization's smaller size?

The short answer to these questions is that it depends. A review of the tables in Section II shows a number of non-responses from participating navies, including "Not Applicable," "N/A," "Unknown," "No Information," "Minimal Data Available," "No Information in Personnel Database," "No Information Readily Available," "No Navy Policies," "Nil," or simply left blank ("No Information Provided"). This suggests that the issue or policy area for a nation's navy has a fairly low priority (no response readily available or no information easily obtainable), is of little or no interest/relevance, or may be completely inapplicable. At the same time, international navies do provide an abundance of information on topics that clearly have no international boundaries. A good example in the present study is the UK's comprehensive response to maternity leave, paternity leave, and the catch-all "other relevant policies." It is fair to say that these policy areas are just as important, just as difficult to resolve, and just as relevant to recruiting and retaining women in participating navies as they are in the US Navy.

Perhaps more important than focusing on differences of scale is simply recognizing effective programs for their positive impact on desired outcomes. The navies of other nations are proportionately smaller due to a number of factors, one of which is the nation's general population and pool of people who can serve, when needed. The US

is the third-largest nation in the world, based on population. Among participating nations, Brazil is closest, ranked at fifth, with about 100 million fewer residents. The next closest in population is the UK, with roughly one-fifth the residents of the US. Nevertheless, the navies of smaller nations often face the same personnel issues as do those of larger ones, and, when viewed in context, they are proportionately no less vexing or important.

A number of other factors should likewise be considered when comparing women's policies across international navies. In fact, many such variables can be identified. Figure 1 represents an initial attempt to identify these factors and to group them according to type. The types are called Rooted, Variable, or Emergent, based on the nature of their influence and stability within a nation. The stability of factors is important in considering potential resistance to changes in policy or practice. It should also be noted that certain factors share elements of other organizing criteria. For example, a nation's system for filling a force is clearly changeable; however, after a given period, the system becomes deeply rooted in the culture and can only be changed under certain conditions, such as massive war, national emergency, political upheaval, or sustained peace and prosperity.

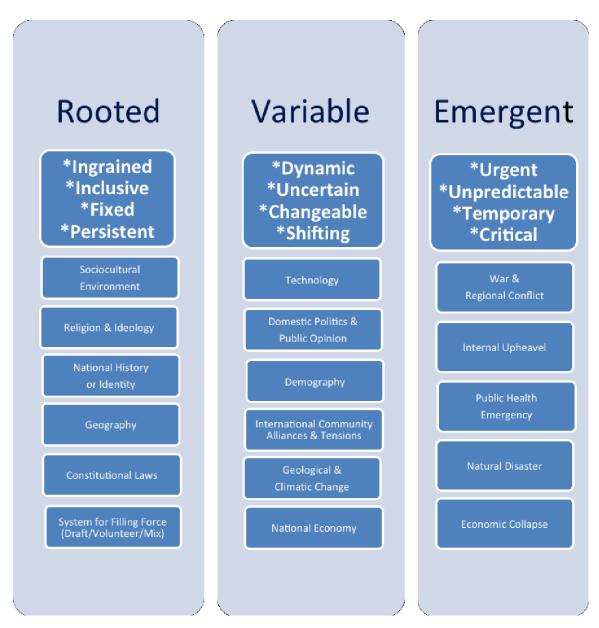


Figure 1. Factors that Influence National Policies toward Women in the Military by Type

The system for filling a force is actually a good example to apply in the present study. Brazil, for instance, currently uses military conscription, unlike the other five participating nations. At the same time, Sweden employed a system of military conscription until just recently, in 2010. Both of these countries were able to rely on compulsory service for men, which alters the pressure on a military to fill vacancies as they arise from one year to the next. In 2003, Sweden considered drafting women, not because of a shortage of available men, but to promote gender equality (Associated Press,

2003). Even with an Army-only draft, "draft-motivated volunteers" can be relied upon to help fill the ranks of other services, such as the navy.

It is interesting to note here that, until recently, Israel was the only nation in the modern era that conscripted women as well as men. As of October 2014, Norway extended its military conscription to women, partly to improve its gender balance, becoming the "first peacetime European or NATO country to extend compulsory conscription to all citizens, regardless of gender" ("Norway's Military Conscription," 2014, para. 2). According to a report in *Deutsche Welle*, female conscripts are chosen in Norway from a pool of 60,000 women, selected using physical and psychological tests and their "motivation" (they do not serve against their will). Women currently account for 10 percent of conscripts and are expected to be about 20 percent by 2020 ("Norway's Military Conscription," 2014). This extends the previous goal of 15 percent female representation by 2008, which was never achieved.

Just a year earlier, a Master's thesis by Brandvold (2013), at the Norwegian University of Life Sciences, compared programs for recruiting and retaining women in Canada, Sweden, and Norway. Brandvold (2013) suggests that Canada's all-volunteer military has helped to promote its military role "as an attractive employer for women and not a male organization where women become visitors on men's terms" (p. 81). "Hopefully," the author states, gender-neutral conscription in Norway "can become a measure that will prepare the military organization for a more diverse culture and with time lead to the military organization becoming an attractive...employer of choice in Norway" (Brandvold, 2013, p. 76). The key objective is to reach a critical mass, which "will at least indicate that the defense is a livable place for a certain amount of women" (Brandvold, 2013, p. 83).

The US, UK, Australia, and Canada have long-standing systems of all-volunteer service that have survived the test of time for at least four decades (55 years in the UK). It was not too long after the US formally ended conscription in July 1973 that the US military services realized they needed more women to help fill the ranks and maintain required end strength. Historians of America's All-Volunteer Force (AVF) recognize that the growing reliance on women in the US military—including changing policies from gender integration through opening traditionally-male jobs to women—was a direct result

of ending the draft. The practical necessities of expanding the recruiting pool, while keeping personnel budgets manageable, ruled the day. Essentially, the US military services turned to women (and racial minorities) to replace the traditional volunteer (white males). Young men became harder to recruit, as the all-volunteer military competed with colleges and other, better-paying jobs in the civilian market. Some have even said that this increased reliance on women helped to save the AVF when it struggled severely in the late 1970s and teetered on extinction (Binkin & Eitelberg, 1986; Eitelberg, 1996).

Consequently, practical necessity helped to push the US military toward gender integration and increased opportunities for women. This is not to say that it would have been possible without a supporting framework—including many other factors in Figure 1, such as the sociocultural environment, laws, the prevailing ideology, domestic politics and public opinion, the national economy, the continuing Cold War, Operations Desert Shield/Desert Storm, and so on. Even today, some have claimed that the US Navy's decision to integrate women on submarines was determined largely by practical considerations (Strategy Page, 2012). That is, the number of newly-commissioned male officers opting to join the US Navy's submarine community has been declining; allowing women to serve on submarines seemed like the right thing to do at the most opportune time. It should be easy to see from this example and others that a navy's interest in recruiting and retaining women—and the policies, programs, and practices to support the recruiting and retention—is tied strongly to a nation's system for filling the military along with a supporting national environment.

Another related example in Figure 1 is demography. Thirty years ago, a hot topic of discussion among military manpower researchers was the "birth dearth" and the impending consequences for filling the military with highly-qualified volunteers (Eitelberg & Mehay, 1994; Eitelberg, 1996). All eyes focused on ways to expand the pool of potentially-eligible recruits, as researchers predicted in the US that *all* military services would soon rely on just "a few good men" to man the force. This was also a time when military researchers and policy makers began looking seriously at how to compete more effectively with civilian employers in recruiting volunteers and keeping them for a full career. As the population of qualified workers continued to shrink, the lure of civilian

employment for young enlisted members, many with a spouse and children, became increasingly stronger. Civilian employers were developing the "flexible workplace" and "family-friendly" policies that were far more alluring than whatever the military services could offer. This period marks a confluence of events that would affect women in the military for years to come.

When faced with a shrinking pool of potential volunteers, how should an all-volunteer military respond? In economic terms, a force can reduce demand (downsize the military), increase supply (expand the pool of potential volunteers), and reduce turnover (cut first-term attrition and boost retention). Before the effects of the "birth dearth" began to appear, the Cold War ended, and the size of the US military's force was reduced drastically. Meanwhile, the pool of potential recruits had already expanded as more opportunities for women opened; these opportunities would expand even more after the conclusion of the first Gulf War. As participation by women widened, so did the military's need to offer improved benefits for new mothers, parents, and families—to do otherwise would mean a hemorrhage of talented members in the middle ranks. The competition for a shrinking number of higher-ability young people—by employers and higher education alike—would ultimately reenergize all-volunteer militaries and push them toward designing new incentives and benefits for young women and men.

Other obvious examples drawn from Figure 1 include Religion & Ideology (Rooted), Domestic Politics & Public Opinion (Variable), and War & Regional Conflict (Emergent). A nation's policies toward women in the military are influenced by the prevailing religion or ideology of that country, especially if the religion establishes an accepted role or rules for how women and men should behave. Turkey is a US ally where the population is almost entirely Muslim and the military employs universal conscription for young men. A limited number of women serve in the Turkish military as officers and in limited roles. It would be interesting to compare the Turkish Navy's policies toward women with those of the US, but not for the same purposes outlined in the present study (Colakoglu, 1998).

Domestic Politics & Public Opinion provide another example of how a factor can influence a nation's policies toward women in the military. In the US, one could argue that politics slowed the pace of expanding opportunities for women in combat-related

occupations. It might also explain why, even today, without a draft, young men are required to register with the Selective Service System while women are not. One could also argue that the outcomes of domestic politics and public opinion do not always agree, given the nature of the electoral process in the US and wide regional differences from one issue to the next. This difference was witnessed when a clear majority of the American people supported removing the nation's ban on gays serving openly in the military—for several years—as a majority of Congress continued to hold the line on keeping the law intact for what was considered the best interests of national defense (Callahan & Paffenroth, 2013).

Canada offers an interesting and unusual case in how Domestic Politics (Variable) and Law (Rooted) have become interrelated. For the present study, participating navies were asked to "please list and describe any other relevant practices/policies or developments not included in the questionnaire." Canada's response was a single sentence: "CAF is governed by the Canadian Human Rights Act which prohibits, among other things, discrimination based on gender." Prohibited grounds of discrimination under the wide-reaching Act include "race, national or ethnic origin, color, religion, age, sex, sexual orientation, marital status, disability, and conviction for an offense for which a pardon has been granted or in respect of which a record suspension has been ordered" (Canadian Human Rights Act, R.S.C., 1985, c. H-6). Also included, and protected, under the Act is "where the ground of discrimination is pregnancy or child-birth, the discrimination shall be deemed to be on the ground of sex" (Canadian Human Rights Act, R.S.C., 1985, c. H-6).

The CAF expanded opportunities for women in traditionally-male occupations in 1971, based on findings and recommendations from a study by the Royal Commission on the Status of Women. In 1985, much of the responsibility for continued expansion of opportunities for women was taken out of the hands of politicians and military leaders with passage of the Human Rights Act along with the Canadian Charter of Rights and Freedoms, which preceded it in 1982. The Act itself is described as "quasi-constitutional"—and applications of the Act to the military were subject to legal interpretation in the early years after passage. A landmark case by women against the CAF precipitated the opening of combat jobs on land and sea to women in 1987; the case,

Brown v. Canadian Armed Forces, was decided in 1989 by the Canadian Human Rights Tribunal (appointed under the Canadian Human Rights Act). By the time the decision was rendered, many actions had already been taken by the CAF, although the Tribunal did order some further expansion under the Human Rights Act (Case Law Canada, Brown v. Canadian Armed Forces, 1989 153/CHRT).

Another factor in Figure 1, War & Regional Conflict (Emergent), requires urgent action. Pushed to its limits, a nation can take drastic action that might never even be considered during peacetime. In the histories of almost all nations, one can find instances of how otherwise excluded groups served their country on the battlefield. Thus, Turkish history celebrates the heroism of women on the battlefield, as in the Ottoman-Russian War and in World War I (Atli, 2014). The Soviet Union, perhaps most recognized for its extensive use of women throughout the military, placed women on the battlefields of the two World Wars, even famously employing them in women's air combat regiments during World War II (Goldstein, 2001). Massive war, of course, is an outlier among the factors, where almost anything goes. It typically becomes a nation's Great Leveler in removing, temporarily, prejudice based on group differences, as people come together for a common cause. However, even on a smaller scale in more modern times, women were utilized in ways during America's wars in Iraq (twice) and Afghanistan that likely violated the letter of then-existing law; and their impressive performance in these conflicts has contributed to policy change.

C. RECOMMENDATIONS FOR FURTHER RESEARCH

The International Navies project began with the rather modest objective of identifying best practices and promising initiatives from other nations that might help the US Navy attract and retain highly-qualified women. As with most research projects, particularly those that set out with limited expectations, the results of the present study suggest a number of potentially useful areas for further research. A few of these are addressed individually in the following discussion.

1. Expand the Study to Include More Navies

This is an obvious recommendation for further research, since the results of the present study provide the methods and tools for easily casting a wider net. A similar Excel spreadsheet questionnaire could be used, with some modifications (e.g., removing

questions on maternity medical procedures and adding questions on equity/safety) to gather information from more nations. Further, the present study provides a relatively easy way to extract responses from the questionnaire and then sort them by topic area for future analysis. For example, one could extract information provided by another country on its Maternity Leave & Related Compensation and simply add a section for that country to the existing Table 8 in this report. Archiving and accessing information for comparative analysis also becomes easier when sorted by topic in this manner.

2. Focus on Life-Work Balance...

During the course of the project, researchers organized and advised two NPS Master's theses related to Life-Work Balance. One thesis looks at how Life-Work Balance affects the retention decisions of female and male officers in the Navy and Marine Corps who have a dual-service marriage (Kocis & Sonntag, forthcoming). The other thesis examines how balancing life and work can influence the retention of female SWOs. These are two very specific situations for Navy officers where the member's personal or family life can compete strongly with a Navy career. Nevertheless, Navy members in many other situations often go through the same decision process—weighing life or family needs against job demands—when faced with a choice of extending their career. And, if the balance tends to favor work, pressures to leave the Navy are relatively greater for women than for men based on sociocultural expectations, family planning, traditional roles, and other considerations.

Many international policies compared in the present study are intended to ease the burden of balancing life and work for parents. Indeed, a more accurate way of describing Life-Work Balance would be Family-Work Balance. Research reported previously has shown clearly that the so-called "college market" of young women in the US—future prospects for the Navy's officer corps—are intent on balancing work and family: over 40 percent tend to rate "balance between work and family" as one of three most important factors in choosing where to work; over half felt that they would find little or no opportunity for balancing work and family in the military; and nearly half stated that they would not consider becoming an officer because it would "interfere with plans to start a family." In separate surveys, many young women felt that having a family while serving in the military would be "nearly impossible" (from Aten, Eitelberg, & Smith, 2014).

A main objective of the present study is identifying best practices that could possibly assist the US Navy's recruiting and retention of women. One way forward is to focus more closely on identifying best practices in achieving Life-Work Balance, a strong concern for young women who are considering a career in the Navy as well as for those who are currently serving.

3. ...And the Flexible Workplace

The "flexible workplace" is a natural companion to Life-Work Balance. Flexibility implies choice in how a worker can achieve the degree and type of desired balance. Many of the policies examined for the present study actually incorporate the words, flexible or flexibility, in describing the purpose of an initiative or the way it operates. As discussed in Section II, flexibility is *the* key aspect of a working environment that promotes Life-Work balance for all employees. A study of best practices in balancing life and work should go hand-in-hand with a complementary study of the flexible workplace, including the feasibility of various practices or programs in the US Navy.

4. Explore Selected Best Practices

The discussion above identifies several practices under mentoring and notable initiatives that appear worthy of further study. The US Navy's CIP (or CIPP in other services) might qualify as a "best practice" at some point, although it has been slow in attracting interest, and limitations on enrollment indicate that it is still basically a pilot program. The Marine Corps version of the program reportedly enrolled only three Marines during the first year of eligibility (Seck, 2014b). Prior to its 2014 launch in the US Air Force, it was described as an opportunity mainly for women to start a family. "Some women leave the Air Force because they want to start a family," according to the Deputy Chief of Staff for Manpower, Personnel and Services in the Air Force. "So, why don't we have a program that allows them, in some cases, to be able to separate from the Air Force for a short period of time, get their family started, and then come back in" (Losey, 2014). Even though CIP may not qualify yet as a "best practice," the reasons for creating it are credible. The time is right to examine the program more closely and determine if it meets the goals that were originally envisioned.

5. Further Develop the Factors Model

The factors model shown in Figure 1 of the report is a very preliminary attempt to explain why policies relating to women may differ from one nation's navy to the next. Why is this important and how could the model be used? First, it should be recognized that women share a certain status across every military in the world today; that is, even though women represent at least half of any nation's population, they are a minority group in military organizations controlled predominantly by men, under laws created and administered predominantly by men. In many other ways, as depicted in Figure 1, influencing conditions may differ. If the purpose of comparative analysis is to identify potentially useful practices, one must first determine if the practice would even apply to existing conditions in the US Navy. As previously discussed in the report, the US Navy is very different from other navies, most notably in size.

Ultimately, a refined factors model could be used as a score sheet to evaluate the US Navy's policies comparatively by identifying nations that are similar and must deal with the same issues. For example, Australia and the US are likely close on many variables—and have similar issues relating to women in the navy—so, RAN's advances in, say, providing mentoring for its female members may be transferable to the US Navy. More generally, Australia's experiences and approaches toward certain issues, such as maternity leave or women in nontraditional occupations, can be instructive. And, if they work effectively in Australia, their chances of succeeding in the US are similarly good. In this way, the model becomes a tool for initially determining and screening potentially transferable policies and practices.

6. Pursue Safety First

"Safety First," much like "Family First," is a commonly-used phrase. It appears on signs posted everywhere from streets to construction sites to factories. For some reason, the questionnaire neglected to include equity/safety. This is discussed in the report, and the area should definitely be added to future iterations of the questionnaire. In fact, since the issue has become so important in the US over recent years, a separate study of international policies could be useful. One point of special concern in the US, as discussed in Section II, is the relatively small percentage of military members who claim to have been assaulted yet fail to file a report. It would be interesting to see if the same

trend occurs in other nations that are similar to the US. Likewise, of special interest and concern is why the US Navy ranks so high on claimed incidences of assault when compared with the other military services: Navy men had the highest incidence of sexual assault among all services; Navy women had the second-highest incidence of sexual assault among all services, as well as the highest incidence of "non-penetrative sexual assault," reported experiences of a "sexually-hostile work environment," experiences of "sexual quid pro quo," sexual harassment, and the combined total of *any* sex-based "military equal opportunity" violation (RAND, 2014, pp. 12–15, 17). Once again, this a topic that needs to be further studied since it is bound to have a long-reaching effect on the recruiting and retention of women in the Navy.

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX A. INTERNATIONAL NAVIES QUESTIONNAIRE

| | ا ا | Please answer the Please describe key question(s) in the column changes, dates, to the right. policy, if known. | | | | | | | | | | | | | |
|--------------------------|--------------|---|--|----------------------------------|--|--------------|---|---|--|--|---|---|--|--|--|
| PTIONS | П | U.S. description of key changes, dates, outcomes related to the policy, if known. | | | | | | 1907; The US Navy Nurse Corps established. | 1917: The Navy authorized the enlistment of women. | 1938: The Naval Reserve Act allowed for the enlistment of qualified women as nurses. | 1942: Congress established the Navy's Women's Reserve Program, including Women's Reserve (Inclinitally known Women's Reserve (Inclinitally known as the "WANES", Women Accepted for Volunteer Emergency Service). | 1947: The Amy-Navy Nurses Act (Public Law 36-80C) established the Nurse Corps as a permanent Staff Corps of the Navy and Pe Army. It also authorized the permanent commissioned rank for rurses. | 1948: Wamen's Armed Services Integration Act (women could enter the U.S. Navy in regular or reserve status). | 1951: President Truman authorized the Services to involuntarily discharge women due to pregnancy or adoption of minor children. | 1959: Avra Der-Vartanian was promoted to the rank of Master Chief Youman, making the the first female Masser Chief in the Navy, as well as the first female E9 in the entire Armod Services. |
| NAVY POLICY DESCRIPTIONS | U.S. Example | U.S. answer to question(s). | Active and Full Time Support (FTS) = (AC) and Reserve (RC): Officer Total Force: 68,394 | Enlisted Total Force: 317,866 | Navy Total Force: 382,461 | Officer: 17% | Enlisted: 18% Total: 18% | | | | | | | | 1908 |
| NAV | | | | | How many individuals are I in your Navy? | | What percentage of your Navy is female? | | | | | | | | When did women first fill regular roles in your Navy? |
| | | Please follow the instructions across this row. Refer to the U.S. example. | | | Size | | Percentage Women | | | | | History | | | |
| | | | | | | | | | | 2000 | Information | | | | |

| | Participating Nation: | Please answer the Please describe key question(s) in the column changes, dates, outcomes related to the policy, if known. | | | | | | | | | | | | | |
|--------------------------|-----------------------|---|--|----------------------------------|--|--------------|---|---|--|--|---|---|--|--|---|
| PTIONS | В | U.S. description of key changes , dates, outcomes related to the tropolicy, if known. | | | | | | 1907; The US Navy Nurse Corps established. | 1917; The Navy authorized the enlistment of women. | 1938: The Naval Reserve Act allowed for the enlistment of qualified women as nurses. | 1942: Congress established the Navy's Women's Reserve Program, including Women's Reserve (profitality known as the "NAVES, Women Accepted for Volunteer Emergency Service). | 1947: The Amy-Navy Nurses Act (Public Law 36-80C) established the Nurse Corps as a permanent Staff Corps of the Navy and the Amy, It also authorized the permanent commissioned rank for rurses. | 1948: Wamen's Armed Services Integration Act (women could enter the U.S. Navy in regular or reserve status). | 1951: President Truman authorized the Services to involuntarily discharge women due to pregnancy or adoption of minor children. | 1959, Avria Der-Vartanian was promode to the rank of Master Chief Yeoman, making her the final temale Master Chief in the Navy, as well as the first female E9 in the entire Armod Services. |
| NAVY POLICY DESCRIPTIONS | U.S. Example | U.S. answer to question(s). | Active and Full Time Support (FTS) = (AC) and Reserve (RC): Officer Total Force: 68,394 | Enlisted Total Force: 317,866 | Navy Total Force: 382,461 | Officer: 17% | Enlisted: 18% Total: 18% | | | | | | | | 1908 |
| NAV | | ions across this row. | | | How many individuals are in your Navy? | | What percentage of your Navy is female? | | | | | | | | When did women first fill regular roles in your Navy? |
| | | Please follow the instructions across this row. Refer to the U.S. example. | | | Size | | Percentage Women | | | | | History | | | |
| | | | | | | | | | | | Information | | | | |

| | Newly drafted OPNAVINT 6000.1D will extend the adoption operational deferment length from four to six months. |
|--|--|
| Servicewomen are not authorized to provide surrogate pregnancy services. Surrogate contractual arrangements between a surrogate mother (a female DOD beneficiary) and the adoptive parent(s) and additionable between those parties and is external business retailorable between those parties and is considered Other Health Insurance (OHI) under TRCARE. Donor Egg Harvesting. More commonly referred to as "Egg Donation," for personal compensation is not authorized, due to the loss of time from official duties in order to complete the medical treatments, and due to the risk of complications. | Postpartum Operational Deferment: All postpartum Servicewomen are deferred from all transfers (e.g. PCS, TAD, TEMDU, etc.) to operational assignments for a period of 12 months following delivery. Adoption Operational Deferment: Servicewomen who place a child(ren) up for months postpartum operational deferment to support the mental health of the mother, prevent and treat postpartum depression as necessary, and allow time to return to physical fitness standards. Service member(s) who adopt a child(ren), are physical fitness standards. Service member(s) who adopt a child(ren), are dependent and deferment. Service member(s) who authorized four months operational deferment. Service deferment length fin the event a dual military four to six months. |
| What are your Navy's policies or practices related to surrogacy/egg harvesting? | What are your policies related to operational/adoption deferment? |
| Surrogacy/Egg Harvesting Policies | Operational/Adoption Deferment |
| | |

| | | | 7 | |
|------------|--|---|---|--|
| | Physical Standards (studies) | If your Navy has conducted studies to determine gender neutral physical standards, can they be made available? | way is in the process or validating gender neutral physical performance standards as part of the Women in Service Review. | |
| | Current FOGO Women (officer) | What is the number of female officers in high- ranking positions (list and separate by specialty). | There are 31 female flag officers in the Navy. | |
| Assignment | Current FOGO Women (enlisted) | What is the number of female enlisted in high- ranking positions (list and speparate by specialty). | Currently two women serve as Fleet Master Chiefs (50%), two women serve as Force Master Chiefs (11%), 48 women serve as Command Master Chiefs (10%), and three women serve as Command Senior Chiefs (6%) in squadrons, onboard ships, and on shore duty. Four female Command Master Chiefs are currently serving in Major command at-sea positions; 12 female Master Chiefs are currently serving in normative level assignment tours, which make up 10% of MCPON's Leadership Mess. | |
| | Accession Rates of Women (officers) | Average female accession rate rate over past 10 years: of female officers? How 19.55% has this changed over Percentage has steadily time? period. | Average female accession rate over past 10 years: 19.55% Percentage has steadily increased during this time period. | |
| | Accession Rates of Women (enlisted) | What is the accession rate of female enlisted? How has this changed over time? | Women comprise approximately 23% of the Navys FY14 and FY15 enlisted recruiting goals. | |
| | | | | |

| Surface Warfare Officer = 5 years after commissioning Aviator = 6-8 years after Submarine Officer = 5 years | Officer: Nurse Corps (32.89%) Enlisted: Legalman (65.97%) | Yes, for specific ratings (enlisted)/designators (officers), as well as personnel who hold critical Navy Enlisted Classification (NEC) codes. | UNK | Is there a typical path members follow in order to promote on a 'usual' collow. Officers and enlisted to promote on a 'usual' follow. Officers and enlisted to follow. Officers in each stagment, unproductive career milestones which the related policies and competitive for promotion practices. | | Each community in the Navy has different milestones, including command billets, joint tours, and other leadership opportunities. |
|---|--|---|--|--|---|---|
| List the time commitment lengths | Which career fields have the highest percentage of women? | Does your Navy offer pay bonuses for retention? | If your Navy has conducted studies on the effect of retention incentives, could the results be made available? | Is there a typical path members follow in order to promote on a 'usual' schedule? If so, will deviation result in a stagnant, unproductive career? Please describe the related policies and practices. | If there is a 'Golden Path,' and a person chooses to stray, are there fulfilling and meaningful directions they can choose to follow if they choose to remain in uniform? Please describe the related policies and practices. | Are there milestones which must be met at certain times in an officer's career? Are there options for flexibility? Please describe. |
| Occupational Commitment Requirements | Propensity of Women in Certain Career Fields | Retention Incentives (yes/no) | Retention Incentives (studies) | "Golden Path" Type Career Progression? | Ability to Choose Own Career Path? | Promotion policies/key timelines or milestones |
| | | | | Career Path & Development | | |

| Describe key transitons or changes (and dates) in your policies regarding women in the Navy. Please list and describe any other relevent policies/practices or developments not included in the included in the questionaire. Describe key transitons or change (and dates) in the Navy. The Career Interpretation and 20 per year, the abovelopments not into the Individuation of the Individu | ermission illows 20 enlisted illity to he AC and he AC and to 3 years full health | Authorized by the FY09 National Defense Authorization Act (NDAA). |
|--|--|---|
| | The second secon | 000 |

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX B. GENDER PARTICIPATION IN ROYAL AUSTRALIAN NAVY

Part 1: Overall Figures

- The overall female participation rate for the Permanent Navy (all officers and sailors in the Trained Force (TF) and Training Force (TGF)) is 18.45% as of 30 April 2014.
- The overall female officer (Midshipman [MIDN] to Rear Admiral [RADM]) participation rate is 19.86% as of 30 April 2014.
- The overall female sailor (Recruit [RCT] to Warrant Officer [WO]) participation rate is 18.00% as of April 2014.

Part 2: Breakdown by Officer Primary Qualification (PQ)

Chart 1 - Gender of Officers by PQ (Only refers to MIDN to Commander [CMDR])

- Chart 1 above includes both Trained and Training Force, but remains restricted by rank to MIDN to CMDR.
- The red-dotted line represents the average female participation rate for *all* female officers (19.86%). The yellow columns represent the female proportion of each PQ (MIDN to CMDR).
- Females represent more than 50% of the MX (Management Executive: not unlike HR), LE (Legal), DN (Dental) and NS (Nursing Sister) PQs, between 30%–50% of MLO (Maritime Logistics Officer: Supply Officer) and TS (Training Systems), between 10%–30% of ME (Mechanical Engineer), AE (Aeronautical Engineer), BD (Bandmaster), MWO (Maritime Warfare Officer—not a Warfare specialist yet

- to attain Warfare—SWO/PWO qual), NPCO (Naval Police Coxswain Officer: Military police), MA (Medical Administrator), INT (Intelligence) and MO (Medical Officer). In essence, they predominate in health and clerical vocations much the same as in Australian society generally.
- Females are severely under-represented (<10%) in WE (Weapons Electronics),
 WEA (Weapons Electronics Armament), MESM (Mechanical Engineer
 Submarines), AvWO (Aviation Warfare Officer), and Pilots.

Part 3: Breakdown by Sailor Category

Chart 2 - Gender of Sailors by Category (Only refers to RCT to CPO)

- The chart includes both Trained and Training Force, but remains restricted by rank to RCT to CPO (Chief Petty Officer).
- The red dotted line represents the average female participation rate for all female sailors (18.00%). The yellow column represents the female proportion of each Category (RCT to CPO).
- Females represent more than 50% of the ML-S (Maritime Logistics-Steward: hospitality), MED (Medical), ML-P (Maritime Logistics-Personnel) and DEN (Dental Assistant) categories, between 30%–50% of ML-SC (Maritime Logistics-Supply Chain), EW (Electronics Warfare), NPC (Naval Police Coxswain), IS (Imagery Specialist), CIS (Communication Information Specialist) and CTL (Cryptologic Linguist) categories and between 10%–30% of BM (Boatswain Mate), CSOMW (Combat Systems Operator-Mine Warfare), PT (Physical Trainer), CSO (Combat System Operator), MUSN, (Musician) ML-C (Maritime Logistics-Chef),

94

- HSO (Hydrographic System Operator) and CTS (Cryptologic Systems) categories.
- Females are severely under-represented (<10%) in A (Aircrewman), MT (Marine Technician), ET (Electronics Technician), MTSM (Marine Technician Submariner), ETSM (Electronic Technician Submariner), ATV (Aviation Technician Avionics), ATA (Aviation Technician Airframes), AWA (Acoustic Warfare Analyst), EWSM (Electronic Warfare Submariner) and AVN (Aviation Handler), and there are no female CD (Clearance Diver: similar to US Navy SEAL) sailors, although open to qualified women.
- Females predominate in Health and Clerical vocations with strong representation in Intelligence, Policing. Musicians, Logistics and IT (Information Technology) and weakening representation in a variety of Sensor Operator and Hydrographic occupations.
- They are severely under-represented in Maritime Services (e.g., BMs), Aircrewman, Submarine Sensor Operator, and all Technical trades).

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF REFERENCES

- Alfred P. Sloan Foundation. (2014). Workplace, workforce, and working families. Retrieved from http://www.sloan.org/major-program-areas/recently-completed-programs/workplace-workforce-and-working-families/
- American Psychiatric Association. (2014). Postpartum depression. Retrieved from http://www.psychiatry.org/postpartum-depression
- Appleman, R. P., & McLaughlin, P. S. (2013). *U.S. Navy officer attitudes on the repeal of "Don't Ask, Don't Tell"* (Master's thesis). Naval Postgraduate School, Monterey, CA.
- Associated Press. (2003, June 26). Sweden mulls military service for women. *AP News Archive*. Retrieved from http://www.apnewsarchive.com/2003/Sweden-Mulls-Military-Service-for-Women/id-72f8fce98600c6d37ff119c854c04794
- Associated Press. (2008, May 5). First dorms were coed, now rooms are, too. Retrieved from http://www.nbcnews.com/id/24431540/ns/us_news-education/t/first-dorms-were-coed-now-rooms-are-too/#.VIofSnsYNTs
- Aten, K. J., Eitelberg, M. J., & Smith, M. K. (2014, September). International navies' policies for women (Presentation). Naval Postgraduate School, Monterey, CA.
- Atli, A. (2014). Turkey in the First World War. Retrieved from http://www.turkeyswar.com/
- Binkin, M., & Eitelberg, M. J. (1986). Women and minorities in the AVF. In W. Bowman, R. Little, & G. T. Sicilia (Eds.), *The All-Volunteer Force after a decade* (pp. 73–102). Elmsford, NY: Pergamon-Brassey's.
- Bouldin, P. L., & Grayson, A. M. (2010). *Perceptions of sexual harassment and sexual assault: A study of gender differences among U.S. Navy officers* (Master's thesis). Naval Postgraduate School, Monterey, CA.
- Brandvold, B. B. (2013). *Recruiting and retaining women in armed forces: The cases of Canada, Sweden, and Norway* (Master's thesis). Norwegian University of Life Sciences, Ås, Norway.
- Burrelli, D. F. (2013). *Women in combat: Issues for Congress*. CRS Report for Congress. Washington, DC: Congressional Research Service.
- Callahan, G. W., & Paffenroth, J. D. (2013). *Marine Corps officers' attitudes toward the repeal of "Don't Ask, Don't Tell"* (Master's thesis). Naval Postgraduate School, Monterey, CA.

- Cameron, P., & Denniss, R. (2013). *Hard to get a break? Hours, leave and barriers to re-entering the Australian workforce* (Institute Paper No. 13). Canberra City: The Australia Institute.
- Canadian Human Rights Act, RSC 1985, c H-6. Retrieved from http://canlii.ca/t/52c3f
- Case Law Canada. *Brown v. Canadian Armed Forces*, 1989 153/CHRT. Retrieved from http://caselaw.canada.globe24h.com/0/0/federal/canadian-human-rights-tribunal/1989/02/20/brown-v-canadian-armed-forces-1989-153-chrt.shtml
- Colakoglu, Y. (1998). Recommendations of rules, regulations, and codes for managing the female officers in the Turkish Navy (Master's thesis). Naval Postgraduate School, Monterey, CA.
- Department of Defense. (2002a). *Population representation in the military services, fiscal year 2001*. Washington, DC: Office of the Under Secretary of Defense, Personnel and Readiness.
- Department of Defense. (2002b). *Career progression of minority and women officers*. Washington, DC: Office of the Under Secretary of Defense, Personnel and Readiness.
- Department of Defense. (2010). Report on the impact of deployment of members of the armed forces on their dependent children. Report to the Senate and House Committees on Armed Services Pursuant to National Defense Authorization Act for Fiscal Year 2010 Section 571.
- Department of Defense. (2012). *Population representation in the military services, fiscal year 2011*, Washington, DC: Office of the Under Secretary of Defense, Personnel and Readiness.
- Department of Defense. (2013a). *Population representation in the military services, fiscal year 2012*. Washington, DC: Office of the Under Secretary of Defense, Personnel and Readiness.
- Department of Defense. (2013b). 2012 demographics report: Profile of the military community. Washington, DC: Office of the Deputy Assistant Secretary of Defense, Military Community and Family Policy. Retrieved from http://www.militaryonesource.mil/12038/MOS/Reports/2012 Demographics Report.pdf
- Department of Defense, DoD SAPRO. (2014a). Department of Defense annual report on sexual assault in the military, fiscal year 2013. Retrieved from http://www.sapr.mil/public/docs/reports/FY13_DoD_SAPRO_Annual_Report_on_Sexual_Assault.pdf

- Department of Defense, DoD SAPRO. (2014b). Department of Defense report to the President of the United States on sexual assault prevention and response.

 Retrieved from http://www.sapr.mil/public/docs/reports/FY14_POTUS/FY14_DoD_Report_to_POTUS_Full_Report.pdf
- Department of Defense, DoD SAPRO. (2014c). Sexual assault prevention and response: Mission & history. Retrieved from http://www.sapr.mil/index.php/about/mission-and-history
- Diálogo, Digital Military Magazine. (2014-04-07). The first women of Brazil's Naval Academy. Retrieved from:

 http://prod.rmisa.gditweb.com/en_GB/articles/rmisa/photo_essay/2014/04/07/photo_essay
- Draper, R. (2014, November 30). In the company of men: Why is it so hard to prosecute sexual assaults in the military? (Cover story). *New York Times Magazine*, pp. 27–31, 50–53.
- Drennan, C. R. (2014). *Stakeholder analysis of integrating women into ground combat units* (Master's thesis). Naval Postgraduate School, Monterey, CA.
- Eitelberg, M. J. (1988). *Manpower for military occupations*. Washington, DC: Office of the Assistant Secretary of Defense, Force Management and Personnel.
- Eitelberg, M. J., & Mehay, S. L. (Eds.). (1994). *Marching toward the 21st century: Military manpower and recruiting*. Westport, CT: Greenwood Press, 1994.
- Eitelberg, M. J. (1996). The All-Volunteer Force after 20 years. In J. E. Fredland, C. L. Gilroy, R. D. Little, & W. S. Sellman (Eds.), *Professionals on the front line: Two decades of the All-Volunteer Force* (pp. 66–98). Washington, DC: Brassey's.
- Ferguson, L. (2011). *Navy and Marine Corps officers' attitudes toward the "Don't Ask, Don't Tell" policy* (Master's thesis). Naval Postgraduate School, Monterey, CA.
- Goldstein, J. S. (2001). War and gender: How gender shapes the war system and vice versa. London: Cambridge University Press.
- Karney, B. R., & Crown, J. S. (2007). Families under stress: An assessment of data, theory, and research on marriage and divorce in the military. Santa Monica, CA: RAND.
- Kocis, N. C., & Sonntag, K. J. (forthcoming). *Dual-service couples: Officer retention in the Navy and Marine Corps while trying to balance career and family* (Master's thesis). Naval Postgraduate School, Monterey, CA.
- Leeds, S. A. (1988). *Dual Navy couples: Their assignment and retention* (Master's thesis). Naval Postgraduate School, Monterey, CA.

- Losey, S. (2014, May 15). Air Force to offer 3 years off for airmen to start families. *Air Force Times*. Retrieved from http://archive.airforcetimes.com/article/20140515/CAREERS/305150044/AirForce-offer-3-years-off-airmen-start-families
- National Science Foundation, National Center for Science and Engineering Statistics. (2013). *Women, minorities, and persons with disabilities in science and engineering:* 2013 (Special Report NSF 13-304). Arlington, VA. Retrieved from http://www.nsf.gov/statistics/wmpd/
- Navy Personnel Command, SAPR. (2014). Navy sexual assault prevention and response (SAPR) program. Our mission. Our vision. Retrieved from http://www.public.navy.mil/bupers-npc/support/21st_century_sailor/sapr/Pages/default2.aspx
- Navy Personnel Research, Studies, and Technology (NPRST). (2011). 2010 Navy pregnancy and parenthood survey. Millington, TN: Author.
- Navy-PRT.com (2014). The complete online resource for your Navy physical fitness test needs. Retrieved from http://www.navy-prt.com/
- Norway's military conscription becomes gender neutral. (2014, October 14). *Deutsche Welle*. Retrieved from http://www.dw.de/norways-military-conscription-becomes-gender-neutral/a-17995882
- Oberlin College. (2008). 175th anniversary of Oberlin College and the City of Oberlin: 1833–2008 An intimate campus revolution. Retrieved from http://oberlin.edu/175/didyouknow-coed.html
- Office of the Chief of Naval Operations, Office of Women's Policy (OPNAV 134W). (2013, September 23). "International navies' policies for women," Statement of Work.
- OPNAV Office of Diversity and Inclusion (N134). (2014, June 2) Life-work balance. Unclassified Briefing. Retrieved from http://www.public.navy.mil/BUPERS-NPC/SUPPORT/21ST_CENTURY_SAILOR/TFLW/Pages/default.aspx
- RAND National Defense Research Institute. (2014). Sexual assault and sexual harassment in the military. (Top-line estimates for active-duty service members from the 2014 RAND military workplace study). Retrieved from http://www.rand.org/pubs/research_reports/RR870.html
- Ryan, S. L. (2014). Analysis of the pull-up requirement in the U.S. Marine Corps physical fitness test for female Marines (Master's thesis). Naval Postgraduate School, Monterey, CA.

- Sackett, P. R., Eitelberg, M. J., & Sellman, W. S. (2010). *Profiles of American youth: Generational changes in cognitive ability*. Alexandria, VA: Human Resources Research Organization.
- Seck, H. H. (2014a, July 3). Marines delay female pull-up requirement again, this time until end of 2015. *Marine Corps Times*. Retrieved from http://archive.marinecorpstimes.com/article/20140703/NEWS/307030068/Marines-delay-female-pullup-requirement-again-time-until-end-2015
- Seck, H. H. (2014b, July 23). Few takers in first year of Marine career sabbatical program. *Marine Corps Times*. Retrieved from http://archive.marinecorpstimes.com/article/20140723/CAREERS02/307230049/Few-takers-first-year-Marine-career-sabbatical-program
- Sloan Center on Aging and Work, Boston College. (n.d.). Why employees need workplace flexibility. Retrieved from http://workplaceflexibility.bc.edu/need/need_employees
- Starr, B. (2014, December 4). Submarine investigation under way after female officers filmed. *Cable News Network (CNN)*. Retrieved from http://www.cnn.com/2014/12/04/politics/navy-submarine-investigation/
- Strategy Page. (2012, May 18). Submarines: Women join the crews of U.S. boats. Retrieved from http://www.strategypage.com/htmw/htsub/20120518.aspx
- Suter, D. J. (1979). *The two-career family in the Navy* (Master's thesis). Naval Postgraduate School, Monterey, CA.
- The Technical Cooperation Program (TTCP). (2007). A beginner's guide to The Technical Cooperation Program—TTCP '101' (DOC-SEC-01-2007). Retrieved from http://www.acq.osd.mil/ttcp/guidance/documents/TTCP_101.pdf
- Thie, H. J., Harrell, M. C., & Thibault, M. (2003). *Officer sabbaticals: Analysis of extended leave options*. Santa Monica, CA: RAND.
- UCLA. (2014). Dykstra Hall: First residence hall on the UCLA hill! Retrieved from https://reslife.ucla.edu/dykstra
- USMC Female PFT. (2014). Retrieved from https://fitness.usmc.mil/fpft/default.aspx
- Vance, A. R. (forthcoming). *Life-work balance and retention of female surface warfare officers in the US Navy* (Master's thesis). Naval Postgraduate School, Monterey, CA.
- Wallace, E. A., & Rose, K. C. *Divorce and family support services: Problems and prospects for the U.S. Navy* (Master's thesis). Naval Postgraduate School, Monterey, CA.

Yardley, R. J., Thie, H. J., Brancato, K, & Abbott, M. (2004). *An analysis of sabbatical leaves for Navy surface warfare officers* (DB-418-NAVY). Santa Monica, CA: RAND.

INITIAL DISTRIBUTION LIST

- Defense Technical Information Center 8725 John J. Kingman Rd.
 Ft. Belvoir, VA 22060-6218
- 2. Dudley Knox Library Naval Postgraduate School Monterey, CA 93943
- 3. Research Sponsored Programs Office, Code 41 Naval Postgraduate School Monterey, CA 93943
- Office of Women's Policy (OPNAV N134W)
 Office of Naval Personnel
 701 South Courthouse Road (Bldg. 12, Rm. 3R180)
 Arlington, VA 22204
- Dr. Kathryn J. Aten
 Graduate School of Business and Public Policy
 Naval Postgraduate School
 Monterey, CA 93943
- 6. Dr. Mark J. Eitelberg
 Graduate School of Business and Public Policy
 Naval Postgraduate School
 Monterey, CA 93943
- 7. Captain Michael K. Smith, AM, RANR Graduate School of Business and Public Policy Naval Postgraduate School Monterey, CA 93943