Military Leadership Diversity Commission Decision Paper #2: Branching and Assignments



February 2011

MLDC decision papers present the Commission-approved, subcommittee-specific recommendations. These recommendations are the product not only of the logic and evidence presented in the decision papers but also the values and judgments of the Commissioners. Legally imposed time constraints naturally limited the Commission's ability to undertake extensive research. Thus, the decision papers present the evidence that was available and that could be collected during the discovery phase of the Commission. The decision papers were reviewed by subject-matter experts external to the Commission.

CONTENTS

Introduction1
Charter Tasks and Strategy1
Commission-Approved Recommendations Related to Branching and Assignments
Organization of This Paper
Key Career Fields, Key Assignments, and Their Relationships to Demographic Diversity
and Rank4
Officer Occupations and Demographic Diversity
Key Assignments and Demographic Diversity
Command Assignments and Demographic Diversity
Partian Hindowing the Advancement of Warman and Minaritian 10
Barriers Hindering the Advancement of Women and Minorities
Barriers Keeping Minorities and Women from Entering Tactical/Operational Career Fields
Barriers Keeping Minorities and Women from Serving in Key Assignments
Combat Exclusion Foncies in More Detail
Career Facilitators: Mentoring Programs and Other Career Development Resources32
Mentoring Programs
The Services' Career Development Resources
Recommendations and Conclusion
Recommendations
Conclusion
Appendix A: Initial Officer Assignments in the Coast Guard, Marine Corps, and Navy 48
Appendix B: Background Information on Mentoring Relationships and Demographic
Diversity
References

INTRODUCTION

In the military's closed personnel system, the racial, ethnic, and gender diversity of leadership depends on the racial, ethnic, and gender diversity of accessions and on the subsequent relative career progression rates of members of each demographic group. For a given level of diversity among accessions, if women and racial and ethnic minorities progress at lower rates than white men, they will be underrepresented in the top ranks. To better understand the drivers of career progression, and, hence, the racial, ethnic, and gender profiles of senior leadership, the Military Leadership Diversity Commission (MLDC) created a subcommittee tasked with exploring the role that branching and assignments play in determining likely promotion opportunities for whites and minorities and for men and women.

This decision paper describes the work of the Branching and Assignments Subcommittee and provides the facts, assumptions, and opinions that helped the Commission develop its branching and assignment recommendations.

Charter Tasks and Strategy

The Branching and Assignments Subcommittee addressed two charter tasks, paraphrased here:

- Assess the precommand billet assignments of officers by race and ethnicity.
- Examine command selection for officers of particular ethnicities.

The first charter task focuses on assignments prior to command, whereas the second charter task focuses on command selection and assignments. Although these charter tasks explicitly address the race and ethnicity of officers, the Commission directed the subcommittee to examine gender issues and issues for enlisted personnel as well.

Based on these two charter tasks, the Branching and Assignments Subcommittee mapped out four areas of investigation to delineate its work:

- *Key career fields and assignments*. The subcommittee examined the relationship between racial, ethnic, and gender diversity and assignment to both career fields and specific jobs or billets, particularly those that could be called "key" to advancement. The subcommittee defined key assignments as those assignments that are recognized to be especially demanding, have high visibility, or provide competitive advantage for advancement to senior leadership. Key career fields are those that have been historically linked to senior leadership.
- *Command selection.* The subcommittee studied the command selection process and racial, ethnic, and gender differences in command selection opportunities and rates.
- *Career barriers.* The subcommittee investigated whether there are institutional barriers that may inhibit women and minorities from entering some career fields and specialties or from being selected for command assignments.¹

¹ For its purposes, the Commission has defined a career barrier as an organizational policy, principle, or practice that limits or tends to limit employment opportunities for members of particular groups (e.g., sex, race, or ethnic background). Later sections of this decision paper will define two important types of barriers—perceptual and structural—and describe how they affect branching and assignments for women and minorities.

• *Career facilitators*. The subcommittee examined access to and quality of mentoring, career counseling, and other career development resources in the Services. This topic extends beyond the charter tasks to focus on tools used by the Services to help servicemembers advance in their careers.

Commission-Approved Recommendations Related to Branching and Assignments²

Evidence from the Branching and Assignments Subcommittee's work indicates that aspects of the branching and assignment process constitute barriers to advancement for minority and female servicemembers, especially officers. The Commission approved the following recommendations to remove the barriers:

Recommendation 1—

To assess demographic diversity patterns across the military lifecycle, the Secretary of Defense shall hold annual accountability reviews with the individual Service secretaries, Service chiefs, and Chief, National Guard Bureau. The Coast Guard should be subject to a similar review.

Recommendation 2—

DoD [The Department of Defense] and the Services should eliminate the "combat exclusion policies" for women, including the removal of barriers and inconsistencies, to create a level playing field for all qualified servicemembers. The Commission recommends a time-phased approach:

- a. Women in career fields/specialties currently open to them should be immediately able to be assigned to any unit that requires that career field/specialty, consistent with the current operational environment.
- b. DoD and the Services should take deliberate steps in a phased approach to open additional career fields and units involved in "direct ground combat" to qualified women.
- c. DoD and the Services should report to Congress the process and timeline for removing barriers that inhibit women from achieving senior leadership positions.

² The recommendations discussed in this decision paper are the Commission-approved, topic-specific recommendations that resulted from the Commission's understanding and interpretation of the findings from this subcommittee. Following the approval of all of the subcommittee-specific recommendations, the Commission developed its final recommendations by combining recommendations across subcommittees to reduce overlap and repetition. Therefore, the recommendations presented in this paper do not map directly to the recommendations presented in the Commission's forthcoming final report.

Recommendation 3—

The Services should ensure their career development programs and resources enhance servicemembers' knowledge of career choices, including Reserve Component opportunities, to optimize the ability of servicemembers to make informed career choices from accession to retirement.

- a. Mentoring and career counseling efforts shall start prior to the initial career field decision point and continue throughout the servicemember's career.
- b. Mentoring programs shall follow effective practices and employ an active line of communication between protégé and mentor.

Underlying Assumptions

The recommendations listed above are based on the following underlying assumptions:

- The current set of tactical/operational career fields and specialties that have been historically linked to advancement to senior leadership in the Services will continue to be linked to advancement to senior leadership.
- A list of all potential barriers that may limit women's and racial and ethnic minorities' access to key career fields and assignments is not available.
 - Barriers can change over time and will vary across Services and career fields/specialties because of different and changing policies, cultures, and operating environments.
 - The Services and DoD will have to identify barriers that apply to specific Services, career fields/specialties, and assignments and continually evaluate and respond to them.
- Removing restrictions for women to serve in formal combat roles will eventually lead to increased female representation in higher military ranks, particularly in the officer corps.
- Mentoring and career counseling can help servicemembers make informed career choices.
 - High-quality mentoring and career counseling will likely increase the number of women and racial and ethnic minorities choosing tactical/operational career fields and key assignments.
 - High-quality mentoring and career counseling is equally beneficial to all servicemembers who use it.

Organization of This Paper

This decision paper begins with a review of two relationships that affect the advancement of women and minorities to the senior ranks of military leadership. The first is the relationship between advancement and career fields and assignments, and the second is the relationship between career fields and assignments and demographics. Next, this paper discusses barriers to the advancement of women and minorities, followed by a discussion of two career facilitators provided by the Services mentoring programs and career development resources. The last section of the paper is organized around the three Commission recommendations related to branching and assignments. These discussions include the reasoning behind each recommendation, including how it is supported by the empirical evidence presented in the earlier sections.

KEY CAREER FIELDS, KEY ASSIGNMENTS, AND THEIR RELATIONSHIPS TO DEMOGRAPHIC DIVERSITY AND RANK

To address questions concerned with key career fields and assignments, the Branching and Assignments Subcommittee explored the relationship between occupational areas and demographic diversity in the enlisted and officer corps.³ Specifically, the subcommittee considered the following questions:

- Does demographic composition differ across enlisted occupations?
- Does demographic composition differ across officer occupations?
- Are key assignments related to the demographic composition of leadership?
- Are command assignments related to demographic composition of leadership?

This section presents the subcommittee's answers to these questions for the officer corps because it was the results for officers that primarily drove the Commission's branching and assignments recommendations. In particular, the subcommittee found that occupational assignment is an important factor in explaining race, ethnicity, and gender representation in the higher officer pay grades but not in higher enlisted pay grades.⁴ See Issue Paper #15 for details of the investigation for the enlisted community.

Officer Occupations and Demographic Diversity

This subsection summarizes the analysis reported in Issue Paper #23, which examined the representation of different race, ethnicity, and gender groups across different officer pay grades and across tactical/operational and nontactical/nonoperational occupational areas.

Data Sources and Definitions

The data for this analysis were provided by the Defense Manpower Data Center (DMDC) and came from the December 2008 extract of the dataset known as WEX/DEERS.⁵ The analysis does not include the Coast Guard because DMDC personnel data for the Coast Guard were not available.

To facilitate inter-Service comparisons, the occupation definitions used here are based on DoD's occupational-classification system. Specifically, DoD defines tactical occupations to include all pilots, officers in occupations directly involving ground or naval arms, ballistic-missile system officers, and combat and operations staff officers. The fact that some staff officers may not have originated in tactical occupations creates a potential for misclassification of flag/general officers (i.e., officers in the

³ For ease of exposition, unless otherwise specified, demographic diversity is used as a synonym for racial, ethnic, and gender diversity throughout this decision paper.

⁴ The available data, however, did not allow for an examination of enlisted occupational patterns over time or for a detailed search for patterns within occupational areas. For example, demographic patterns for special operations forces (SOF) may exist, but in the dataset used in the analysis, SOF were subsumed under the infantry, gun crews, and seamanship occupational categories. The subcommittee hopes that future studies will examine these complex issues for enlisted occupations and demographic diversity.

⁵ WEX refers to the Work Experience File, which is generated from DMDC's Active Duty Military Personnel Master File; DEERS refers to Defense Enrollment Eligibility Reporting System, which serves as a central DoD repository of personnel and medical data.

O-7 through O-10 pay grades). To address this problem, flag/general officers were classified as having come from tactical occupations if they held tactical occupations before reaching the grade of O-6. In addition, the source data included Service occupation codes, which were useful in checking whether officers were properly classified as coming from tactical occupations.

Finally, race and ethnicity are based on self-reported data. As explained in Issue Paper #1, the five, mutually exclusive race and ethnicity groups used by the Commission are:

- white non-Hispanic
- black non-Hispanic
- Asian non-Hispanic
- other non-Hispanic (includes American Indians, Pacific Islanders, Alaska natives, and "more than one race")
- Hispanic.

Because these categories are mutually exclusive, each person is counted only once. For instance, if a servicemember reports being both black and Hispanic, he or she would be included in the Hispanic category but not in the black category. (Throughout the text, these category names are abbreviated. For example, non-Hispanic white and black servicemembers are referred to as white and black, respectively.) However, not all Services report their data this way. Thus, some of the data presented here may look different from data presented by the Services.

Career Field and Rank: A Majority of Flag/General Officers Come from Tactical/Operational Backgrounds

In each Service of the U.S. military, flag/general officers tend to come from the subset of occupations most closely linked to the Service's overall mission. In the Army and the Marine Corps, general officers tend to come from the combat occupations (e.g., infantry). In the Air Force, general officers are most often pilots by trade. In the Navy, most flag officers come from the unrestricted line communities (e.g., surface warfare). This emphasis on the core-mission occupations shapes the senior billet structures in all the Services, which, in turn, shape the occupational profiles of officers in the Services' senior ranks.⁶

Figures 1 and 2 illustrate this institutional feature of the U.S. military. First, Figure 1 shows that, in 2008, a majority (over 60 percent) of flag/general officers across the four DoD Services came from these tactical/operational career fields. The figure also shows that, compared with O-3 officers, the flag/general officers were more concentrated in tactical/operational occupations. Second, Figure 2 shows that, even among the flag/general officers, the fraction of officers from tactical/operational occupations increased with rank. Together, these patterns suggest that, in general, flag/general officers are disproportionately drawn from tactical/operational occupations; overall, it is clear that the highest levels of military leadership tend to be populated by officers with tactical/operational backgrounds.

⁶ This emphasis does not shape the senior enlisted billet structure to the same extent that it shapes the senior officer billet structure; this is one reason that occupational assignment is less of a factor in shaping the demographics of senior leadership.

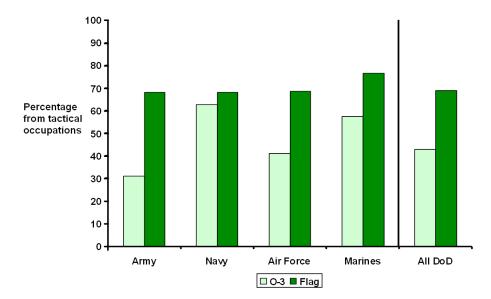
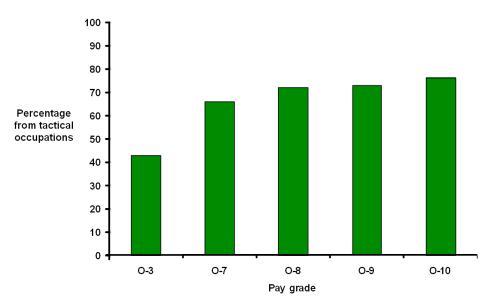


Figure 1. Percentage of Officers in Tactical/Operational Occupations, December 2008

SOURCE: Defense Manpower Data Center, 2008.



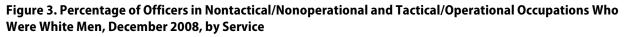


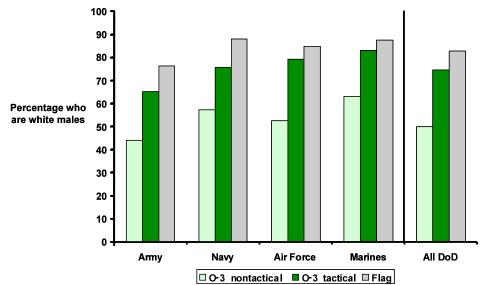
SOURCE: Defense Manpower Data Center, 2008.

Career Field and Demographics: Tactical/Operational Occupations Have High Concentrations of White Men

The finding that a majority of those in the flag/general officer corps had backgrounds in tactical/operational career fields matters for demographic diversity because, compared with other occupations, tactical/operational occupations tend to have higher concentrations of white men. As an example, Figure 3 shows the percentage of tactical/operational and nontactical/nonoperational

officers in pay grade O-3 who are white men. (For reference, it also shows the percentage of white men among all flag officers.) Even at the O-3 level, 75 percent of all officers in tactical/operational occupations are white men, compared with 50 percent of the officers in nontactical/nonoperational occupations. To be sure, the demographics of recent flag officers depend on the demographics of their own cohorts and not on the demographics of officers recently at the O-3 level. Nonetheless, Figure 3 demonstrates that the tendency of tactical/operational occupations to contain higher fractions of white men persists.⁷





SOURCE: Defense Manpower Data Center, 2009.

Demographic Characteristics and Career Field Backgrounds of Recently Selected Flag Officers

To confirm that the relationships between career field, demographics, and rank hold in more-recent data, the subcommittee asked each Service to provide the primary career field backgrounds and demographic characteristics of officers who recently became flag/general officers (i.e., were selected to the O-7 pay grade). Because of the small size of its flag corps, the Coast Guard provided profiles for all flag officers. The responses from all the Services are shown in Table 1.

⁷ According to information provided to the Commission by the Coast Guard, a majority of tactical/operational (i.e., mission execution) positions are currently filled by white male officers (about 71 percent). However, the same can be said of nontactical/nonoperational (i.e., mission support) positions, which are largely held by white male officers (about 70 percent).

Officer Characteristic	Air Force	Army	Coast Guard	Marine Corps	Navy
Demographic					
Male	90%	97%	88%	100%	97%
White non-Hispanic	93%	82%	92%	90%	94%
Career field background					
Tactical/operational	62%	70%	48%	70%	76%
Nontactical/nonoperational	38%	30%	52%	30%	24%

Table 1. Demographic Characteristics and Career Field Backgrounds of FY 2009 and FY 2010 O-7 Board Selectees from the Four DoD Services and of FY 2010 O-7 Through O-10 Officers from the Coast Guard

NOTES: Air Force data are based on 29 officers selected to O-7 in FY 2010. Army data are based on 39 Active Competitive Category officers selected to O-7 in FY 2009. Coast Guard data are based on ALL 52 officers in the O-7 through O-10 pay grades as of FY 2010. Marine Corps data are based on 10 officers selected to O-7 in FY 2009. Navy data are based on 34 officers selected to O-7 in FY 2009.

The data in Table 1 show that recent O-7 selectees for the four DoD Services were predominately white and male and came predominately from tactical/operational occupations, indicating that the patterns from the 2008 snapshots continue to hold. The Coast Guard's flag officers were demographically similar to the DoD flag officers—both the recent O-7 selectees and all flag officers from the 2010 snapshot—but they came in almost equal proportions from tactical/operational (i.e., mission execution) and nontactical/nonoperational (i.e., mission support) career fields.

Thus, to the degree that officers from the tactical/operational sector continue to have better career prospects in the U.S. military, racial, ethnic, and gender diversity in senior leadership ranks will be limited by the demographic composition of tactical/operational occupations.

Key Assignments and Demographic Diversity

As seen in the previous section, the racial, ethnic, and gender composition of the senior leadership in the officer corps is greatly affected by the racial, ethnic, and gender composition of career fields and specialties. This subsection shows that the types of assignments that officers choose and/or are given once they enter their career fields can also have an impact. Indeed, the two Commission charter tasks that the Branching and Assignments Subcommittee was asked to address were on the relationship between race and ethnicity and officer assignments, both precommand billet assignments and command. To begin the examination into this important issue, the subcommittee focused on *key assignments*, which it defined as those assignments that are recognized to be especially demanding, have high visibility, and provide competitive advantage for advancement.

The subcommittee took a three-pronged approach to gathering information about the relationship between key assignments and demographic diversity. First, the subcommittee asked other Commissioners whether they could provide information about the key assignments in their respective Services. Commissioners representing the Air Force (three Commissioners), the Army (three Commissioners), the Marine Corps (two Commissioners), and the Navy (one Commissioner) provided information about key assignments.⁸ Second, the subcommittee asked the Services to provide information about key assignments in their briefings to the Commission. Third, the subcommittee held a day of meetings with Service representatives to ask questions about key

⁸ Note, however, that Commissioners' responses were based on their personal experiences and knowledge about key assignments and, thus, do not include all possible key assignments in their Services.

assignments as they relate to issues of racial, ethnic, and gender diversity. The main finding from the subcommittee's investigation is that the Services do not collect information about racial, ethnic, and gender patterns in key assignments in any systematic way. The specifics of what the subcommittee found on this topic are described in the following subsections.

It is also possible that assignments could be related to the demographic diversity of senior enlisted personnel. However, according to the information provided by Commissioners and Service representatives to the Commission, there are very few, if any, key assignments for enlisted personnel. The reason lies with how enlisted personnel are promoted. Unlike officers, enlisted personnel rarely compete for promotion across specialties (e.g., rating in the Navy and military occupational specialty in the Army and Marine Corps). Instead, enlisted personnel are promoted within their specialties based on a ranking system that includes some composite of time factors (e.g., time in grade, time in service), test scores, medals and awards, and performance ratings. Thus, the type of assignment held by an enlisted member does not readily factor into promotion outcomes. For most of the Services, differentiation across enlisted assignments only begins to matter to some degree in senior enlisted pay grades (i.e., E-7 through E-9).⁹ Given that enlisted assignments are not ready designators for promotion prior to senior enlisted ranks, and given the lack of significant demographic patterns across occupational areas by pay grades, the subcommittee did not focus on the issue of key assignments for the enlisted corps.

Definitions of Key Assignments by Service

The nine Commissioners who responded to the request about key assignments largely agreed with the subcommittee's definition and believed that it fit with their understanding of key assignments. Commissioners from the Army and the Marine Corps were more likely to note that there are now more cases in which some key assignments that had once been critical for officer advancement are no longer as critical because of the current conflicts in the Middle East. For example, a Commissioner from the Marine Corps stated that performing well as an advisor overseas in lieu of having a command assignment at the O-5 pay grade could be a designator for promotion to the O-6 pay grade in his Service. Furthermore, many of the Commissioners and Service representatives to the Commission stated that serving in leadership or other important positions in Iraq or Afghanistan has become a designator for officer promotion. The changing nature of what is considered "key" for officer advancement (besides the obvious performance requirements) was cited by some Service representatives as fitting with the "bloom where planted" concept, which means to perform well in any assignment, particularly if it is not within one's notional career path.

Although most of the Commissioners and Service representatives understood the subcommittee's definition of *key assignments*, the Services do not define key assignments (or key billets) as broadly as the subcommittee. Specifically, the Services tend to define key assignments by branch/community and even by career field specialty. For example, the Army breaks the concept of *key assignment* into two parts: *key developmental position* and *key billet*. In the Army, a key developmental position is "deemed fundamental to the development of an officer in his or her core branch or functional area competencies or deemed critical by the senior Army leadership to provide experience across the

⁹ The Air Force appears to have the earliest differentiation, such that enlisted personnel can become first sergeants at the E-7 pay grade. For the Army and Marine Corps, this differentiation largely begins at the E-8 pay grade, which is when Army and Marine Corps enlisted personnel can become first sergeants. However, Army and Marine Corps Commissioners cited some types of assignments that are important prior to the E-8 pay grade, such as recruiter in the Marine Corps and platoon sergeant in the Army. For the Navy and Coast Guard, differentiation is primarily found at the E-9 pay grade with the command master chief designation.

Army's strategic mission," whereas a key billet is a "duty assignment at the lieutenant colonel or colonel rank requiring specific, highly developed skills and experience that is deemed so critical to a unit's mission that an officer is selected for assignment by Headquarters Department of the Army" (U.S. Department of the Army, 2010, p. 14). The Services' focus on assignments *within* branches/communities/career fields makes it difficult to provide a detailed map of all key assignments across all branches/communities/career fields.

Common Themes for Key Assignments

Although none of the Services has "a checklist of assignments required for promotion from one grade to the next," each Service branch/community/career field has "a notional career path comprising work and educational assignments that will make a due-course officer effective and credible" (Schirmer et al., 2006, p. 32). These notional career paths are largely what guided the Commissioners and Service representatives when they provided lists of key assignments. For example, the Army's November 2009 briefing to the Commission and the Navy's March 2010 briefing to the Commission provided lists of key assignments that were largely based on notional career paths for officers in tactical/operational career fields (i.e., combat arms fields—now called maneuver, fire, and effects—for the Army and the unrestricted line for the Navy). Particularly in the Army and the Marine Corps, certain key assignments are not open to women because they are classified as involving "direct offensive ground combat" (Issue Paper #23 and Issue Paper #56).

According to information provided by the nine Commissioners and by the Service representatives who attended the key assignment meetings with the subcommittee, there are some common themes in key assignments across the Services. For officer key assignments, the subcommittee discovered the following themes:

- All of the Services identified *command assignments* as key for officer advancement. Command assignments include the command of squadrons, ships, or installations and are critical to building leadership credibility. In the Army and the Marine Corps, command assignments are important earlier in an officer's career than they are in the Air Force, the Coast Guard, and the Navy. That is, in the Army and the Marine Corps, officers (particularly in tactical/operational career fields) should have company commands as captains (i.e., at the O-3 pay grade). In the Air Force, the Coast Guard, and the Navy, major command opportunities come later, usually at the O-5 pay grade. However, in the Air Force, officers in nonrated (i.e., nontactical/nonoperational) career fields have command assignments earlier in their careers than do officers in rated career fields. According to figures provided to the Commission by the Air Force, about 93 percent of Air Force majors (i.e., officers at the O-4 pay grade) in nonrated career fields are currently in command assignments, compared with only about 7 percent of majors in rated career fields.
- Most Services stress that officers should become experts in their career fields and specialties and pursue developmental leadership and staff assignments *prior to command*:
 - Coast Guard officers usually complete two tours for a certain specialty within their first three tours in order to establish themselves in their specialty. Also, Coast Guard officers often earn graduate degrees prior to making O-5 command.¹⁰

¹⁰ We were unable to gather more information on Coast Guard key assignments because of time constraints.

- In the Marine Corps, officers in tactical/operational occupations are expected to serve in leadership positions, such as platoon leader, prior to making company command as a captain.
- In the Army, leadership positions similar to those in the Marine Corps and certain Army staff positions, such as aide-de-camp, are important for company grade officers, who generally command as captains.
- In the Navy, being a flag lieutenant or aide at the O-3 pay grade is important, and completing certain educational milestones prior to O-5 command is important.
- In the Air Force, pilots complete a number of assignments and meet different training and educational milestones prior to competing for command. For example, pilots in the O-1 through O-3 pay grades (i.e., company grade) would be expected to serve as instructor pilots or flight examiners, succeed at Fighter Weapons School, and serve as squadron tactics or squadron weapons officers. In the late O-3 through O-4 pay grades, Air Force pilots are expected to complete in-residence Intermediate Development Education, complete another staff assignment, have another cockpit assignment (e.g., operations officer in a squadron), and compete for in-residence slots at the War College or other Senior Developmental Education.
- Officers are expected to meet certain educational milestones, primarily in terms of professional military education and getting advanced degrees.
- Executive officers or executive assistants to flag/general officers (especially 3- and 4-star flag/general officers), chiefs of staff, or similar staff positions at the Pentagon, major commands, and Service headquarters are key assignments. These types of positions are usually held at the O-6 pay grade.
- Completing joint assignments is required by law for officers who desire to be promoted to flag/general officer. Joint assignments at strategic locations, such as major commands and the Pentagon, tend to provide greater visibility than other joint assignments.

Of course, there are differences across the Services in some of the types of key assignments for officers. For example, only the Marine Corps and Army Commissioners and representatives listed leadership positions (e.g., command) at recruiting locations to be important for officers. Also, according to information provided to the Commission by the Air Force, Air Force officers tend to complete joint-qualified assignments later than Marine Corps and Army officers. Other assignments that appear to be unique to specific Services include inspector/instructor (Marine Corps), advisor overseas (Marine Corps), leadership positions at the Personnel Services Center (Coast Guard), Combat Training Center observer/controller (Army), and instructor pilot (Air Force). Despite these differences, the Services generally emphasize that as officers progress through their careers, they should take on assignments with more leadership responsibilities, complete joint assignments, and meet certain educational milestones.

Demographic Characteristics and Assignment Histories of Recently Selected Flag Officers

The Services had difficulty providing racial, ethnic, and gender breakdowns for all key assignments. In general, the problem appears to be that the demographic information for key assignments is not collected and tracked in a systematic way. For example, one Service representative reported that

information on the demographic characteristics of personnel in key assignments was not accessible because the information is not recorded in a single database.

Because the Services had difficulty providing demographic information about all key assignments, the subcommittee asked each Service to provide key assignment histories, including information on primary career field backgrounds and demographic characteristics, of recently selected flag officers. These assignment histories are summarized by Service in Table 2, which references the same officers described in Table 1 with one exception—the Navy did not provide key assignment information about the eight restricted line (i.e., nontactical/nonoperational) officers selected to O-7 in FY 2009.

Table 2. Key Assignment Histories, Career Field Backgrounds, and Demographic Characteristics of FY 2009 and FY 2010 O-7 Board Selectees from the Four DoD Services and of FY 2010 O-7 through O-10 officers from the Coast Guard

Officer Characteristics	Number
Air Force ($N = 29$ officers selected to brigadier general in FY 2010)	
Gender	
Male	26
Female	3
Race and ethnicity	
White non-Hispanic	27
Black non-Hispanic	0
Hispanic	1
Asian non-Hispanic	0
Other non-Hispanic	1
Career field background	
Rated (i.e., pilot, air battle manager, combat systems officer)	18
Nonrated	11
Pre-flag/general officer assignments	
Intermediate Developmental Education, in residence—Service	16
Intermediate Developmental Education, in residence—Joint	10
Squadron/detachment command	28
Group command	17
Wing command	28
Senior Developmental Education (War College level), in residence—Service	9
Senior Developmental Education (War College level), in residence—Joint	14
Military assistant	7
Executive officer (XO)	10
Fellow (e.g., White House fellow, National Defense fellow)	6
Below-the-zone promotion at least once in career	26
At least one deployment in career	18

Officer Characteristics	Number
Army ($N = 39$ ACC officers selected to brigadier general in FY 2009)	
Gender	
Male	38
Female	1
Race and ethnicity	
White non-Hispanic	32
Black non-Hispanic	5
Hispanic	0
Asian non-Hispanic	2
Other non-Hispanic	0
Career field background	
Maneuver, fire, and effects	28
Operational support	4
Force sustainment	7
Pre-flag/general officer assignments	
Aide-de-camp	10
Battalion operations officer	18
Battalion XO	16
Brigade	8
Brigade XO	11
Battalion command	33
Brigade command	33
Division XO	4
Headquarters Department of the Army XO	10
Served in Operation Desert Shield	13
Deployed in Operation Iraqi Freedom/Operation Enduring Freedom	33
Coast Guard ($N = 52$ officers in O-7 through O-10 pay grades as of FY 2010)	
Gender	
Male	46
Female	6
Race and ethnicity	
White non-Hispanic	48
Black non-Hispanic	1
Hispanic	3
Asian non-Hispanic	0
Other non-Hispanic	0

Officer Characteristics	Number
Mission execution	25
Mission support	27
Pre–flag/general officer assignments	
O-5 command/O-6 command	47
Department head/precommand assignment	41
Advanced degree (master's or doctorate)	49
Senior Service School/Senior Service Group	30
Assistant Commandant for Resources Directorate (CG-8)	11
Personnel Service Center (officer personnel management or enlisted personnel management)	7
Special assignment (e.g., Congressional Affairs, White House, flag aide) or chief of staff assignment	41
Marine Corps ($N = 10$ officers selected to brigadier general in FY 2009)	
Gender	
Male	10
Female	0
Race and ethnicity	
White non-Hispanic	9
Black non-Hispanic	0
Hispanic	1
Asian non-Hispanic	0
Other non-Hispanic	0
Career field background	
Ground combat element	4
Ground combat support	2
Aviation	3
Aviation support	1
Pre–flag/general officer assignments	
Platoon command	7
Leadership position at supporting-establishment billet (e.g., recruiting)	2
Company command	6
Maintenance officer, squadron maintenance officer, or squadron XO (aviators only)	3
Battalion staff (e.g., XO)	7
Battalion command	10
Inspectors/instructors	0
Advisor overseas	3
Headquarters Marine Corps or Division staff (e.g., XO)	9
Regiment or Marine Expeditionary Unit command; Marine Air Group command (aviators)	9
CO at Marine Barracks, OCS, The Basic School, Naval Academy, etc.	1

Officer Characteristics	Number
Attended Naval War College	8
Joint positions at U.S. major commands (e.g., U.S. Central Command, U.S. European Command, U.S. Joint Forces Command)	7
Joint positions at Marine Corps locations (e.g., HQMC)	2
Navy ($N = 26$ URL officers selected to rear admiral lower half in FY 2009)	
Gender	
Male	26
Female	0
Race and ethnicity	
White non-Hispanic	25
Black non-Hispanic	1
Hispanic	0
Asian non-Hispanic	0
Other non-Hispanic	0
Career field background	
Aviation	10
Submarine	5
Surface warfare	9
Special warfare (e.g., Navy SEAL)	2
Pre-flag/general officer assignments	
Graduate degree	22
Flag lieutenant/aide	2
O-5 command	26
Chief of staff	6
(Deputy) Executive assistant to flag officer	9
Major command (i.e., command at O-6)	26
Joint tour at O-6	18
Washington, D.C., tour (e.g., Pentagon) within last two tours	18
Other staff assignment (e.g., Finance/Strategy, Legislative Fellow)	20

NOTES: ACC = active competitive category. CO = commanding officer. HQMC = Headquarters Marine Corps. OCS = Officer Candidate School. SEAL = Sea, Air, Land. URL = unrestricted line. The numbers for the assignments do not add up to the total number of officers in the relevant sample. The numbers for the assignments represent how many of the officers in that sample had that type of assignment. For example, in the Navy sample, of the 22 officers who have graduate degrees, it is not clear how many had joint tours at the O-6 pay grade.

The data in Table 2 show that some of the common themes in key assignments that were identified by Commissioners and Service representatives can be found in the assignment histories of recently selected flag/general officers in the Air Force, the Army, the Marine Corps, and the Navy and of the current flag corps of the Coast Guard. The main similarity across Services is that most of

the flag/general officers had command assignments prior to making flag/general officer. Another similarity across most of the Services is that these officers completed certain educational milestones, such as receiving a graduate degree or completing in-residence professional military education.¹¹ Likewise, three of the Services noted that many of their recently selected brigadier generals had been deployed, most likely to the Middle East. Interestingly, many of the officers described in Table 2 were not fellows, executive assistants/officers, or military assistants, nor did they serve in other similar staff positions prior to making flag/general officer. It is unclear whether these types of assignments are not as "key" as they once were or whether this cohort of flag/general officers is somehow unusual.

As previously stated, the Services had difficulties providing information about demographic characteristics of officers in key assignments. The information the Services did provide—and which is summarized in Table 2—did not allow the subcommittee to examine the relationship between the demographic characteristics of the officers and their assignment histories, nor did it allow the subcommittee to determine if women and racial and ethnic minorities have been selected for most key assignments at lower rates than men and whites.

However, some of the Service briefings to the Commission did provide demographic information for selection to one type of key assignment: command. The subcommittee's findings about the relationship between demographic diversity and command assignments are detailed in the next section.

Command Assignments and Demographic Diversity

The second Commission charter task for the Branching and Assignments Subcommittee concerned the command selection process. Because of this task and because command assignments were identified as key assignments for officer advancement, the subcommittee took a closer look at the relationship between command assignments and demographic diversity. To do this, the subcommittee asked the Services to provide information about command selection outcomes when they briefed the Commission in November 2009.¹² Three of the Services—the Army, Navy, and Marine Corps—provided command selection outcomes by gender, race, and ethnicity. Specifically, the subcommittee was able to compare outcomes of the O-5 and O-6 command selection and screening processes for the command selection boards, by fiscal year (FY), in FY 2006–FY 2010 for the Army, FY 2006–FY 2009 for the Marine Corps, and FY 2007–FY 2009 for the Navy aviation surface warfare officer (SWO) communities.¹³ Analysis of these outcomes is summarized here and described in detail in Issue Paper #32.

¹¹ The Services have educational requirements for career progression for commissioned officers, and not meeting these requirements renders one ineligible for promotion. Additionally, exceeding these educational requirements may make candidates for promotion more competitive. Therefore, educational requirements are used both as a cutoff for promotion and to distinguish between qualified candidates.

¹² The subcommittee also asked each Service to describe its command selection process. Because the command selection process generally parallels that for officer promotion, the Promotion Subcommittee pursued the topic of command selection and promotion boards in Issue Paper #34.

¹³ The Army brief to the Commission provided command selection rates for the Army's ACC, which means that officers are selected by a central board based on competitive category. The Marine Corps brief to the Commission provided command screening results. We used only data on individuals who were selected to command (i.e., who were on the primary, not alternate, list for command). The Navy brief to the Commission did not supply command selection rates for the submarine community. Therefore, command selection rates for this community could not be provided.

The command selection outcomes were analyzed in two ways. First, subcommittee research staff calculated within-group selection rates, which are the percentages of selected individuals from the eligible pool within each race, ethnicity, and gender group (e.g., the percentage of eligible female officers who were ultimately selected for command).¹⁴ Second, research staff calculated the percentages of total selectees from each race, ethnicity, and gender group—or, in other words, the percentages of selectees who were nonminorities (i.e., white non-Hispanic), minorities, and women.

Across the three Services that provided data, minority selection rates were 1–5 percentage points lower than nonminority selection rates for O-5 command. For O-6 command, minority selection rates were 2–13 percentage points higher than nonminority selection rates in the Marine Corps and the Navy SWO and aviation communities. In the Army, the minority selection rate was about 3 percentage points lower than the nonminority selection rate. Female selection rates for O-5 command were 2–4 percentage points lower than male selection rates in the Army and the Marine Corps and 4–9 percentage points higher than male selection rates in the Navy SWO and aviation communities. For O-6 command, female selection rates were 2–6 percentage points lower than male O-6 selection rates in the Army and the Marine Corps and 4–9 percentage points lower than male selection rates in the Navy SWO and aviation communities.

To properly interpret these differences in selection rates, it is important to note that, across Services, they are based on very different underlying sample sizes. Almost 400 women were eligible for command at the O-6 level in the Army, but no more than 30 women were eligible in the Marine Corps and the Navy SWO and aviation communities. Similarly, for O-5 command, more than 1,100 women were eligible in the Army, compared with fewer than 65 in the Marine Corps and the two Navy communities. Thus, the small sample sizes for women in the Marine Corps and Navy data reduce the strength of the findings for gender because they make the female selection rates extremely sensitive to the selection of just one or two fewer (or additional) women. For example, for O-5 command, the selection rate for female SWOs was nearly 9 percentage points higher than the selection rate for male SWOs—30 percent versus 21.3 percent. However, if just 2 fewer women had been selected (four rather than six), the female selection rate, now only 20 percent, would have been lower than the male rate.¹⁵

Turning to female and minority percentages of total selectees, the data show the following. Across the three Services that provided data, men and whites made up at least 80 percent of the officers selected for O-5 or O-6 command. At the O-5 level, the largest differences in terms of race, ethnicity, and gender were in the Marine Corps: Only 9.6 percent of the officers selected for O-5 command were minorities, and only 1.7 percent were women. At the O-6 level, the largest differences were in the Navy aviation community, where only 5.4 percent of the officers selected for command were minorities, and only 1.2 percent were women.

¹⁴ The selection rates calculated by the subcommittee are raw or unconditional selection rates; the data provided by the Services did not allow the subcommittee to calculate rates controlling for factors other than race, ethnicity, and gender. In particular, the Army data include tactical/operational and nontactical/nonoperational competitive categories, which have an unknown effect on the selection rates for women and minorities.

¹⁵ Because of these differences in sample sizes and because statistical significance is so largely driven by sample size, the statistical significance of the gender, racial, and ethnic differences in selection rates was not calculated. Statistical significance is a criterion that rules out differences that are easily attributable to random variation. Larger samples yield more-precise estimates, so the bigger the sample, the less likely a given difference is attributable to chance. This means that very small differences can be statistically significant if the sample size is large enough. In contrast, relatively large differences in rates are normal for small samples, even if the underlying probabilities are similar. Thus, apparently large differences can be statistically insignificant if the sample size is small enough.

Thus, the main findings concerning O-5 and O-6 command selection and demographic diversity are that:

- Differences in O-5 and O-6 command selection rates by race, ethnicity, and gender are not the result of a clear bias for or against any particular group.
- However, a vast majority of officers (i.e., at least 80 percent) selected for O-5 or O-6 command during the period under review were men and nonminorities.

Taken together, these findings suggest that minority and female representation in recent cohorts of command selectees is indeed low because minorities and women are not highly represented in the candidate pools for command assignments. The lower representation of minorities and women in candidate pools for command assignments may be due to race, ethnicity, and gender differences in accessions, branching, continuation, previous key assignments, and previous promotion rates prior to command. Indeed, command opportunities are more plentiful in tactical/operational career fields, which we have shown are more highly populated by white men. Thus, it is what happens before the command selection point that has an impact on the representation of minorities and women in O-5 and O-6 command assignments.

BARRIERS HINDERING THE ADVANCEMENT OF WOMEN AND MINORITIES

The previous section of this decision paper showed that tactical/operational occupations and command assignments are important factors that increase opportunities for promotion to the higher officer ranks, but women and minorities are underrepresented in tactical/operational career fields and in candidate pools for command assignment. This section of the decision paper explains the latter finding in terms of barriers that inhibit women and minorities from entering tactical/operational career fields and rearer fields and from serving in key assignments.¹⁶

Following Kirby et al. (2000), the subcommittee considered two types of barriers: structural and perceptual. Kirby et al. (2000) define structural and perceptual barriers in the following ways. Structural barriers are "prerequisites or requirements that exclude minorities to a relatively greater extent than non-Hispanic whites" and are "inherent in the policies and procedures of the institution" (Kirby et al., 2000, p. 525). An example of structural barriers is academic requirements or test scores necessary for entry into a career field. Another example of a structural barrier is the policies concerning combat restrictions for women. In contrast, perceptual barriers are "those perceptions, attitudes, or beliefs that lead minorities [and women] to think they cannot or should not pursue . . . a job or career option" (Kirby et al., 2000, p. 525). Factors that create perceptual barriers include a lack of role models in certain occupations or assignments; a lack of community support or knowledge about the occupation or assignment; and perceptions of racial, ethnic, or gender discrimination among members in certain occupations or assignments. Kirby et al. (2000) did not define either structural or perceptual barriers as being inherently positive or negative, but simply as factors that disproportionately affect minority (and female) groups.

Barriers Keeping Minorities and Women from Entering Tactical/Operational Career Fields

Past research has identified structural and perceptual barriers that inhibit women and minorities from entering tactical/operational career fields in the military. This subsection summarizes this research and presents relevant facts related to the Commission's deliberations. This discussion was written primarily with officers in mind because of the relationship between career field and advancement for officers. However, the barriers identified below also apply to career field choice, assignment, or both for enlisted personnel.

Perceptual Barriers to Entering Tactical/Operational Career Fields

Although perceptual barriers for women to enter tactical/operational career fields may exist, most of the evidence for perceptual barriers focuses on minority men. Evidence suggests that more white men than minority men prefer tactical/operational career fields in the Army (Lim et al., 2009) and the Air Force (Haygood & Morris, 2009) and that more white men than minority men enter SOF in the

¹⁶ The Commission also addressed the idea of changing the billet structure itself. See the discussion of Recommendation 10 in the Commission's forthcoming final report.

Army, the Navy, and the Air Force (Kirby et al., 2000). These findings persist even after controlling for such factors as rankings on merit-based lists for initial branching.¹⁷

Four perceptual barriers that may explain why minority men do not choose to enter tactical/operational career fields or specialties are described below. However, it is important to clarify that these barriers may not apply to all Services and may have changed since the time the research was conducted. Nonetheless, the list of barriers presented below offers the Services some guidance on where to focus their efforts when trying to understand and find solutions to the problem of female and minority servicemembers not choosing to enter tactical/operational career fields and specialties.

- Skill development preferences may differ among race and ethnicity groups. Specifically, minorities may be more likely than whites to prefer military career fields that they believe will provide skills (e.g., engineering skills) that will readily transfer to the civilian sector. Consistent with this hypothesis, Kirby et al. (2000) found that more minority men than white men indicated that transferability of skills was important to them.
- *Minority communities and families may not have the same level of knowledge about or support for certain career fields as white communities and families.* For example, Kirby et al. (2000) found that, compared with minorities, more of the white participants they interviewed in their study knew about SOF, such as the Navy SEALs, when they were children.
- *Minorities may perceive that people in certain specialties hold racist attitudes.* In particular, the minority military personnel who participated in Kirby et al.'s (2000) study generally indicated that the Army Green Berets and Rangers were believed by both minority civilian and minority military communities to be "white organizations with racist attitudes" (Kirby et al., 2000, p. 538).
- *Minorities may not identify with certain career fields and their members because they contain few successful minority role models.* Kirby et al. (2000, p. 537) found that minority role models may "actively discourage minority youth from considering an SOF career, either by actively selling their own military career choice, or by speaking negatively of SOF." Indeed, in a report about blacks in combat arms, White (2009, p. 18) argued that the Army has not done enough to advocate for blacks in combat arms, and he recommends that "serving African American Combat Arms officers do all that they can to dissuade young Black men and women from accessing into the combat arms branches." Thus, widespread perceptions that a Service does not provide support for minorities to succeed in tactical/operational career fields can have serious consequences for minority entry into those career fields.

Structural Barriers to Entering Tactical/Operational Career Fields

Structural barriers to minorities and women entering tactical/operational career fields can be found well before the initial branching point. For minorities, the main structural barrier concerns the relationships among officer commissioning source, race and ethnicity, and tactical/operational slot

¹⁷ Most of the Services' officer commissioning sources have rankings of cadets and midshipmen in terms of "meritbased" factors in order to make initial branching and assignment decisions. For example, Army Reserve Officers' Training Corps (ROTC) cadets are put on an Order of Merit List based on a weighted composite of academic grade point average, leadership performance and skills, and physical fitness qualifications (Lim et al., 2009). Although the Services use different strategies when using the merit-based rankings, cadets and midshipmen who rank higher on the list generally receive earlier consideration in terms of career field preferences than cadets and midshipmen who rank lower on the list.

allocations. For women, the main structural barrier concerns the DoD and Service-specific combat exclusion policies.

Structural Barrier for Minorities

Two patterns, when combined, can constitute a structural barrier that keeps minorities from entering tactical/operational career fields. The first pattern concerns racial and ethnic differences in accessions by officer commissioning source. Except in the Marine Corps, blacks are less likely than members of other groups to access via a Service academy. This fact is illustrated in Table 3, which shows the share of each race and ethnicity group that was commissioned through a Service academy in FY 2009, for each Service. For example, of all the black officers who were commissioned in the Navy in FY 2009, only about 10 percent graduated from the Naval Academy. In contrast, of all the white officers who were commissioned in the Navy in FY 2009, about 21 percent graduated from the Naval Academy.¹⁸

Table 3. Percentage of Each Race and Ethnicity Group Commissioned Through a Service Academy in FY 2009, by Service

Race and Ethnicity Category	Air Force	Army	Coast Guard	Marine Corps	Navy
White	30%	18%	55%	15%	21%
Black	18%	9%	19%	22%	10%
Hispanic	26%	19%	25%	16%	22%
Other*	38%	23%	39%	16%	17%

NOTES: The percentages in this table are percentages within race and ethnicity groups and thus do not sum to 100 percent across rows or down columns. The percentages for the Army are for active competitive category (ACC) accessions only. The data used to compute the percentages in these tables came from information provided to the Commission by the Services.

*This race/ethnicity category includes Asian, Pacific Islander/Hawaiian, Native American, and multiple races.

The second pattern concerns the tactical/operational slots allocated to different officer commissioning sources. At least for the Army and the Air Force, larger proportions of tactical/operational slots are allocated to the Service academies than to the other commissioning sources. According to information provided to the Commission by the Army, in FY 2009, about 77 percent of West Point's ACC slots were for combat arms branches (now called maneuver, fire, and effects). In comparison, only about 48 percent of Army ROTC's ACC slots and only 47 percent of Army OCS's ACC slots were for combat arms branches. As a result, West Point graduates have a disproportionately greater likelihood of entering combat arms fields than do officers accessing through other commissioning programs.¹⁹

¹⁸ The relatively large black percentage for the Marine Corps may be due to the small number of black officers who were accessed into the Marine Corps in FY 2009: Only 68 black officers were accessed in FY 2009, compared with 1,488 white officers. Small changes in the number of black officers who are commissioned through a given source can have a sizeable impact on the percentages. If just six fewer black officers had been accessed into the Naval Academy in FY 2009, the percentage in Table 3 for Marine Corps black officers would have been smaller than the percentage for white officers. However, for the percentage of white officers to have been larger than the percentage of black officers accessed through the Naval Academy in FY 2009, 113 more white officers would have had to have been accessed through the Naval Academy in FY 2009. A similar argument about small sample sizes can be made for the Coast Guard, in which only 16 black officers were accessed in FY 2009, compared with 352 white officers.

¹⁹ United States Military Academy graduates actually account for a relatively small share of total Army accessions. In FY 2007 and FY 2008 combined, accessions from West Point accounted for just 14 percent of all

The numbers for the Air Force are slightly more complicated: According to information provided to the Commission by the Air Force, about 43 percent of Air Force rated (tactical) allocations go to Air Force Academy graduates, 43 percent to Air Force ROTC graduates, 10 percent to Air Force Officer Training School (OTS) graduates, and 4 percent to others (e.g., directly commissioned officers). Although the allocation percentages for the Air Force Academy and ROTC do not differ, the percentage of officers selected for undergraduate pilot training (UPT) differed by commissioning source: About 45–55 percent of Air Force Academy graduates were selected for UPT, whereas only about 25 percent of ROTC and about 10 percent of OTS graduates were selected for UPT. This trend is not new: Carretta (2000) noted that the Air Force Academy has historically received a disproportionately high number of pilot training slots relative to ROTC and OTS. Thus, based on available numbers of per capita slots, officers have a better chance of getting a pilot training slot in the Air Force if they go through the Air Force Academy than if they go through other Air Force commissioning sources.²⁰

Taking the two patterns together, minority officers—particularly black officers—have fewer opportunities to enter tactical/operational career fields in the Air Force and the Army because minority officers are less likely to access via the Service academies than via other commissioning sources.²¹

Structural Barrier for Women

The most important barrier keeping women from serving in tactical/operation career fields is the DoD and Service policies that prohibit women from serving in occupations involving direct offensive ground combat (Harrell & Miller, 1997; Segal & Segal, 2004). Although the laws that prohibited women from operating combat aircraft and serving on combatant ships were repealed in the early 1990s, policies barring women from other combat-related activities remain in place. These policies will be discussed in greater detail in a later section; this section simply notes their impact on the share of total occupations available to women. As of 2003, the combat exclusion policies made the following percentages of occupations closed to women:

accessions, compared with 42 percent for ROTC and 26 percent for OCS. Using the FY 2007–FY 2008 data and focusing only on accessions from the Academy, ROTC, and OCS, the table below shows how the specified allocations give West Point graduates a disproportionate share of combat arms opportunities.

	Combat Arms Slots Implied by				
	Accessions	Share of Total Accessions	Allocations	Share of Total Slots	
West Point	2,103	17.2%	1,619	25.1%	
ROTC	6,296	51.4%	3,022	46.9%	
OCS	3,848	31.4%	1,809	28.0%	
Total	12,247	100.0%	6,450	100.0%	

The data for this footnote come from *Population Representation in the Military Services*, also known as the Population Representation Report (found in Office of the Under Secretary of Defense, FY 2007–FY 2008). ²⁰ For the Air Force, in FY 2007 and FY 2008 combined, the Academy, ROTC, and OTS accounted for 24.2, 40.4, and 12.7 percent of all accessions, respectively.

²¹ The tactical/operational slot allocation patterns for the Air Force and the Army may not extend to the Navy, the Marine Corps, and the Coast Guard because of how officers are initially assigned to career fields/specialties in these three Services. For a more-detailed discussion of how the Navy, Marine Corps, and Coast Guard differ, see Appendix A.

- Army occupations—9 percent
- Marine Corps occupations—8 percent
- Navy occupations—6 percent²²
- Air Force occupations—1 percent (Segal and Segal, 2004).

In contrast, all occupations in the Coast Guard have been open to women since 1978 (U.S. Coast Guard, n.d.).

Barriers Keeping Minorities and Women from Serving in Key Assignments

Perceptual and structural barriers not only keep women and minorities from serving in tactical/operational occupations but also keep them from serving in key assignments. The subcommittee identified one potential perceptual barrier—lack of effective career counseling and mentoring—and three structural barriers—namely, career field segregation, combat exclusion policies, and short windows of eligibility for serving in certain assignments—that likely keep women and minorities from serving in key assignments.

Potential Perceptual Barrier to Key Assignments

One potential perceptual barrier keeping minorities and women from obtaining key assignments, such as command, is a lack of sufficient knowledge about key assignment opportunities. That is, minorities and women may not receive the same career counseling or mentoring about key assignments that their white male counterparts receive. If this is the case, minorities and women would be more likely to miss career enhancing assignment opportunities.

As described in Issue Paper #25, a minority or female servicemember is more likely than a white man to have a mentor of a different race, ethnicity, or gender—i.e., to be in a mixed mentoring relationship. There is limited research on demographic differences between mentor and protégé²³ and their effect on the quality of the relationship and the type of mentoring it provides. What research does exist, though, shows some differences in same-gender/same-race mentoring relationships versus female protégé/male mentor and minority protégé/white mentor relationships. For instance, female protégés with female mentors report receiving more psychosocial support (e.g., Koberg et al., 1998) and role modeling functions (Ragins & McFarlin, 1990) than do female protégés with male mentors. Likewise, racial and ethnic minority protégés with mentors of the same race and ethnicity report receiving more psychosocial support (Ensher & Murphy, 1997). Therefore, female and racial and ethnic minority protégés may derive a different set of benefits from same-gender and same-race and ethnicity mentoring relationships than from mixed mentoring relationships.

Moreover, additional research shows that protégés who perceive greater similarities between themselves and their mentors report both receiving more psychosocial mentoring (Wanberg et al., 2006) and having higher-quality relationships (Finkelstein et al., 2002) than protégés who perceive fewer similarities between themselves and their mentors.

Together, this body of research indicates that it is likely that mixed mentoring relationships may not only be different than nonmixed pairs but may also be less effective. To the extent that protégés

²² This percentage is likely to have increased since the Secretary of Defense lifted the ban barring women from serving on submarines in 2010 (Peck, 2010).

²³ A protégé can also be called a mentee. We use the term *protégé* here to keep the terminology consistent with the Commission's recommendation on mentoring.

in mixed mentoring relationships receive, or perceive that they receive, lower-quality information about key assignments or less encouragement to take on key assignments than do protégés in nonmixed mentoring relationships, minorities and women may face a perceptual barrier to obtaining key assignments. The subcommittee notes, however, that the available research cited here was conducted in civilian settings. It is possible that institutional differences between civilian and military work settings may mean that these results are not generalizable to mentoring relationships in the military. This highlights the need for evaluation of military mentoring programs.²⁴

Structural Barriers to Key Assignments

There are three structural barriers that limit female and minority access to key assignments. First, career field segregation is a major structural barrier to obtaining key assignments, especially command assignments. That is, most command assignments go to servicemembers in tactical/operational career fields. Thus, the lower representation of minorities and women in tactical/operational career fields means that a lower proportion of minorities and women have access to command assignments and perhaps other key assignments. Because the barriers to entering tactical/operational career fields have already been described, they will not be further described here.

Second, the structural barrier for women to enter key career fields is also a structural barrier for women once they are in their career fields: In addition to keeping women from entering occupations that involve direct ground combat, DoD and Service policies prohibit women from taking assignments that involve direct ground combat, even within those career fields that are open to them.²⁵ As a result of these policies, in 2003, only 70 percent of positions in the Army and 62 percent of positions in the Marine Corps were open to women. At the other end of the spectrum, however, 99 percent of Air Force positions and 91 percent of Navy positions were open to women (Segal & Segal, 2004).²⁶ Finally, although all Coast Guard *occupations* are open to women. To the degree that such combat-related assignments are considered "key" for advancement, women will face a structural barrier to key assignments. Again, these policies will be discussed in more detail in a later section.

A third type of structural barrier is best explained using an example from the Navy. According to information provided to the Commission by the Navy, the Navy's Surface Warfare community discovered that some key assignments had short windows of time for officers to be considered eligible for the assignments. That is, potential candidates for those assignments had only a short period of time (e.g., a month) to apply. The Surface Warfare community noticed that the candidate pools for the assignments with shorter windows were less demographically diverse than the candidate pools for assignments with wider windows. When the community widened the eligibility windows for the key assignments with short windows, the eligibility pool became more demographically diverse. This example highlights how some structural factors that appear to be demographically neutral can effectively create barriers for minorities and women to have the opportunity to compete for key assignments.

²⁴ Additional information (summarized from Issue Paper #25) can be found in Appendix B.

²⁵ For more on the distinction between position and occupation/career field, see Issue Paper #56.

²⁶ Again, the percentage of Navy positions open to women is likely to have increased since the Navy's recent decision to allow women to serve on submarines (Peck, 2010).

Combat Exclusion Policies in More Detail

This subsection discusses the DoD and Service combat exclusion policies in more detail. The subcommittee believed that this topic merited particular attention because of the importance of the policies as a barrier to female entry to career-enhancing occupations and assignments and because of the Commission's recommendation to eliminate the policies. The material in this subsection is drawn primarily from Issue Paper #56.²⁷

The Current Policies

It is important to note from the outset that the current policies are, indeed, policies, not laws. The only law currently in place regarding women's roles in combat is a provision from the National Defense Authorization Act for Fiscal Year 2006 that requires the Secretary of Defense to give Congress 60 days' notice before changing the assignment policies for women or opening or closing new positions to women and to report whether DoD is currently complying with the 1994 policy (Harrell et al., 2007).

There are, however, multiple assignment policies because the DoD policy allows each Service to impose additional restrictions, so long as they are within its guidelines. The DoD and Service policies are described below. Particular attention is given to the Army policy because almost all Air Force and Navy roles are open to women and because of the relatively small percentage of women in the Marine Corps.²⁸ It is also the Army's policy that has been under scrutiny because of concerns about whether the Army's actual use of women in Iraq has been consistent with the existing policies (Harrell et al., 2007).

The DoD Policy: An Assignment Policy, Not an Employment Policy

The current DoD policy is known as the Direct Ground Combat Assignment Policy (DGCAP). The DGCAP states,

Service members are eligible to be assigned to all positions for which they are qualified, except that women shall be excluded from assignment to units below the brigade level whose primary mission is to engage in direct combat on the ground....(Aspin, 1994)

As an assignment policy, DGCAP restricts how female servicemembers are assigned in theater, rather than how they are utilized or employed. To facilitate implementation of the policy, units and positions are coded to identify them as direct ground combat or not direct ground combat (Defense Advisory Committee on Women in the Services, 2009).

Thus, given that a female servicemember is trained in an occupation, the assignment policy determines to which unit she can be assigned to perform her job. As already noted, there are also entire occupational specialties, such as infantry, closed to women. The interaction between occupational specialties open or closed to women and the units open or closed to women is illustrated in Table 4. The columns indicate whether the occupation is open or closed to women, and the rows indicate whether the unit is open or closed to female assignments. For example, there are

²⁷ Some of the material from Issue Paper #56 was, in turn, excerpted and revised from Harrell and Miller, 1997. For a more complete history of women in the military, see Holm, 1992, and National Defense Research Institute, 2010.

²⁸ Additionally, the Marine Corps guidance on roles for women does not have the same complicating factors as will be discussed for the Army guidance.

traditionally female jobs that are open to women in traditionally female units, such as nurses working in military hospitals. But there are also women serving in slightly less-traditional occupations, such as supply. A female supply sergeant could be assigned to a supply unit, such as an Army combat sustainment support battalion. But that same female servicemember could not be assigned to an infantry battalion. Finally, all positions requiring occupational specialties from which women are barred from serving are also closed to women, regardless of the unit.

Table 4. Examples of Occ	upational Specialties and	l Units Open or Closed to	o Women in the Army

Occupation Open to Women		Occupation Closed to Women
Unit open to women	Nurse in hospital; supply sergeant in combat sustainment support battalion	Infantry instructor at schoolhouse at Ft. Benning
Unit closed to women	Supply sergeant in infantry battalion	Infantry soldier in infantry battalion

Once a female servicemember has been validly assigned to a unit, the assignment policy does not prescribe what duties she can perform. The local commander has the authority to use personnel to fulfill the unit mission.²⁹ For example, Harrell et al.'s study (2007) found examples of female servicemembers trained as cooks having received the Combat Action Badge in Iraq, likely because contractor cooks obviated the need for U.S. soldiers to perform that role. Instead, these women, along with their male colleagues trained as cooks, were performing other duties, such as guard duty.

Finally, the DoD assignment policy does not limit the units with which female servicemembers can interact.³⁰ There were instances in Iraq in which individuals or small units were attached to other units. This is different from assignment and is not prohibited by the assignment policy. The Army forward support company (FSC) provides an example of women serving in a unit that was attached to maneuver battalions. The FSCs were assigned to the brigade support battalion (BSB), but the BSB was often hours away and only infrequently in contact with the FSC. However, the practice of attaching these units was likely part of the motivation for a congressionally mandated assessment of Army assignment policies in Iraq (Harrell et al., 2007).

The Services' Policies

In addition to its main restriction on women's engagement in direct ground combat, the DGCAP allows the Services to include additional restrictions in their own policies according to the following criteria:

Where the Service Secretary attests that the costs of appropriate berthing and privacy arrangements are prohibitive;

Where units and positions are doctrinally required to physically collocate and remain with direct ground combat units that are closed to women;

Where units are engaged in long range reconnaissance operations and Special Operations Forces missions; and

²⁹ For example, the Army assignment policy states, "[o]nce properly assigned, female solders are subject to the same utilization policies as their male counterparts. In event of hostilities, female solders will remain with their assigned units and continue to perform their assigned duties" (U.S. Department of the Army, 1992, p. 2).

³⁰ As discussed below, the Army policy prohibits collocation, which is a type of interaction.

Where job related physical requirements would necessarily exclude the vast majority of women service members. (Aspin 1994)

Thus, according to McSally (2007), DoD ultimately "translates into the exclusion of women from infantry, tank (armor), and artillery units below the brigade level in the Army and Marine Corps, Navy submarines and other ships with close quarters, and Special Forces units in all the service branches."

Based on information that was current in 2003, Segal and Segal (2004) summarized the combatrelated occupational and assignment restrictions for each of the DoD Services as follows:

- *Army:* Women "are prohibited from serving in units of battalion size or smaller whose primary mission is ground combat, or with units that are routinely located with combat units. Women are excluded from the occupational fields of infantry, armor, and Special Forces. Also closed to women are units at the battalion level or below in cannon field artillery and multiple launch rocket artillery. Women are also excluded from ranger units at the regiment level and below, ground surveillance radar platoons, combat engineer line companies, and short-range air defense artillery units."
- *Navy:* Women "are excluded from submarines, special forces (SEALS), coastal patrol boats, special boat unit crews, and support positions with Marine Corps ground combat units. Women also may not work as fire control technicians, missile technicians, and sonar technicians (submarine) because these occupations require submarine service."
- *Air Force:* "Women are excluded from positions that are physically located with ground combat units, such as combat control, tactical air command and control, and pararescue. Restricted assignments include special operations force (SOF) rotary aircraft (helicopters); combat liaison officer assignments with infantry battalions; and radio communications positions that collocate with ground combat units."
- *Marine Corps:* The Marine Corps policy excludes women from "occupations in infantry, armor, and artillery, as well as from serving as security force guard, close-quarter battle team member, and 15 other occupations that routinely collocate with ground combat units. As with the Army, positions in [some type of] units below the battalion level are closed. Additionally, eight specialties that are open to women have restricted assignment to certain units. Some Marine Corps positions are closed because they are on Navy ships that may not yet accommodate women."

Because the Services' policies are subject to change, these summaries are intended to illustrate the general nature of the other Services' policies. For example, in 2005, the Navy changed its policy to allow women to serve on coastal patrol boats (U.S. Department of the Navy, 2009), and in 2010, the Navy lifted the restriction banning women from serving on submarines (Peck, 2010).

The Army Policy: How It Relates to the DoD Policy

The Army policy has been in place since 1992 and, thus, predates the 1994 DoD policy. The combat environments in Iraq and Afghanistan have highlighted key differences between the two policies.³¹ Describing these differences helps to better explain each policy individually.

³¹ Harrell et al. (2007) provide a more detailed discussion of the differences between the policies and an assessment of whether the Army followed the policy during the conflict in Iraq.

One difference between the Army and DoD policies pertains to their definitions of combat. The DoD policy defines "direct ground combat" as "[e]ngaging an enemy on the ground with individual or crew served weapons, while being exposed to hostile fire and to a high probability of direct physical contact with the hostile force's personnel" (Aspin, 1994). The DoD policy states further, [d]irect ground combat takes place well forward on the battlefield while locating and closing with the enemy to defeat them by fire, maneuver, or shock effect" (Aspin, 1994). The Army policy defines "direct combat" as "[e]ngaging an enemy with individual or crew served weapons, while being exposed to direct enemy fire, a high probability of direct physical contact with the enemy's personnel and a substantial risk of capture. Direct combat takes place while closing with the enemy by fire, maneuver, and shock effect in order to destroy or capture the enemy, or while repelling the enemy's assault by fire, close combat, or counterattack" (U.S. Department of the Army, 1992, p. 5). Thus, the Army policy adds the requirement for "substantial risk of capture" to the definition. The other key difference is that the Army definition includes the aspect of repelling assault. This becomes especially important because another key difference between the two policies is that the DoD policy prohibits "assignment to units below the brigade level whose primary mission" is direct ground combat (Aspin, 1994). The Army policy, however, prohibits assignment to units of that size whose "routine mission [is] to engage in direct combat" (U.S. Department of the Army, 1992, p. 1). The operations in Iraq highlight the differences between these policies, as there have been military units that have routinely participated in combat, although combat was not their primary mission. This is, for example, the experience of supply units whose passage along convoy routes was routinely subject to attack. If such a situation could be considered repelling the enemy, then those units routinely participated in direct combat, even though their primary mission was supply related.

Another difference between the DoD policy and the Army policy pertains to collocation. Specifically, the Army policy prohibits assignment of women to units "which collocate routinely with units assigned a direct combat mission" (U.S. Department of the Army, 1992, p. 5). While some experts have maintained that units must be interdependent on one another to be considered collocated, the Army policy defines collocation as occurring when a unit "physically locates and remains" with another. Although the DoD policy mentions collocation, it does not impose collocation restrictions.

The Combat Exclusion Policy and the Current Operational Environment

DoD and Service policies that bar women from entry to certain combat-related career fields, specialties, units, and assignments are based on standards of conventional warfare, with well-defined, linear battlefields. The current conflicts in Iraq and Afghanistan have been anything but conventional. As discussed in Issue Paper #56, "[C]oncepts such as 'enemy,' 'exposed to hostile fire,' 'forward,' and 'well-forward' are no longer useful when determining which units should be closed to women. The enemy is no longer clearly and consistently identifiable, and all units are essentially exposed to hostile fire. Additionally, the spatial concepts of forward and well-forward are inappropriate and lacking to convey the complexity of operations such as those in Iraq and Afghanistan." The current conflicts in Iraq and Afghanistan render interpretations of the combat exclusion policies more difficult than ever before.

As a result of the changes in warfare in recent years, some of the military women deployed to Iraq and Afghanistan have been engaged in activities that could be considered combat related. Examples abound of women being exposed to combat in theater while deployed in Iraq and Afghanistan. The Marine Corps Lioness program in Iraq attaches female servicemembers to all-male combat units in order for female servicemembers to facilitate the units' interactions with local Iraqi women. Similarly,

the Marine Corps' Female Engagement Teams (FETs) are used in Afghanistan to speak with local women and gather intelligence (Defense Advisory Committee on Women in the Services, 2009). As cited previously, collocation is an aspect of the Army's combat exclusion policy (Harrell et al., 2007) and is used by all four DoD Services to bar women from certain specialties or assignments (U.S. Government Accountability Office, 1998).³² The role that women play in forward support companies is another example of the difficulty of applying current policies to operational environments. Harrell et al. (2007) found that women who served in forward support companies for maneuver (i.e., direct combat) units can and do use weapons in self-defense and provide security to other support units. Furthermore, personnel in these support units did not report perceiving themselves as being part of a separate entity from the maneuver units they supported. This example shows that women, while not being formally assigned to combat units, may be directly engaged in combat-related activities.

This disconnect between the combat exclusion policies and what is happening in the operational theater makes for unclear and counterproductive policies. Harrell et al. (2007) interviewed soldiers who had recently returned from serving in Iraq or Afghanistan and found that many of the soldiers did not understand the Army's assignment policy concerning women. Once the policy was explained to them, many felt that it was inappropriate, given how well women have performed in combat-related roles while serving in Iraq.

Ultimately, the current policies do not accommodate the reality in the ground, which can result in policies that are unclear at best and, at worst, are ineffective (McSally, 2007).

Women in Combat and Mission Accomplishment

A common argument in favor of the current combat exclusion policies is that having women serving in direct combat will lower unit morale and unit cohesion and, consequently, will hamper mission effectiveness (McSally, 2007). These arguments were also made with respect to racial integration and, more recently, to the integration of gay servicemembers in the military. However, as noted in Issue Paper #56, this argument has not been borne out by either research or practical experience.

To date, there has been little evidence that the integration of women into previously closed units or occupations has had a negative impact on important mission-related performance factors, such as unit cohesion. Following the policy change in the early 1990s, Harrell and Miller (1997) studied the impact of gender integration on unit cohesion, morale, and readiness in recently integrated units or units that had recently opened more assignments to women in the Army, Marine Corps, and Navy. The authors found that gender integration was perceived by study participants—both men and women—to have a "relatively small effect" on the unit cohesion, morale, and readiness of the units they studied (p. xvii). When gender was mentioned as a factor by study participants, it did not feature as prominently as such factors as rank and leadership issues.

Similar findings about unit morale and cohesion were found in more-recent studies. In a study reported by DACOWITS in 2009, a majority of servicemembers who were part of the study's focus groups said that women serving in combat roles, such as "on convoys, as drivers, or otherwise traveling between camps—and participating in female search teams, including the Lioness program," in Iraq and Afghanistan did not have a negative impact on unit morale. Likewise, McSally (2007) reported that, based on her experiences, women have been successfully integrated into fighter pilot teams and have not reduced cohesion, as had been feared prior to the 1994 integration effort. These two reports, combined with the study by Harrell and Miller (1997), suggest that fears that women would hurt unit morale or cohesion have not been borne out in practice.

³² As mentioned earlier, there are different definitions of collocation. See Harrell et. al., 2007, for more information.

Moreover, there is some evidence that women actually have a positive impact on mission accomplishment in combat environments. In the DACOWITS (2009) study, a majority of focus group participants felt that women serving in combat environments in Iraq and Afghanistan actually had a positive impact on mission accomplishment. Focus group members cited that these women had "greater sensitivity to cultural considerations" and were "helping to maintain personnel strength" and "providing a unique perspective on the mission" (p. 73). These explanations of how women serving in Iraq and Afghanistan had positive impacts on mission accomplishment highlight the potential for gender diversity to enhance mission accomplishment, if it is properly managed by good leadership and training.

Another argument against changing the current policies concerns women's physical and emotional resilience. Specifically, some proponents of the combat exclusion policies have argued that, even if men are not distracted by the presence of women in direct ground combat units, women would impede mission effectiveness because they are either physically weaker than men, less emotionally resilient than men, or both. However, as discussed in Issue Paper #56, there is not much direct evidence to support claims that all women lack the physical ability to perform in combat roles. In fact, women and men have overlapping physical capabilities. Therefore, current policies in which men are assumed to qualify to serve in combat and allowed to enter tactical career fields without having to prove themselves physically capable and all women are assumed to be unqualified overinclude men and under-include women (McSally, 2007).³³ Likewise, research does not indicate that women are necessarily less able than men to deal with the emotional ramifications of combat. Rather, the limited published studies on gender differences in mental health impacts of combat exposure suggest that the evidence is mixed; some research shows slightly more negative impacts for women, but other research finds no gender differences (Street et al., 2009). Furthermore, DoD officials noted that initial studies of veterans with similar time outside secure bases in Iraq revealed increased mental health issues for men and women in nearly the same proportion (Cave, 2009).

Taken together, the research evidence and practical experience of members serving with women in combat zones in Iraq and Afghanistan do not support arguments that women's capabilities and mere presence in formerly closed units will reduce unit morale, cohesion, and, ultimately, mission accomplishment. On the contrary, the majority of focus group participants in the DACOWITS focus groups indicated that "that having females in combat not only does not erode morale but can be a positive influence" (Defense Advisory Committee on Women in the Services, 2009).

The Effect of Combat Exclusion Policies on Career Opportunities for Women

As described in previous sections of this paper, as of December 2008, a substantial majority (over 65 percent) of general/flag officers in the four DoD Services came from tactical/operational career fields. Thus, all else being equal, the greatest opportunities to reach senior leadership ranks in the officer corps are through tactical/operational career fields. However, female officers are less likely than male officers to serve in tactical/operational occupations: In December 2008, just 11 percent of Active

³³ Research does show, however, that when otherwise-similar male and female servicemembers are compared, male servicemembers are on average physically stronger and have higher cardiovascular abilities (Presidential Commission on the Assignment of Women in the Armed Forces, 1992). Therefore, any likely gender-neutral physical standard for combat or entry into tactical fields, as is recommended by the Commission, would disqualify a higher percentage of women than men.

Component female officers were in tactical/operational occupations, compared with about 41 percent of Active Component male officers.³⁴

Even when women are allowed to enter tactical/operational career fields, their opportunities to obtain certain assignments in the four DoD Services are limited by the combat exclusion policies that restrict the types of positions women can occupy in the U.S. military. According to a 1998 GAO report, the effects of the different policies can be broken out as follows: Services reported that about 46 percent of positions were closed because these positions were classified as involving direct ground combat, 41 percent because of their interpretations of the collocation rule, 12 percent because of living arrangement restrictions,³⁵ and 2 percent because of special operations.³⁶ To the extent that these assignments are considered to be key to advancement, female officers have fewer chances to develop competitive assignment histories.

The interaction of occupation and assignment restrictions compounds the problem. Issue Paper #56 presents several cases in which women are allowed to serve in particular occupations but are barred from positions in those occupations. For example, a female supply sergeant in the Army could be assigned to a supply unit, such as an Army combat sustainment support battalion, but she could not be assigned to an infantry battalion. Thus, depending on the type of assignment, this supply sergeant may not be able to serve in a position for which she is trained.

To summarize, women face a two-level structural barrier to advancement caused by the combat exclusion policies. The first level bars women from entering certain tactical/occupational career fields, which are linked to senior leadership in the U.S. military. The second level bars women from serving in certain positions within the tactical/operational career fields that they can enter. Consequently, as long as women are barred from certain tactical/operational career fields, specialties, and assignments, they will face a structural barrier to reaching the highest levels of leadership in their Services.³⁷

³⁴ These statistics were based on December 2008 personnel data provided by the DMDC to the Commission. These are the same personnel data used in Issue Paper #23.

 $^{^{35}}$ The Government Accountability Office (1998) describes these positions as "exclusive to the Navy and . . . on submarines and small surface vessels like mine sweepers, mine hunters, and coastal patrol ships." As discussed earlier, the Navy now allows women to serve on submarines, so the 12 percent figure has likely decreased since the GAO paper was published.

³⁶ These percentages sum to greater than 100 due to rounding.

³⁷ Enlisted men are also more concentrated in tactical/operational occupational categories than enlisted women. As of December 2008, about 22 percent of Active Component enlisted men were in tactical/operational occupations (i.e., infantry, gun crews, and seamanship) compared with just 5 percent of active-duty enlisted women (Issue Paper

^{#15).} Evidence linking occupational area to enlisted advancement is, however, lacking.

CAREER FACILITATORS: MENTORING PROGRAMS AND OTHER CAREER DEVELOPMENT RESOURCES

The Branching and Assignments Subcommittee's final area of investigation was career facilitators. Specifically, the subcommittee looked at the role that mentoring programs and other career development resources play in helping servicemembers manage their own career progressions. This focus is consistent with the 2009 Diversity Management Policy, which states that the DoD Diversity Management program will "establish training, mentoring, and development approaches that ensure all DoD personnel have the skills to navigate career progression successfully" (U.S. Department of Defense, 2009).³⁸ This discussion applies to both officers and enlisted personnel.

Mentoring Programs

One of the ways organizations address issues of career advancement and racial, ethnic, and gender diversity is through mentoring programs. Although the Services' mentoring programs vary in terms of their level of development and degree of formality, they are all intended to educate and guide servicemembers about career options and ways to develop their potential. However, and perhaps most importantly, there is no strong evidence as to whether and how the Services' mentoring programs are meeting either their goal of supplying servicemembers with equal access to mentors or their ultimate goal of improving Servicemembers' abilities to guide their own careers and advance as far as possible given their abilities.

Effective Mentoring Practices Identified by Research

In general, research finds that mentored individuals have higher compensation, more promotions, greater career satisfaction, greater expectations for advancement, more career commitment, and higher job satisfaction than nonmentored individuals (Allen et al., 2004). Some mentoring practices have, however, been shown to be particularly effective (Finkelstein & Poteet, 2007). Specifically, research on mentoring has shown that effective mentoring relationships and programs are characterized by the following practices:³⁹

- the establishment of clear objectives for the mentoring program so that all participants know why the program was developed and what is expected of them. This includes leaders making it clear that they support the program.
- allowing protégés and mentors to establish multiple mentoring relationships to give mentors and protégés the chance to learn from multiple viewpoints
- providing high-quality training for both mentors *and* protégés at key points to allow the mentoring relationships to develop and be successfully maintained⁴⁰

³⁸ See Issue Paper #50 for more on DoD Directive 1020.02.

³⁹ These and other effective practices are described in the appendix for Issue Paper #33.

⁴⁰ According to Allen et al. (2006, p. 570), mentoring training should help protégés to "develop appropriate expectations for the relationship" and to understand the objectives for the program and the program's purpose. One can make a similar argument for mentoring training for mentors.

- if relevant to the mentoring program, matching mentors and protégés based on multiple criteria that align with the goals of the mentoring program. This includes the following:
 - accounting for the organization's culture and individual differences, such as personality, when matching protégés and mentors. As explained in Issue Paper #25, perceived similarity between the mentor and the protégé is an important factor in perceived relationship quality.
 - allowing mentors and protégés to provide input into the matching process.
- continuously evaluating the effectiveness of mentoring programs against predetermined goals and criteria.

Taken together, effective mentoring practices highlight the importance of program design, flexibility, and evaluation.

The Services' Mentoring Programs

Many of the Services current mentoring programs are described in Issue Paper #33. During the November 2009 MLDC meeting, Service representatives presented briefings that addressed the role that their Services' mentoring programs play in increasing the racial, ethnic, and gender diversity of future leadership.⁴¹ Issue Paper #33 provides an overview of the briefings and of supplemental, publicly available information about the Services' mentoring programs in terms of the programs' goals and assumptions, features (i.e., tools and activities), and measures of effectiveness.⁴²

Table 5 summarizes the findings from Issue Paper #33. A check mark means that there is evidence that at least one mentoring program in that Service has that goal/assumption, feature, or measure of effectiveness. Conversely, the lack of a check mark means that the Service did not provide evidence of that goal/assumption, feature, or measure of effectiveness in its mentoring programs.

As seen in Table 5, all of the Services indicated that mentoring should provide benefits to protégés, mentors, and the Service as a whole. Among other benefits, the Services assume that protégés' career potential should be improved by being in mentoring relationships. Assumed benefits for mentors include gaining a sense of satisfaction and pride from helping to develop the careers of more-junior individuals and exposure to new ideas that will help the mentors themselves perform better as leaders. Finally, benefits for the Service as a whole include providing the Service with a pool of competent and adaptive leaders and providing the Service with more-committed servicemembers.

In terms of diversity-related goals, only the Coast Guard and the Navy explicitly stated that mentoring is part of an official diversity strategy. For example, one of the Coast Guard's objectives provided as part of its diversity plan is to "establish an effective mentoring and counseling network so all members (active duty, reserve and civilian) have guidance while navigating their careers" (U.S. Coast Guard, 2009, p. 14). However, all of the Services had goals that had an equal opportunity flavor: Everyone who wants a mentor should be able to access a mentor, or, for the Air Force and the

⁴¹ Prior to the November 2009 MLDC meeting, the Commission sent a letter to the Service chiefs asking them to send representatives to brief the Commission on issues of career advancement at the November meeting. One of the questions that the Services were asked was how their mentoring programs functioned to improve the diversity of future leadership.

⁴² Note that the purpose of Issue Paper #33 was to provide straightforward descriptions of the Services' mentoring efforts and to underline similarities and differences among them. The issue paper was not meant to be a comprehensive review of all of the Services' current efforts to develop and maintain mentoring programs. Furthermore, the focus of the issue paper was on mentoring programs offered by the Services themselves, not by organizations affiliated with the Services.

Marine Corps, everyone should have a mentor because supervisors should be the primary mentors for all of their direct subordinates.

		Air Force	Army	Coast Guard	Marine Corps	Navy
Goals an	d assumptions					
	Mentoring improves career potential of protégés	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
	Mentors and Services benefit from mentoring	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
	Equal access to mentors/everyone should have a mentor	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
	Mentoring is part of an official diversity strategy			\checkmark		\checkmark
Features						
	Development plans include mentoring tools	\checkmark	\checkmark	\checkmark		
	Mentoring handbook/guide	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
	Mentoring websites	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
	Web-enabled mentoring tools	\checkmark	\checkmark	\checkmark		\checkmark
	Supervisor directed to mentor all subordinates	\checkmark			\checkmark	
	Formal guidance for mentoring relationship (e.g., how often mentors and protégés should meet)				\checkmark	✓
	Mentors are screened and trained					\checkmark
	Mentor–protégé matching tool provided			\checkmark		\checkmark
	Contract has to be signed					\checkmark
Measure	s of effectiveness					
	Survey questions about mentoring	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark

Table 5. Comparison of Goals and Assumptions, Features, and Measures of Effectiveness Across the Services' Mentoring Programs

SOURCE: Issue Paper #33.

The Services' mentoring programs feature a variety of tools and activities. Four features of mentoring programs are common across three or more of the Services. First, all of the Services provide mentoring handbooks or guides for protégés and mentors. These handbooks explain what it means to mentor or be mentored, the benefits of mentoring relationships, how to find mentors or protégés, and so forth. Second, all of the Services provide mentoring websites that offer both mentoring resources (e.g., articles on what it means to be a mentor) and ways for protégés to find and establish contact with mentors. In many cases, the Services use web-enabled mentoring programs to "reach the masses" in ways not possible through more-traditional mentoring programs. Third, all of the Services except the Marine Corps have web-enabled mentoring tools with interactive features, such as online mentor–protégé matching tools, that potential protégés and mentors can use to establish and maintain relationships. Finally, the Air Force, the Army, and the Coast Guard offer servicemembers individual development plans, which are tools that allow servicemembers to share their records, career plans, and other relevant information with supervisors (i.e., primary mentors) and other mentors of their choosing.

The similarities in features of mentoring programs across most of the Services generally end with mentoring websites, mentoring handbooks or guides, web-enabled mentoring tools, and individual development plans. For example, only the Air Force and the Marine Corps use formalized supervisory mentoring (i.e., supervisors are directed to mentor their immediate subordinates). The apparent benefits of this approach are that it provides a formalized link to leadership (i.e., to be a good leader you must be a mentor) and, if supervisors are compliant, it ensures that everyone has a mentor. The drawbacks of this approach are that supervisors can be overwhelmed by having to provide mentoring services to all of their subordinates and that supervisory mentoring creates concerns that supervisors will be better mentors to subordinates with whom they get along better (Keele et al., 1987). However, most research has not found supervisory mentoring to be problematic (e.g., Allen et al., 2006; McGuire, 2007; Ragins et al., 2000). Therefore, supervisory mentoring may be one way that the Army, Navy, and Coast Guard could expand mentorship offerings.

The rest of the features of the Services' mentoring programs are unique to the Navy or to the Navy and one other Service. The Navy and the Marine Corps require mentors and protégés to agree to meet a minimum number of times in a given time interval (e.g., once a month). It is not clear how these Services monitor compliance with this requirement. The Navy and the Coast Guard have mentor–protégé matching tools that protégés can use to match their professional profiles to those of potential mentors. The Coast Guard's matching tool uses an "alignment of competencies, areas of expertise and learning needs" to match protégés with potential mentors (Triple Creek, Inc., n.d.). Only the Navy appears to have a mentor program—the Navy Aviation Enterprise Mentoring Program—that includes the screening and selection of would-be mentors, a full day of training for mentors, and follow-on training sessions for mentors to enable them to stay proficient in mentoring. Unfortunately, the subcommittee was not provided with evidence regarding the effectiveness of the mentor training. Finally, some of the more-formal Navy mentoring programs require mentors and protégés to sign mentoring-relationship contracts. These contracts usually require the signees to state the conditions under which they are choosing to enter the relationship, what they hope to achieve in the relationship, how often they agree to meet, and so forth.

Based on its investigation into mentoring programs across the Services, the subcommittee concluded the following:

- The main way in which the Services' mentoring programs are intended to affect racial, ethnic, and gender diversity is by trying to ensure that all members—regardless of demographics—have the same access to mentors.
- Only the Navy and the Coast Guard explicitly tie their mentoring programs to their diversity strategies.
- Across the Services, mentoring programs vary in terms of their level of development and the formality of the mentoring relationships.
- The Services did not describe mentoring efforts prior to the initial career field decision point (i.e., precommissioning for officers or prior to the initial career field assignment point for enlisted personnel).

The Services' Career Development Resources

In addition to mentoring programs, the Services provide a variety of other career development resources. The most common of these are websites that provide links to career development information, such as career guides, (optional) professional development forms, contact information for career counselors, and information about enlisted-to-officer programs. Some of these websites

offer interactive career development tools, such as the Air Force's Enlisted Development Plan (MyEDP), which has an online journaling feature that airmen can use to directly communicate with mentors (Petcoff, 2010). The main features of these programs are described in Issue Paper #38 and summarized in Table 6.

Most of the Services also provide dedicated career counselors and have career "road shows," which are events during which counseling personnel visit installations to describe assignment and promotion processes and deliver other career information. Some of the Services provide individual development plans (IDPs), which refer to all-in-one, standardized documents or online platforms that allow servicemembers to "share their records, career plans, and other relevant information with supervisors (i.e., primary mentors) and other mentors of their choosing" (Issue Paper #33, p. 2). The Coast Guard is the only Service that actually requires any of its members (i.e., first-term enlisted personnel and officers) to complete an IDP.

Career Development Resource	Air Force	Army	Coast Guard	Marine Corps	Navy
Web-based information	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Individual development plans	\checkmark		\checkmark		√ u
Career path guides	\checkmark	٧٥	√٥		√ e
Online information about enlisted-to-officer programs	√e	✓e	√ e	√ e	√ e
Dedicated career counselors	\checkmark		√ °	\checkmark	√ e
Raters encouraged to give career advice in counseling sessions during the performance review process	\checkmark				
Career road shows	√ e		\checkmark	\checkmark	√ u

Table 6. Types of Career Development Resources, by Service

NOTES: A check means that the Service offers the type of resource listed in that row. The superscripted letters next to the checks indicate whether the subcommittee has evidence that the resource is for enlisted personnel (e) or officers (o) or whether the subcommittee does not know for whom the resource is intended (u). The lack of a superscripted letter means that the resource is available to both enlisted and officer personnel.

Servicemembers' Perceptions About Career Development Resources

In general, the Services provided the Commission only with indirect evidence of the effectiveness of their career development resources. Air Force representatives reported not having retention issues at present and speculated that this may be due in part to mandatory counseling briefings, which have received positive survey ratings. Army representatives reported conducting surveys on the quality of career counseling (e.g., the *Sample Survey of Military Personnel*) but did not report the results of these surveys. The Coast Guard's diversity strategy provides a performance metric for evaluating mentoring and counseling networks, but it is unclear whether the Coast Guard has used this metric yet (Issue Paper #33). The Marine Corps has a climate survey, the *2007 Marine Corps Climate Assessment Survey* (U.S. Department of the Navy, 2007), that contains a few items about professional development, but the Branching and Assignments Subcommittee did not obtain data related to these questions and does not know how the Marine Corps uses the survey results. Finally, the Navy reported heavy usage of Navy Knowledge Online (NKO): 96 percent of active-duty members and 90 percent of reservists were registered users in 2005 (Gagne, 2005). This may suggest that NKO is an effective career development tool.

To assess the effectiveness of the Services' career development resources, the subcommittee's research staff examined servicemembers' perceptions about their Service's career development

resources using data collected in March 2010 through the Defense Equal Opportunity Management Institute's online survey instrument, the Defense Equal Opportunity Climate Survey. A total of 352 servicemembers completed the survey, but 99 of these respondents did not provide complete responses to the relevant survey items and had to be removed from the analysis. The final sample of 269 participants was mostly male (85 percent), white (63 percent), from the enlisted corps (78 percent), and from either the Army (44 percent) or the Navy (36 percent).⁴³

To examine overall career perceptions, we averaged responses across the survey items to create four representative factors. Using a composite factor provides a more reliable assessment of a group's opinion by minimizing the influence of any wording bias contained in a single item. The following list shows the survey questions that belong to each factor:

- Factor 1: Person-Service Career Goal Congruency
 - 1. My career goals match my Service's goals.
 - 2. My career timetable matches my Service's timetable for me.
 - 3. I can meet my career timetable in my Service.
 - 4. My career strategy matches my Service's military career strategy for my future.
 - 5. I can use my career strategy in my Service.
- Factor 2: Satisfaction with Access to Career Planning Tools
 - 1. My Service has formal career planning programs or services (e.g., "road shows") that help servicemembers identify future assignment opportunities.
 - 2. In my Service, raters/counselors are effective at identifying future assignments as part of servicemembers' performance rating process (e.g., midterm counseling by rater).
 - 3. My Service provides a method to easily identify or find out about openings for assignments.
- Factor 3: Perceptions of Career Education in Early Career
 - 1. When I first entered the military, someone talked to me about the typical career paths of servicemembers who are in my military occupation.
 - 2. When I first entered the military, I knew how the occupational branching and assignment process worked in my Service.
 - 3. When I first entered the military, I met role models from the occupational area I was likely to enter.
- Factor 4: Satisfaction with the Assignment Process
 - 1. How satisfied are you with the way servicemembers are first assigned to occupations/communities/branches in your Service?
 - 2. How satisfied are you with the amount of input you are allowed to give in the job assignment process?

Table 7 shows the averages of these factors, broken out by gender, race, and ethnicity.

⁴³ Note that the sample from this survey is a convenience sample and is not necessarily representative of members of each Service. The sample size is fairly small and is strongly weighted toward enlisted personnel and Army and Navy members. As such, inferences from the survey results need to be made with caution.

	Survey Factor					
	1	2	3	4		
Gender						
Female (<i>N</i> = 38)	3.11	3.10	2.92	3.05		
Male (<i>N</i> = 215)	3.33	3.13	2.91	3.09		
Race and ethnicity						
Nonminority ($N = 152$)	3.25	3.12	2.87	3.07		
Minority (<i>N</i> = 88)	3.45	3.22	3.04	3.13		
Fotal						
Overall average ($N = 269$)*	3.30	3.13	2.92	3.09		

Table 7. Average Perceptions of Career Development Resources and Assignment Processes, by Gender, Race, and Ethnicity

SOURCE: Defense Equal Opportunity Management Institute, Directorate of Research, 2008.

NOTES: This is the response scale for Factors 1-3: 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, and 5 = strongly agree. This is the response scale for Factor 4: 1 = strongly dissatisfied, 2 = dissatisfied, 3 = neither satisfied nor dissatisfied, 4 = satisfied, and 5 = strongly satisfied. These are the survey factors: Factor 1: Personal-Service Career Goal Congruency, Factor 2: Satisfaction with Access to Career Planning Tools, Factor 3: Perceptions of Career Education in Early Career, and Factor 4: Satisfaction with the Assignment Process.

* The overall sample size (N = 269) is larger than the sum of the sample sizes for the female and male groups (overall gender N = 253) and the sum of the sample sizes for the nonminority and minority groups (overall race and ethnicity N = 240) because of missing data for the gender, race, and ethnicity variables.

Overall, averages for each of the factors tended to cluster around 3.00 (i.e., a response of "neither agree nor disagree" or "neither satisfied nor dissatisfied"). There were no statistically significant differences by either gender or race and ethnicity for any of the survey factors. These results mean that, on average, servicemembers did not have very positive (or very negative) perceptions about career development resources and the assignment process. The only survey factor with averages of less than 3.00 was Factor 3: Perceptions of Career Education in Early Career. On average, servicemembers reported being somewhat less knowledgeable about career processes early in their careers.

Further examination of the data revealed that individuals who felt that their career goals generally matched their Service's goals for their careers were more likely to be satisfied with their Service's assignment process (and vice versa).⁴⁴ The pattern of results generally suggests that servicemembers who felt that they knew more about the assignment process early in their careers and servicemembers who had career goals that matched those of their Service were more satisfied with their Service's career development resources and assignment processe.⁴⁵

⁴⁴ Specifically, all of the factors were positively correlated with each other, with correlations ranging from 0.40 to 0.67. The largest correlation (0.67) was for the relationship between personal-service career goal congruency (Factor 1) and satisfaction with the assignment process (Factor 4).

⁴⁵ Note, however, that these are correlations and thus do not imply causality. As such, the direction of relationships between factors can go either way: Satisfied individuals are more likely to report knowing about the assignment process, *or* individuals who report knowing more about the assignment process are more likely to be satisfied with career development resources and their career options.

Career Counseling During Formal Performance Reviews

An important type of career development resource that is missing from Table 5 and that most Services, thus, appear to lack is career counseling by raters as an additional part of the Services' formal performance review process. Except in the Coast Guard, raters are required to provide counseling during the performance review cycle. For example, the Army requires that all officers be counseled by their raters within 30 days of the beginning of the rating period and that subsequent counseling sessions occur within a certain time frame (U.S. Department of the Army, 2007). However, these formal counseling sessions are focused on performance objectives and not necessarily on imparting career information. That is, Army raters are not explicitly encouraged to talk about future assignments as part of the formal counseling sessions. It appears that only the Air Force encourages raters to provide any sort of career advice (e.g., regarding potential future assignments) during the midterm counseling sessions. However, this does not mean that there is evidence that the career advice that is given greatly increases all servicemembers' knowledge about their career choices.

Nevertheless, the most ready form of counseling for servicemembers comes from their raters. Thus, if the Services are not doing so already, the Commission suggests that they should make supplying career development guidance part of the formal performance review process. The Services would not only instruct raters to provide career advice but would also monitor whether the advice was being given and whether it was actually increasing servicemembers' knowledge of their career options, including understanding the impact of their career choices on chances for future advancement.

Clearly, monitoring the information provided in midterm counseling sessions would be difficult because of how many sessions occur every year. One way to measure the effectiveness of midterm counseling would be to randomly sample units within career fields and conduct audits of midterm counseling sessions. Another method would be to conduct surveys to evaluate whether servicemembers know what they should about their career field at a given point. The Services would thus be able to identify knowledge gaps. Either of these methods of measurement would require the Services to first establish appropriate criteria for evaluating the effectiveness of their midterm career counseling and the personnel doing the evaluations to be trained on how to use the criteria, analyze the results, and make appropriate recommendations.

Summary

Based on information about career development resources provided by the Services and culled from publicly accessible information and survey data, the Commission's Branching and Assignments Subcommittee concluded that:

- The Services are engaging in active efforts to ensure that servicemembers are aware of career opportunities and requirements.
- The Services provide a great deal of career information online, although the information is spread across many websites. The Services use these websites to provide career advice, information about promotion requirements, and resources for further counseling.
- Servicemembers are expected to be self-motivated to develop their careers.
- Servicemembers report moderate knowledge of and satisfaction with career development resources and processes.
- Servicemembers' perceptions of their career goals, knowledge of the assignment process, and access to career development resources are related to their satisfaction with career development information and assignment processes.

RECOMMENDATIONS AND CONCLUSION

Recommendations

The previous sections of this paper detailed the information and evidence gathered by the Branching and Assignments Subcommittee to address the congressional charter tasks related to branching and assignments. The Commission's congressional charter provided the Commission with two specific tasks related to branching and assignments:

- Assess the precommand billet assignments of ethnic-specific officers.
- Examine command selection for officers of particular ethnicities.

These two tasks guided the work of the Branching and Assignments Subcommittee, which in turn resulted in three recommendations.

The first of these recommendations indicates that the Secretary of Defense should conduct accountability reviews to address career racial, ethnic, and gender diversity patterns in the military. As pointed out in this decision paper, minorities and women are not highly represented in tactical/operational career fields, which are closely tied to senior leadership. Further evidence also shows that minority and female servicemembers are not highly represented in O-5 and O-6 command assignments in at least three Services. Moreover, the subcommittee found that the Services cannot provide detailed information about racial, ethnic, and gender diversity patterns in key assignments. In general, given this evidence, the Commission offers this recommendation as a tool to help DoD and the Services identify existing and potential barriers to advancement at key career points, to identify the root causes of these barriers and propose appropriate actions, and to report on the progress being made in eliminating these barriers.

The second recommendation asks DoD and the Services to conduct a phased elimination of the combat exclusion policies for women. In general, evidence presented in this decision paper shows a disconnect between these policies and current combat realities. Moreover, the subcommittee could not find convincing evidence that eliminating these policies would be detrimental to mission readiness. Lastly, the subcommittee found strong evidence that shows that these policies hinder the advancement of women to the upper ranks of the military, at least in the officer corps.

The third recommendation asks the Services to ensure that servicemembers have the appropriate support to make informed career choices. Although the subcommittee could not find strong evidence to support the effectiveness of the programs currently implemented by the Services, research in the civilian sector supports mentoring as a tool to educate the workforce about career decisions.

Accountability Reviews

Recommendation 1—

To assess demographic diversity patterns across the military lifecycle, the Secretary of Defense shall hold annual accountability reviews with the individual Service secretaries, Service chiefs, and Chief, National Guard Bureau. The Coast Guard should be subject to a similar review.

The Commission offers this recommendation as a way for the Office of the Secretary of Defense (OSD) and the Services to address career barriers that prevent minorities and women from entering key career fields and from being considered for key assignments. The steps in this process are as follows:

- Identify barriers at key career points.
- Identify the root causes and propose actions to address them.
- Report on progress made on previous actions.
- Include metrics to determine if actions have the desired impact.

The bulleted statements identify the general steps that the accountability reviews should follow. These steps were adapted from the Navy's internal accountability review process.⁴⁶ According to information provided to the Commission by the Navy, the Chief of Naval Operations (CNO) holds accountability reviews by community. In these reviews, each community's vice admiral briefs the CNO about the demographic diversity health of his or her community, including demographic diversity in selection for key/nominative billets and how members of all demographic groups are progressing along the community's notional career path. In addition, the community leader must also create diversity goals and evaluation metrics for which leadership can be held accountable. Thus, the senior leadership of each Navy community is responsible for ensuring that unnecessary barriers are removed, when possible.

The following example from the Navy's Surface Warfare community illustrates how this process has worked for the Navy. First, the Navy Surface Warfare community identified a root cause for a barrier keeping minorities and women from obtaining certain key assignments: short eligibility windows. Second, they created a process for addressing the root cause: Widen the windows to see how it would impact the demographic diversity of the eligibility pools for the key assignments in question. Third, the Surface Warfare's senior leadership was responsible for reporting on progress made on removing the barriers to the CNO. Finally, the Surface Warfare community used metrics, such as differences in the demographic diversity of the eligibility pools before and after the windows were widened, to show the impact of their efforts.

The Commission believes that the template for the Navy process can be extended to the OSD level, with each of the four steps being taken from the within-Service level up to the OSD level. More generally, the Commission considers accountability reviews to be a best practice that each Service can follow—either on its own or in support of OSD-level reviews.

⁴⁶ See Decision Paper #8 for a description of the barriers analysis process used by federal agencies.

The Combat Exclusion Policies for Women

Recommendation 2—

DoD and the Services should eliminate the "combat exclusion policies" for women, including the removal of barriers and inconsistencies, to create a level playing field for all qualified servicemembers. The Commission recommends a time-phased approach.

The ground combat exclusion policies act as a structural barrier for women to enter certain tactical/operational career fields and specialties and to obtain certain assignments. Evidence for officers suggests that tactical/operational career fields are strongly linked to senior leadership in the military. This recommendation asks DoD and the Services to address this barrier for women to enter key career fields and to obtain key assignments. The Commission considered arguments related to four key issues associated with rescinding the policies:

- readiness and mission capability
- appropriateness given current combat environments
- discrimination and fairness
- unanticipated effects.

In this decision paper, the Branching and Assignments Subcommittee summarized evidence regarding the first two issues: There is little evidence that the integration of women into previously closed units or occupations has had a negative impact on mission capability, and there is some evidence that the female presence has had a positive impact in combat settings. In addition, military women deployed to Iraq and Afghanistan have already been engaged in activities that would be considered combat related, including being collocated with combat units and engaging in direct combat for self-defense. Thus, the combat exclusion policies do not reflect the current operational environment.

The third and fourth issues were addressed during the Commission's public deliberations on this issue. For many Commissioners, the policies are fundamentally discriminatory because they stipulate that assignment decisions should be based solely on gender, without regard to capability or qualifications. However, the Commission also considered whether there might be unanticipated effects from rescinding the combat exclusion policies, especially with regard to opening career fields. In particular, it is unknown what type of impact such a policy change would have on enlisted recruiting. If young women perceive the opening of combat career fields to mean that they will be required to enter these occupations, rather than being allowed to volunteer for them, female propensity to enlist may drop, and the Services may find it difficult to achieve their recruiting missions.

Based on these considerations, the Commission recommends that DoD and the Services should eliminate their combat exclusion policies for women using a phased approach, so that all potential issues with how to best implement new policies can be thought through. This recommendation was approved by a majority, but not all, of the Commissioners. Because of concerns regarding the potential impact of the policies' removal on unit effectiveness and potential issues of implementation, a small number of Commissioners did not approve recommending removal of the policies immediately but instead favored further study. On the other hand, a small number of other Commissioners believed that the above recommendation was not strong enough. They would have preferred a more forceful recommendation to immediately eliminate the policies. The Commission proposes three strategies for implementing this recommendation, as described below.

Recommendation 2a—

Women in career fields/specialties currently open to them should be able to be assigned to any unit that requires that career field/specialty, consistent with the current operational environment.

In previous sections of this decision paper, the subcommittee provided examples of the disconnect between the roles that women are formally assigned (policy) and the roles that they usually end up filling while deployed (practice). This suggests that the DoD and Service policies about the assignment of women to direct ground combat positions are inconsistent with the operational environment, in which women are serving in roles prohibited by current assignment practice. This may mean that women are not receiving full credit for their accomplishments because they did not achieve them in their formally assigned roles. It also means that women cannot achieve the fullest careers possible for their chosen career fields or specialties. Given the limitations already imposed on women's ability to choose certain tactical/operational career fields, the Commission recommends that qualified women in career fields/specialties currently open to them should be able to be assigned to any unit that requires that career field or specialty. This should help to make the current assignment policies consistent with practice.

Recommendation 2b—

Additional steps should be taken to open all career fields and units to qualified women.

In this paper, the argument has been made repeatedly that tactical/operational career fields and assignments (namely command assignments) are linked to senior officer ranks in the Services. As long as the combat exclusion policies bar women from entering tactical/operational career fields and units, women will be at a disadvantage, compared with men, in reaching the highest levels of their Services. The Commission is not arguing that women cannot reach senior leadership levels without being in tactical/operational career fields or that a large number of women will choose or be qualified to enter tactical/operational career fields if given the opportunity. However, the Commission does argue that the existing policy prevents qualified women from having the opportunity that men have—to enter the career field of one's choosing—and thus affects women's chances of advancement to the higher ranks. Therefore, the Commission recommends that additional steps should be taken to open all career fields and units to qualified women.

Recommendation 2c—

DoD and the Services should report to Congress the process and timeline for achieving a gender-neutral policy based on recent combat experience.

In order for DoD and the Services to follow Recommendations 2a and 2b, they need to determine how they will go about following those recommendations. Furthermore, Congress requires the Secretary of Defense to report to Congress any changes to the ground combat exclusion policy (Harrell et al., 2007); the reporting requirements can be found in 10 U.S.C. 652 (2006). Therefore, the Commission recommends that DoD and the Services should report to Congress the process and

timeline for achieving a gender-neutral policy based on recent combat experience. To be clear, this recommendation means that DoD and the Services will have to determine *how* to achieve a gender-neutral policy, not *whether* they can achieve a gender-neutral policy.

Mentoring and Career Development Resources

Recommendation 3—

The Services should ensure their career development programs and resources enhance servicemembers' knowledge of career choices, including Reserve Component opportunities, to optimize the ability of servicemembers to make informed career choices from accession to retirement.

The Commission proposes this recommendation as a way to remove perceptual barriers that may hinder the career advancement of minorities and women. Although the Commission does not know to what degree *particular* barriers, such as lack of community support, influence the career decisions of minorities and women, there is enough evidence that some form of perceptual barrier is likely to exist because minority male officers are less likely than white male officers to choose tactical/operational career fields.

By adding career development programs that connect servicemembers with mentoring and career counseling before their initial career field selection, the Services can provide servicemembers information regarding what career fields are more likely to lead to senior leadership positions. Ongoing mentoring can also allow servicemembers to make more-informed choices about what assignments to pursue and how to make other career decisions.

Specifically, the subcommittee examined both the impact of mentoring and the current Service programs. The recommendations are based on a review of the literature on the benefits of mentoring and on what types of mentoring are the most effective, in addition to what was found about gaps in the Service's programs. Based on evidence about the potential benefits of high-quality mentoring, the Commission assumes that servicemembers who have high-quality mentoring relationships from their Services will be able to make more-informed career decisions. This ability is particularly important for minority male servicemembers, who may not have been choosing tactical/operational career fields partly because of a lack of knowledge about the potential benefits of entering such career fields. The literature also identified effective mentoring practices, which include establishing clear program objectives, matching mentors and protégés based on program objectives, encouraging multiple mentor–protégé relationships, and evaluating mentorship programs against goals (Finkelstein & Poteet, 2007). The resulting recommendations concerning career development resources are based on these findings and our analysis of gaps in the Service's programs.

Recommendation 3a—

Mentoring and career counseling efforts shall start prior to the initial career field decision point and continue throughout the servicemember's career.

Like many organizations, the Services provide mentoring to inform servicemembers of their career options and to help them develop professionally and personally. However, the Services did not indicate a focus on mentoring prior to initial career path decisions, such as the selection of a career branch or community for officers or of a job specialty for enlisted servicemembers. Officers in tactical/operational career fields are more likely to be promoted into flag/general officer positions.

Newly commissioning officers should be able to make initial career branch decisions with full knowledge of these issues. Therefore, the Commission recommends that the Services ensure that their mentoring efforts start prior to the initial career decision point and continue throughout the career.

Recommendation 3b

Mentoring programs shall follow effective practices and employ an active line of communication between protégé and mentor.

The findings from the subcommittee's investigation of the military's mentoring programs and practices (summarized in Issue Paper #33) indicate that the Services are making extensive efforts to assist their members in their career development. They also show, however, that there is very little information about the effectiveness of these efforts, either overall or for specific demographic groups.

In particular, all of the Services indicated that they have surveys that ask servicemembers about mentoring. The Air Force, the Coast Guard, and the Navy did not provide results from these types of surveys to the Commission. However, both the Army and the Marine Corps presented some of their survey results during their November 2009 briefings to the Commission. According to the Army briefing (Horne, 2009), a majority of Army officers (67 percent) and enlisted soldiers (56 percent) reported having mentors. However, there has been unmet demand: About a quarter of both officers and enlisted soldiers reported that they had never had a mentor but would have liked to have had one. According to the Marine Corps briefing (U.S. Marine Corps, 2009), between 37 and 48 percent of respondents across all race and ethnicity groups agreed with the survey statement "[m]y mentor has had a positive impact on my life in the Marine Corps." The survey only asks respondents to answer yes or no, so it is unclear how strongly respondents disagreed with this statement. However, the rate of disagreement is a clear indication that the Marine Corps should examine its current supervisory-based mentor system in order to improve the quality of mentoring given to marines.

Based on the information that the Services provided regarding how they measure the effectiveness of their mentoring programs, the Commission was unable to determine whether, how, or to what extent any of the programs are meeting either the direct goal of supplying equal access to mentors or the ultimate goal of improving the career advancement of all servicemembers—women, minorities, and white men alike. Therefore, the Commission recommends that the Services' mentoring programs should follow the effective practices listed in Decision Paper #33 and should be evaluated on an ongoing basis. Moreover, while a large amount of career information can be made available online, the Commissioners believe that a direct and personal line of communication between mentor and protégé is key in helping protégés receive pertinent information. This is especially true when mentors are well matched to protégés and therefore can provide effective advice based on firsthand experience to their protégés. Descriptions of methods for conducting ongoing evaluations of mentoring programs are described in the sections below.

Approaches to Evaluating Mentoring Programs

The Services should, on an ongoing basis, evaluate the outcomes of their mentoring programs against predetermined goals and criteria. The Services can do this by using surveys to measure mentor and protégé perceptions and gather self-reported experiences with mentoring—a practice they appear to

be following already.⁴⁷ However, the surveys should supply a definition of mentoring or ask servicemembers how they define mentoring to help avoid problems with determining who actually is or has been in mentoring relationships. Some of the mentoring-related constructs that the Services could examine include

- personality characteristics, professional background, or other factors that are theoretically related to mentor and protégé perceptions of similarity
- mentor and protégé attitudes about their mentoring relationships
- general mentor and protégé attitudes about work
- mentor and protégé-perceived barriers to initiating and maintaining mentoring relationships
- protégé reports of career functions provided by mentors
- protégé knowledge about career options and the assignment process
- satisfaction with specific features of a mentoring program (e.g., matching tool).

In addition to using surveys, the Services can conduct focus groups or interviews with servicemembers to get more detailed information about their mentoring experiences.⁴⁸ An example of a multimethod approach to understanding mentoring already exists in the Services. Colonel Kolditz, now the head of the Department of Behavioral Sciences and Leadership at the U.S. Military Academy (West Point), wanted to understand how Army officers established and maintained mentoring relationships. His interviews with 53 Command and General Staff Officer Course (CGSOC) students revealed that those who were protégés generally initiated relationships with mentors, despite their initial claims that the mentors initiated the relationships (Kolditz, 2006). Kolditz also surveyed 233 CGSOC students as part of his research. He found that students who rated higher on a scale measuring feedback-seeking behavior were more likely to establish mentoring relationships than were peers who scored lower on the feedback-seeking scale.⁴⁹ He also found that raters who scored higher on a scale measuring leader-empowering behavior were more likely than raters who scored lower on the scale to be mentors. Based on this line of research, a course taught at West Point requires cadets to initiate and maintain mentoring relationships during the course and then write reports about their experiences. The purpose of having cadets seek out mentors is to help them learn early in their careers how to initiate mentoring relationships and what to expect from them.

In addition to using multiple assessment methods, the Services should track the careers of individuals who use their mentoring programs and tools over time. At a minimum, one assessment should be done prior to use of the program and another after some critical point in the relationship has passed (or after the program has ended). If possible, the Services should also conduct experiments to determine whether the features of their mentoring programs, particularly mentoring training, work as intended. For example, would-be mentors could be randomly assigned to one of two groups, one that receives mentoring training as part of the program and one that does not. The Services could then assess (via surveys or other assessment methods) whether mentors who underwent training have

⁴⁷ Surveys should be based on large, representative samples of the population of interest and should contain reliable and valid questions about the constructs of interest.

⁴⁸ The focus groups and interviews should follow a set of protocols, have a standard set of questions and rating criteria, and be applied in standardized settings.

⁴⁹ This finding fits with some research that suggests that individuals who are more proactive in searching for career development opportunities actually tend to receive more developmental opportunities (Riche et al., 2007, p. 20).

more knowledge about how to provide effective mentoring to their protégés than mentors who did not get the training. Other assessments could determine whether protégés with mentors in the two groups have different levels of satisfaction with mentors, how much protégés learned about their career development prospects, and so forth.

Conclusion

The analysis described in this decision paper drew on multiple information sources, including past studies, information provided by the Services, and original data, to evaluate how branching and assignment processes affect racial, ethnic, and gender diversity in military leadership. Given the rapidly changing threat landscape, a more demographically diverse military leadership could bring different perspectives and skills together for the benefit of a more agile and adaptable workforce. However, reaping the benefits of a more demographically diverse leadership in the future requires today's senior leaders to provide effective and accountable diversity management (Issue Paper #14). The aspect of diversity management on which the Branching and Assignments Subcommittee focused its attention was the removal of structural and perceptual barriers that keep women and minorities from advancing to the highest ranks in the U.S. military. The subcommittee identified four areas in which barriers exist, with the first of these deemed most critical:

- *Key career fields.* Women and minorities are underrepresented in senior leadership, at least in part because they are underrepresented in the tactical/operational career fields that lead to promotion to the top ranks.
- *Command assignments*. Although the data do not show that command selection rates for women and minorities are systematically lower than those of men and whites, women and minorities represent a small number of command selectees. One possible reason, other than low representation of women and minorities in tactical/operational career fields, is that women and minorities may not be getting career-enhancing (i.e., "key") assignments prior to O-5 and O-6 command.
- *Career barriers*. The subcommittee found both perceptual and structural barriers for women and minorities. These barriers hinder advancement opportunities and prevent women and minorities from reaching the upper ranks of the military.
- *Career facilitators.* There is a need for continued development, provision, and evaluation of flexible and effective mentoring programs and career development across all the Services.

Ultimately, the Commission recommends that DoD and the Services identify and remove barriers to advancement, including combat exclusion policies for women, and ensure that all servicemembers have the knowledge to make informed career choices at all stages of their careers. The Commission believes that implementing these recommendations will pay large dividends for the Services in terms of increased racial, ethnic, and gender diversity among senior military leaders, as well as the development and maintenance of a mission-ready future force.

APPENDIX A: INITIAL OFFICER ASSIGNMENTS IN THE COAST GUARD, MARINE CORPS, AND NAVY

The tactical slot allocation patterns for the Air Force and the Army may not extend to the Navy, the Marine Corps, and the Coast Guard because of how officers are initially assigned to career fields/specialties in these three Services.

In the Coast Guard, the first tour for most newly commissioned officers is an operational tour (i.e., operations either ashore or afloat). According to information provided to the Commission by the Coast Guard, about 90 percent of Coast Guard Academy graduates and about 80 percent of OCS graduates go either ashore or afloat on their first tour. The main difference between the two commissioning sources is that more afloat tour slots are filled by academy graduates than OCS graduates and more ashore tour slots are filled by OCS graduates than academy graduates. For both commissioning sources, about 10 percent of the graduating class goes to flight school. For OCS graduates, a final 10 percent goes to a staff position first before going on an operational tour. Coast Guard officers do not usually establish themselves in their career specialties until they have had a second tour in the same career field. With some exceptions, this second tour does not necessarily have to come directly after the first tour in the specialty, but it usually occurs within the first three tours of an officer's career. Assignment to first tours is based on merit rankings within commissioning sources and on officers' preferences. The Coast Guard does not have data to suggest that there are demographic diversity patterns in merit rankings and preferences for first-tour assignments.

In the Marine Corps, officers go to The Basic School (TBS) after going through their commissioning sources. Therefore, Marine Corps officers are not branched and assigned to their military occupational specialties (MOSs) until they are all together in TBS.⁵⁰ Thus, tactical slot allocations to commissioning sources do not apply to the Marine Corps.⁵¹

In the Navy, a majority of officers are slotted for URL fields (i.e., aviation, submarine, or surface warfare), regardless of commissioning source. Thus, only small differences exist in "tactical" slot allocations across commissioning sources. For example, according to information provided to the Commission by the Navy, about 52 percent of the URL slots given to the Naval Academy and Naval ROTC (NROTC) went to the Naval Academy and 48 percent went to NROTC. According to information provided to the Commission by the Navy, there are some but not many differences in the types of tactical slots allocated to the Navy's two main commissioning sources, the Naval Academy and NROTC. Of the slots allocated to either of these two commissioning sources in FY 2009, the Naval Academy received proportionately more submarine slots than NROTC (about 55

⁵⁰ The two exceptions to this statement are for pilots and lawyers, who do know what MOSs they will enter prior to entering The Basic School.

⁵¹ According to information provided to the Commission by the Marine Corps, a majority of officers who were previously commissioned through the Naval Academy were assigned to tactical MOSs in FY 2009 (about 67 percent). However, the same statement could be made about officers previously commissioned through other sources: A majority of officers who were commissioned through Naval ROTC (about 55 percent), the Platoon Leaders Course (about 60 percent), or the Officer Candidate Course (about 54 percent) were assigned to tactical MOSs in FY 2009. These general trends were found for FY 2007 and FY 2008, with some of the percentages differing across these four major commissioning sources.

percent versus 45 percent, respectively) and proportionately more special warfare or operations than NROTC (about 62 percent versus 38 percent, respectively).⁵²

⁵² The differences in surface warfare and aviation slot allocations across the two commissioning sources in FY 2009 were much smaller. Specifically, the Naval Academy received about 51 percent of surface warfare slots and 53 percent of aviation slots versus 49 percent of surface warfare and 47 percent of aviation slots received by NROTC.

APPENDIX B: BACKGROUND INFORMATION ON MENTORING RELATIONSHIPS AND DEMOGRAPHIC DIVERSITY

Before investigating the Services' mentoring programs and tools, the Branching and Assignments Subcommittee examined the extant research on the topic of mentoring relationships and demographic diversity. The end result was Issue Paper #25, which summarizes research on two important concerns related to mentoring relationships and demographic diversity:

- Do women and racial/ethnic minorities generally have access to mentoring relationships in organizations?
- Do women and racial/ethnic minorities benefit from mentoring relationships in organizations?

The reason why the subcommittee focused on these two questions is because organizational leaders, policy makers, and researchers have generally been concerned that women and racial/ethnic minorities lack access to mentors and, as a result, many organizations have created special mentoring programs to aid in the career development of women and minorities who tend to face more barriers to advancement (Giscombe & Mattis, 2002).

Benefits of Formal Versus Informal Mentoring Relationships

The mentoring programs that organizations develop and implement to aid women and minorities usually result in what are known as *formal* mentoring relationships, which are usually initiated through a mentor-protégé matching process and are often monitored by the organization. Formal mentoring relationships are often contrasted with *informal* mentoring relationships, which are relationships that occur spontaneously, with either the junior or senior individual (or both) initiating the relationship without organizational assistance. There has been concern that informal mentoring relationships are more beneficial than formal mentoring relationships. Indeed, some research studies have found that protégés in informal mentoring relationships (Ragins & Cotton, 1999). However, Ragins et al. (2000) found that protégé satisfaction with the mentoring relationship was more strongly related to protégé work attitudes (e.g., job satisfaction) than with the formality of the mentoring relationship. These findings suggest that formal mentoring relationships are not uniformly less beneficial than informal mentoring relationships.

Women and Minorities' Access to Mentoring Relationships

In answer to the first question listed above, women and racial/ethnic minorities generally have access to mentors. Recent evidence suggests that women are as likely as men to have mentors (Hezlett, 2003; Steinberg & Nourizadeh, 2001). For minority access to mentors, the evidence is more mixed but more studies suggest that minorities are generally as likely as whites to have mentors (Dreher & Cox, 1996; Steinberg & Foley, 1999; Thomas, 1990) than studies that suggest minorities have less access to mentors than whites (e.g., Viator, 2001). Despite the evidence that women and minorities may have equal access to mentors, women (Ragins & Cotton, 1991) and blacks (Viator, 2001) *perceive* more barriers to accessing mentors than white men.

What may be more important than the question of access is the question of what types of mentoring relationships women and minorities usually have. Specifically, the types of mentoring relationships women and racial/ethnic minorities have may be different in some important ways from the mentoring relationships white men have. Evidence from the civilian literature suggests that women and minorities are more likely than white men to be in mixed (i.e., cross-gender and/or cross-race/ethnicity) mentoring relationships. Specifically, compared with white men, women are more likely to be in cross-gender mentoring relationships, and racial/ethnic minorities are more likely to be in cross-race or cross-ethnicity mentoring relationships (Dreher & Cox, 1996; Ragins & Cotton, 1991; Thomas, 1990). This is likely because the pool of potential mentors contains more white males, since there are larger numbers of white men in senior positions in organizations.

Quality of Women and Minorities' Mentoring Relationships

Given that women and racial/ethnic minorities are more likely to be in mixed mentoring relationships than white men, the concern then becomes whether women and minorities receive similar benefits from mentoring relationships as do white men. The evidence is mixed. On one hand, there is evidence that female and racial/ethnic minority protégés with white male mentors may earn more money than protégés with female or nonwhite mentors (e.g., Dreher & Cox, 1996), which suggests that female and racial/ethnic minority protégés get career benefits from being in mixed mentoring relationships. On the other hand, female protégés with female mentors report receiving more psychosocial support—role modeling, friendship, counseling, and providing acceptance and confirmation—than do female protégés with male mentors of the same race/ethnicity report receiving more psychosocial support (Koberg et al., 1998; Thomas, 1990) and career development support (Ensher & Murphy, 1997). Therefore, female and racial/ethnic minority protégés may derive a different set of benefits from same-gender and same-race/ethnicity mentoring relationships than from mixed mentoring relationships.

Women and Minorities Have Access to Mentors but the Quality of Their Mentoring Relationships Is open to Question

The key results from the existing research literature on mentoring relationships and demographic diversity can be summarized as follows:

- Research indicates that, overall, women and minorities do not lack access to mentors but that they do lack access to mentors of the same gender or race/ethnicity. As a result, they are more likely to be in mixed mentoring relationships.
- Research indicates that mixed mentoring relationships are more likely to provide career benefits, whereas mentoring relationships based on demographic similarity are more likely to provide psychosocial benefits.

Until more is known about the effects of both types of mentoring relationships, organizations cannot assume that creating mentoring programs that target members of historically disadvantaged groups will necessarily lead to better career progression for these people and, ultimately, to more diversity among senior leadership. As with any organizational intervention, a mentoring program requires careful design and evaluation to be effective.

REFERENCES

Allen, T. D., Eby, L. T., & Lentz, E. (2006). Mentorship behaviors and mentorship quality associated with formal mentoring programs: Closing the gap between research and practice. *Journal of Applied Psychology*, *91*, 567–578.

Allen, T. D., Eby, L. T., Poteet, M. L., Lentz, E., & Lima, L. (2004). Career benefits associated with mentoring for protégés: A meta-analysis. *Journal of Applied Psychology*, *89*, 127–136.

Armor, D. J., & Gilroy, C. L. (2010). Changing minority representation in the U.S. military. *Armed Forces and Society*, *36*(2), 223–246.

Aspin, L. (1994, January 13). Direct combat definition and assignment rules.

Carretta, T. R. (2000). U.S. Air Force pilot selection and training methods. *Aviation, Space, and Environmental Medicine, 71,* 950–956.

Cave, D. (2009, November 1). Women at arms; A combat role, and anguish, too. New York Times.

Defense Advisory Committee on Women in the Services. (2009). 2009 report. Washington, DC: Defense Advisory Committee on Women in the Services.

Defense Equal Opportunity Management Institute, Directorate of Research. (2008, October 14). *DEOMI Organizational Climate Survey (DEOCS)*. Patrick Air Force Base, FL: Defense Equal Opportunity Management Institute.

Defense Manpower Data Center. (2008). WEX/DEERS extract [Dataset].

Defense Manpower Data Center. (2009). November 2008 Status of Forces Survey of Active Duty Members: Administration, datasets, and codebook [Report No. 2008-033]. Arlington, VA: Defense Manpower Data Center.

Defense Manpower Data Center. (2010, February 17). *Enlisted NPS gains report*. Retrieved February 27, 2010, from https://www.dmdc.osd.mil/appj/ids/reportloadingaction.do?module=2&report=1

Dreher, G. F., & Cox, T. H., Jr. (1996). Race, gender, and opportunity: A study of compensation attainment and the establishment of mentoring relationships. *Journal of Applied Psychology*, *81*, 297–308.

Ensher, E. A., & Murphy, S. E. (1997). Effects of race, gender, perceived similarity, and contact on mentor relationships. *Journal of Vocational Behavior*, *50*, 460–481.

Finkelstein, L. M., Allen, T. D., & Montei, M. S. (2002, April). *Mentorship quality: The role of relational characteristics and expectations*. Paper presented at the 17th annual meeting of the Society for Industrial and Organizational Psychology, Toronto, Canada.

Finkelstein, L. M., & Poteet, M. L. (2007). Best practices in workplace formal mentoring programs. In T. D. Allen & L. T. Eby (Eds.), *The Blackwell handbook of mentoring: A multiple perspectives approach* (pp. 345–367). Malden: Blackwell Publishing.

Gagne, J. (2005, September 22). Navy Knowledge Online surpasses 500,000 user mark. Retrieved April 9, 2010, from http://www.navy.mil/search/display.asp?story_id=20223

Giscombe, K., & Mattis, M. C. (2002). Leveling the playing field for women of color in corporate management: Is the business case enough? *Journal of Business Ethics*, 37(1), 103–119.

Harrell, M. C., Castaneda, L. W., Schirmer, P., Hallmark, B. W., Kavanagh, J., Gershwin, D., & Steinberg, P. (2007). *Assessing the assignment policy for Army women* [MG-590-1-OSD]. Santa Monica, CA: RAND Corporation.

Harrell, M. C., & Miller, L. L. (1997). New opportunities for military women: Effects upon readiness, cohesion, and morale [MR-896-OSD]. Santa Monica, CA: RAND Corporation.

Haygood, A., & Morris, M. (2009, November). *Air Force accessions*. Briefing presented to the Military Leadership Diversity Commission in Melbourne, FL.

Hezlett, S. A. (2003). Who received mentoring? A meta-analysis of employee demographic, career history, and individual differences correlates [UMI No. 3087761]. Dissertation Abstracts International: Section B: The Sciences and Engineering, 64(4-B), 1930.

Holm, J. (1992). Women in the military: An unfinished revolution. Novato, CA: Presidio Press.

Horne, J. (2009, November 18). *Officer and enlisted career development*. Briefing presented to the Military Leadership Diversity Commission in Melbourne, FL.

Hosek, S. D., Tiemeyer, P., Kilburn, R., Strong, D. A., Ducksworth, S., & Ray, R. (2001). *Minority and gender differences in officer career progression* [MR-1184-OSD]. Santa Monica, CA: RAND Corporation.

Keele, R. L., Bucker, K., & Bushnell, S. J. (1987). Formal mentoring programs are no panacea. *Management Review*, 76(2), 67–68.

Kirby, S. N., Harrell, M. C., & Sloan, J. (2000). Why don't minorities join special operations forces? *Armed Forces and Society*, *26*, 523–545.

Koberg, C. S., Boss, R. W., & Goodman, E. (1998). Factors and outcomes associated with mentoring among health-care professionals. *Journal of Vocational Behavior*, 53, 58–72.

Kolditz, T. (2006, March 21). Building your bench: Guided self-development in the professions. Presentation given at the MRMC Commanders Conference.

Lim, N., Marquis, J. P., Hall, K. C., Schulker, D., & Zhuo, X. (2009). Officer classification and the future of diversity among senior military leaders: A case study of the Army ROTC [TR-731-OSD]. Santa Monica, CA: RAND Corporation.

McGuire, M. A. (2007). A joint perspective on mentoring: A look by senior military officers across the Services on the prevalence and contribution of mentoring relationships [UMI No. 3260150]. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 68(4-B), 2698.

McSally, M. (2007). Women in combat: Is the current policy obsolete? *Duke Journal of Gender Law & Policy*, 14, 1011–1059.

Military Leadership Diversity Commission. (2009). *How we define race and ethnicity categories for MLDC research* [Issue Paper #1]. Arlington, VA: Military Leadership Diversity Commission.

Military Leadership Diversity Commission. (2010). Business-case arguments for diversity and diversity programs and their impact in the workplace [Issue Paper #14]. Arlington, VA: Military Leadership Diversity Commission.

Military Leadership Diversity Commission. (2010). *Military occupations and implications for racial/ethnic and gender diversity: Enlisted force* [Issue Paper #15]. Arlington, VA: Military Leadership Diversity Commission.

Military Leadership Diversity Commission. (2010). *Military occupations and implications for racial/ethnic and gender diversity: Officers* [Issue Paper #23]. Arlington, VA: Military Leadership Diversity Commission.

Military Leadership Diversity Commission. (2010). *Mentoring relationships and demographic diversity* [Issue Paper #25]. Arlington, VA: Military Leadership Diversity Commission.

Military Leadership Diversity Commission. (2010). *Recent command selection outcomes for female and minority officers* [Issue Paper #32]. Arlington, VA: Military Leadership Diversity Commission.

Military Leadership Diversity Commission. (2010). *Mentoring programs across the Services* [Issue Paper #33]. Arlington, VA: Military Leadership Diversity Commission.

Military Leadership Diversity Commission. (2010). *The active-duty officer promotion and command selection processes: Considerations for race/ethnicity and gender* [Issue Paper #34]. Arlington, VA: Military Leadership Diversity Commission.

Military Leadership Diversity Commission. (2010). *Career development resources in the Services* [Issue Paper #38]. Arlington, VA: Military Leadership Diversity Commission.

Military Leadership Diversity Commission. (2010). Department of Defense Directive 1020.02: A foundation for effective, accountable diversity management? [Issue Paper #50]. Arlington, VA: Military Leadership Diversity Commission.

Military Leadership Diversity Commission. (2010). *Women in combat: Legislation and policy, perceptions, and the current operational environment* [Issue Paper #56]. Arlington, VA: Military Leadership Diversity Commission.

Military Leadership Diversity Commission. (2011). *Metrics* [Decision Paper #8]. Arlington, VA: Military Leadership Diversity Commission.

National Defense Research Institute. (2010). Sexual orientation and U.S. Military personnel policy: An update of RAND's 1993 study [MG-1056-OSD]. Santa Monica, CA: RAND Corporation.

Office of the Under Secretary of Defense, Personnel and Readiness. (FY 2007–FY 2008). *Population representation in the military services*. Washington, DC.

Peck, T. R. (2010, March 6). *Women serving in Navy continue reaching milestones*. Retrieved October 11, 2010, from http://www.navy.mil/search/display.asp?story_id=51758

Petcoff, R. P. (2010, February 23). My Development Plan gives airmen access to career information, mentorship. *Air Force Print News Today*.

Presidential Commission, Assignment of Women in the Armed Forces. (1992, November 15). Report to the President. Washington, DC: U.S. Government Printing Office.

Ragins, B. R., & Cotton, J. L. (1991). Easier said than done: Gender differences in perceived barriers to gaining a mentor. *Academy of Management Journal*, *34*, 939–951.

Ragins, B. R., & Cotton, J. L. (1999). Mentor functions and outcomes: A comparison of men and women in formal and informal mentoring relationships. *Journal of Applied Psychology*, 84, 529–550.

Ragins, B. R., Cotton, J. L., & Miller, J. S. (2000). Marginal mentoring: The effects of type of mentor, quality of relationship, and program design on work and career attitudes. *Academy of Management Journal*, 43, 1177–1194.

Ragins, B. R., & McFarlin, D. (1990). Perception of mentor roles in cross-gender mentoring relationships. *Journal of Vocational Behavior*, *37*, 957–971.

Riche, M. F., Kraus, A., & Hodari, A. K. (2007). *The Air Force diversity climate: Implications for successful total force integration* [CRM D0016190.A2]. Alexandria, VA: CNA Corporation.

Schirmer, P., Thie, H. J., Harrell, M. C., & Tseng, M. S. (2006). *Challenging time in DOPMA: Flexible and contemporary military officer management* [MG-451-OSD]. Santa Monica, CA: RAND Corporation.

Segal, D. R., & Segal, M. W. (2004). America's military population. Population Bulletin, 59(4).

Steinberg, A. G., & Foley, D. M. (1999). Mentoring in the Army: From buzzword to practice. *Military Psychology*, *11*, 365–379.

Steinberg, A. G., & Nourizadeh, S. M. (2001, August). *Superior, peer, and subordinate mentoring in the U.S. Army.* Paper presented at the 110th annual convention of the American Psychological Association in Chicago, IL.

Street, A. E., Vogt, D., & Dutra, L. (2009). A new generation of women veterans: Stressors faced by women deployed to Iraq and Afghanistan. *Clinical Psychology Review*, 29, 685–694.

Thomas, D. A. (1990). The impact of race on managers' experiences of developmental relationships (mentoring and sponsorship): An intra-organizational study. *Journal of Organizational Behavior*, *11*, 479–491.

Triple Creek, Inc. (n.d.). *Web-based Coast Guard mentoring, mentee guide*. Retrieved March 15, 2010, from https://www.3creekmentoring.com/uscgmentoring/index.cfm

U.S. Coast Guard. (n.d.). *Women & the U.S. Coast Guard: Moments in history*. Retrieved January 21, 2010, from http://www.uscg.mil/History/uscghist/WomenChronology.asp

U.S. Coast Guard. (2009, September 1). United States Coast Guard diversity strategic plan. Washington, DC: U.S. Coast Guard.

U.S. Code, Title 10, Subtitle A, Part II, Chapter 37, Section 652. (2006). Notice to Congress of proposed changes in units, assignments, etc. to which female members may be assigned.

U.S. Department of Defense. (2009, February 5). *Diversity management and equal opportunity (EO) in the Department of Defense* [DoDD 1020.02]. Washington, DC: U.S. Department of Defense.

U.S. Department of the Army. (1992, March 27). *Army policy for the assignment of female soldiers* [Army Regulation 600-13]. Washington, DC: U.S. Department of the Army.

U.S. Department of the Army. (2007, August 13). *Evaluation reporting system* [PAM 623-3]. Washington, DC: U.S. Department of the Army.

U.S. Department of the Army. (2010, February 1). Commissioned officer professional development and career management [PAM 600-3]. Washington, DC: U.S. Department of the Army.

U.S. Department of the Navy. (2007, February 1). 2007 Marine Corps climate assessment survey. Washington, DC: U.S. Department of the Navy.

U.S. Department of the Navy. (2009, May 14). Assignment of women in the Department of the Navy [SECNAVINST 1300.12C CH-1]. Washington, DC: U.S. Department of the Navy.

U.S. Government Accountability Office. (1998, October). *Information on DoD's assignment policy and direct ground combat definition* [GAO/NSIAD-99-7]. Washington, DC: United States Government Accountability Office.

U.S. Marine Corps. (2009, November 18). Brief to the Military Leadership Diversity Commission (MLDC). Briefing presented to the Military Leadership Diversity Commission in Melbourne, FL.

Viator, R. E. (2001). An examination of African Americans' access to public accounting mentors: Perceived barriers and intentions to leave. *Accounting, Organizations and Society, 26*, 541–561.

Wanberg, C. R., Kammeyer-Mueller, J., & Marchese, M. (2006). Mentor and protégé predictors and outcomes of mentoring in a formal mentoring program. *Journal of Vocational Behavior*, 69, 410–423.

White, R. C., Jr. (2009). *Wasting time: Black participation in the combat arms branches* [OMB No. 0704-0188]. Carlisle Barracks, PA: U.S. Army War College.