DEFENSE ADVISORY COMMITTEE ON WOMEN IN THE SERVICES (DACOWITS)

Quarterly Meeting Minutes

22-23 March 2017

The Defense Advisory Committee on Women in the Services (DACOWITS) held a quarterly business meeting on March 22 and 23, 2017. The meeting took place at the Hilton Mark Center Hotel, 5000 Seminary Road, Alexandria, VA, 22311.

22 March 2017

Welcome and Opening Remarks

COL Aimee Kominiak, DACOWITS Military Director and Designated Federal Officer, opened the March quarterly business meeting by reviewing the Committee's establishment and charter. COL Kominiak then turned the meeting over to Gen (Ret.) Janet Wolfenbarger, DACOWITS Chair.

Swearing-In of New Committee Members

Gen (Ret.) Wolfenbarger welcomed the public to the meeting and introduced the guest speaker, Mr. Anthony Kurta, who is performing the duties of the Under Secretary of Defense for Personnel and Readiness, to preside over the swearing-in of six new Committee members. Mr. Kurta has been performing these duties since January 20, 2017. He is the chief Human Resource Officer for DoD, and is responsible for health affairs, readiness, civilian and military personnel policy for all 2.9 million members of the Department. Mr. Kurta graduated with merit from the U.S. Naval Academy in 1981, earned an M.A. in National Security Studies from Georgetown University, is a distinguished graduate of the Air Command and Staff College, and was a National Security Fellow at the Kennedy School of Government at Harvard University. Mr. Kurta's career includes over 32 years on Active Duty as a Navy Surface Warfare Officer. Mr. Kurta retired from the Navy in 2013 as a Rear Admiral.

Mr. Kurta acknowledged the service of COL Kominiak and informed the public that this will be her last official function with DACOWITS before she retires after 30 years of service. Mr. Kurta then reviewed the history and importance of DACOWITS. Mr. Kurta applauded the work that the Committee has done and the progress that it has been directly and indirectly responsible for in its 65 years of service, which culminated in the opening of all military positions to women in 2015. Mr. Kurta noted that some may suggest that the Committee's work is done since there is nothing significant left for the Committee to accomplish. However, Mr. Kurta addressed the Committee directly and encouraged them to develop a renewed sense of purpose, because he believes that it is the wrong time to ease up. Mr. Kurta stated that recent events illustrate the importance and relevance of DACOWITS' work and addressed the recent harassment of female Marines on social media. Mr. Kurta noted that bullying, harassment, and hazing in the military is now more subtle and takes place mostly online, whereas it was previously more overt and

happened in the workplace. Mr. Kurta asserted that the work and advice of the Committee is more important than ever. Mr. Kurta noted that the issues the Services are currently facing will require a complete change in culture, which requires sustained leadership and time. Mr. Kurta referenced the Commandant of the Marine Corps' recent statement stressing that the U.S. cannot go to war today without women. Mr. Kurta agreed with the Commandant and asserted that if the bullying and harassment issues are not solved, the future of the force is in danger. Mr. Kurta stated that it took thirty to forty years for the military culture surrounding race relations and drug and alcohol abuse to change, and if it takes forty years to stamp out this kind of behavior towards women in the Services, the U.S. will not be able to maintain an all-volunteer force to carry out the mission of the country. Mr. Kurta ended his remarks by thanking the Committee for its hard work and urging the members to commit again their passion, experience, and ideas because the senior leadership needs their advice and solutions.

Mr. Kurta welcomed the new DACOWITS members, and COL Kominiak administered the oath to the new members in accordance with the Federal Advisory Committee Act. Mr. Kurta pinned the new members, and he and Gen (Ret.) Wolfenbarger congratulated them.

Introductions and Status of Requests for Information

COL Kominiak shared additional administrative remarks and turned the meeting over to Gen (Ret.) Wolfenbarger, who asked all Committee members and meeting attendees to introduce themselves.

Gen (Ret.) Wolfenbarger acknowledged the centennial celebration of the first woman to enlist in the military and Women's History Month. Gen (Ret.) Wolfenbarger stated that although good progress has been made relative to women in Military Services, there is still more work for the Committee to do. Gen (Ret.) Wolfenbarger wanted to speak on record on behalf of the Committee and say that they are very concerned about the national news surrounding the harassment of women in the Services on social media. Gen (Ret.) Wolfenbarger stated that the Committee plans to review the findings of the ongoing investigation in order to further advise the Services on this issue. Gen (Ret.) Wolfenbarger stated that the Committee put forward two recommendations surrounding this issue in 2015 and that the topic will be addressed further by the Committee in the future.

COL Kominiak then reviewed the status of the Committee's requests for information (RFIs). The Committee received responses to all four of its RFI requests. COL Kominiak added that the Committee will also be briefed on the Service Academies' Boxing Programs by a graduate student from the Kennedy School of Government at Harvard University.

Panel Discussion: Women's Retention (RFI 2)

The Committee requested briefings from the Military Services on the points in a career timeline when women and men leave the military. The Committee specifically requested that the Services identify: 1) which career fields are having a hard time retaining personnel and compare the male to female retention rates in those fields, 2) the ten career fields with the highest retention rates, the ten career fields with the lowest retention rates, and the retention rates for men and women in those fields; 3) what the current retention rates for women in operational and non-operational career fields compared to men are; 4) if there is a gender difference in retention rates and what

strategies the Services are using to address this issue; 5) how each of the Services uses retention data to inform recruitment strategies; and 6) what opportunities are afforded to Service members for rebranching or reclassifying.

Army: MAJ Brian Miller, Personnel Strength Analyst, Chief of Staff of the Army

MAJ Miller began by describing how the Army measures attrition and continuation behavior and how the continuation behavior of enlisted female soldiers differs from that of enlisted male soldiers. Initial entry training (IET) loss accounts for most of the attrition that the Army experiences. The highest attrition rates for both male and female soldiers occur during this period, but the loss behavior is higher for female soldiers. Between the first and third year of service, there is a significant difference in attrition rates between males and females. MAJ Miller stated that the Army uses year three as the benchmark to study attrition behavior. After the third year, there is still a substantial difference in attrition rates between the genders, with a 9 percentage point difference in continuation behavior. Between year 3 and year 4, continuation behavior for men diverges after initial service obligation, and MAJ Miller attributed this loss to the fact that most enlistment contracts end after four years. After four years, the continuation behavior for male and female soldiers is almost identical.

MAJ Miller then discussed the reasons for loss of continuation behavior in male and female soldiers. The Army uses expedient means to eliminate people quickly during IET, so looking at attrition rates during that time period is not especially meaningful. The attrition rate for female soldiers is 18% during IET compared to 12% for male soldiers. The two most common reasons that male soldiers separate are 1) misconduct (13.9%), and 2) issues with drugs and/or alcohol (12.2%), and the two most common reasons that female soldier separate are 1) disability (14.8%), and 2) parenthood and pregnancy (14.0%). MAJ Miller mentioned that this continuation behavior pattern for enlisted soldiers is significantly different than that of officers.

The continuation behavior of female and male officers is very similar through four years of service, but it diverges after the initial service obligation, which is typically four to five years. After the year 5 initial separation, female officers separate at a rate 5 percentage points higher than male officers. The continuation behavior of male and female officers follows this pattern for the remainder of service time.

MAJ Miller then discussed attrition for males and females by career field. Females have higher attrition rates than men in every career field. The occupations with the highest and lowest losses are the same for males and females. Engineers, Armor, Air Defense, Artillery, and Aviation all have a small cohort of women, (10% of all female soldiers are in these career fields). MAJ Miller stated that Infantry and Armor have the highest attrition rates for males, and the Army expects women to also attrite at 50% or more in those fields when they integrate. There is a roughly even split in attrition rates by gender for both combat and non-combat occupational specialties, with females experiencing about a 10 percentage point higher loss rate than males in both combat and non-combat fields.

Marine Corps: Capt Raul Garza, Manpower Analyst, Headquarters Marine Corps

Capt Garza began by discussing women's retention in the Marine Corps. The Marine Corps does not access, retain, or promote by race, creed, color, or gender, and the Marine Corps does not have any programs or initiatives that focus on reducing attrition and increasing retention of women specifically. Instead, the Marine Corps focuses on increasing the retention of quality

Marines, regardless of gender. Career fields with low retention rates often have a shortage of personnel and this drives recruiting efforts. All Marines are afforded the opportunity to laterally move into a different occupational specialty based on the inventory needs of the Marine Corps.

Capt Garza then discussed the retention of officers in all occupational fields versus the retention of officers in the occupational fields with the lowest retention rates. The Marine Corps has 15 occupational fields. The occupational fields with the highest 5 retention rates are: 1) Unmanned Aircraft Systems, 2) Naval Aviators, 3) Aircraft Maintenance, 4) Military Police, and 5) Judge Advocates. The occupational fields with the lowest 5 retention rates are: 1) Manpower, 2) Public Affairs, 3) Financial Management, 4) Air Command and Control, and 5) Communications. The five occupational fields with the lowest retention rates have lower retention rates at 5, 8, and 11 years of service.

Capt Garza then explained the difference in retention rates between male and female officers in both the highest and lowest retaining occupational fields. Throughout 20 years of service in the bottom 5 occupational fields continuation rates are not consistently higher for one sex. For example, male continuation is 7 percentage points lower than female at 4 years of service and 8 percentage points lower at 12 years of service. However, female continuation is 9 percentage points lower at 5 years of service and 6 percentage points lower at 11 years of service. Similarly, trends follow similar patterns in the top 5 occupational fields as well. For example, male continuation is 10 percentage points lower at 5 years of service at 5 years of service at 7 years of service. Female continuation is 17 percentage points lower at 6 years of service and 11 percentage points lower at 12 years of service.

Capt Garza then discussed the average continuation rates of enlisted Marines by gender. Most Marines, both male and female, separate from the Marine Corps after 4 years of service. The retention rate for females is generally lower between years 10 and 15, but it is then similar between males and females for the duration of service. Capt Garza then discussed the retention rates for males and females in the occupational specialties that are healthiest (have the highest retention rates) and most degraded (have the lowest retention rates). He explained that, for some specialties, the female cohort is so small that there are large fluctuations in retention percentages.

Navy: CDR Lee Levells, Deputy Branch Head, Office of Plans and Policy, and CDR J. Darrick Poe, Deputy Branch Head, Enlisted Plans and Policies

CDR Poe explained that the Navy does not have explicit retention policies that deviate for any protected class, including by race or gender. CDR Poe began by explaining that the fields with the lowest retention rates for both sexes typically involve a harsh work environment and/or one going out to sea. He then discussed the career fields that have a hard time retaining enlisted personnel and compared the male retention rates to female retention rates in those fields. These career fields differ between males and females, but all of the lowest ranking career fields have higher retention rates for males than they do females. CDR Poe then similarly discussed the career fields that have low retention rates for male and female officers and the average length of service before separating is 8.05 years for males and 5.78 years for females. For officers, the average length of service before separating is 13.71 years for males and 10.85 years for females.

CDR Levells then discussed the career fields with the highest and lowest retention rates and broke the rates down by gender. He mentioned that the specialties that were recently opened up

to women do not have female retention rates associated with them yet. CDR Levells stated that the highest-ranking career fields are typically highly skilled and in high demand. CDR Levells then discussed male and female officer continuation rates in communities with difficulty retaining personnel in the same field over the length of a career. The losses reflected in those rates are lateral moves.

CDR Poe explained that the Navy does not qualify career fields as operational or non-operational as most directly support warfighting efforts. The briefers offered community roll-up information as an alternative. CDR Poe then highlighted three communities that have the largest difference in retention rates between enlisted males and females: 1) Surface, 2) Aviation, and 3) Nuclear. Males had between approximately 8 and 13 percentage points higher retention rates than females. CDR Poe similarly highlighted three communities that have the smallest difference in retention rates between enlisted males and females: 1) Administration and Supply, 2) Information Warfare, and 3) Medical. Males had approximately 4 percentage points higher retention rates for Information Warfare, and females experienced approximately 2 to 3 percentage points higher retention rates by gender for officers in restricted lines and unrestricted lines. For Unrestricted Line Officers, the continuation rate is approximately 14 percentage points lower for females than it is for males. For Restricted Line Officers, the continuation rate difference is approximately 1 percentage point lower for females and males.

CDR Poe then addressed the strategies that the Navy is using to address the disparity in retention rates between males and females. The Navy has targeted efforts to improve retention for all of its Service members by: 1) increasing maternity leave from 6 to 18 weeks (*Gen (Ret.) Wolfenbarger asked the Navy if policy allows for 18 weeks of maternity leave or 12 weeks, and CDR Poe confirmed that it is 12 weeks.*), 2) improving colocation policies to limit or eliminate geographical separation for dual military couples, 3) expanding investment in Child Development Centers to extend hours of operation, and 4) expanding the Career Intermission Program to permit temporary breaks in service without harm to careers. The Navy has planned future initiatives, such as promotion deferment programs for officers and changes to the evaluation system, to improve career flexibility for all Service members.

CDR Levells then discussed how the Navy utilizes retention data to understand personnel turnover and establish recruitment goals. He stated that when the Navy loses officers, they have to be replaced; therefore, the Navy does not separate their efforts to replace officers by gender. CDR Poe then discussed the opportunities available to Service members for rebranching or reclassifying. Navy enlisted requirements or needs are advertised to sailors within career decision windows. Sailors applying for rebranching or reclassifying are competitively evaluated to ensure that the best and most qualified candidates are selected. Similarly, officers can apply for a redesignation board that is hosted twice annually. Several officer communities rely almost exclusively on inter-transfers to build their inventory. He discussed a Career Waypoint System that allows officers to look at their ratings, see what other fields with availability that they would qualify for, and decide to apply or not accordingly.

Air Force: Ms. Emi Izawa, Deputy Chief, Military Force Management Division, Directorate of Force Management Policy, Deputy Chief of Staff, Manpower, Personnel, and Services

Ms. Izawa began by specifying that the Air Force calculates average annual retention rates over a 5-year period, and it is measured by the percent of airmen that are still in the Air Force after one

year of service. She also mentioned that the Air Force does not study continuation behavior in the way that other Services do, they solely measure retention rates. She then discussed the career fields with the highest and lowest retention rates for males and females. She referenced the four tables, and mentioned that the fields with female rates classified as "N/A" are fields that have only recently opened to women. For example, Aviation only has two women currently, so there is no retention behavior data available. The top career fields for officers and enlisted airmen have high retention rates for both males and females, and the male and female retention rates are closely aligned. Ms. Izawa added that the retention rates for the top career fields may look artificially high because the Air Force offers retention or reenlistment bonuses for those fields. She also added that the enlisted musicians who are members of the band have very high retention rates, which she attributed to the members having to have a specific skill level in order to join, and the members essentially staying in one station for their entire careers.

Ms. Izawa then discussed officer retention rates and stated that officers experience the greatest difference in attrition rates between males and females between 2 and 10 commissioned years of service. Retention survey responses indicate that this difference is largely due to family-related choices or education-related choices. There is little difference in attrition rates by gender for enlisted members. Ms. Izawa added that the attrition rates increase dramatically around 15 years of service for both males and females, which she attributed to the Air Force reducing tenure requirements from 20 years of service to 15.

Ms. Izawa then discussed the retention rates for officers in operational and non-operational career fields broken down by gender. She stated that the largest retention disparities between the genders in operational careers occur between 3 and 11 years of service. The largest retention disparities between the genders in non-operational careers occur between 4 and 9 years of service. Ms. Izawa similarly discussed retention rates for enlisted airmen in operational and non-operational career fields broken down by gender. Retention rates for enlisted personnel in operational and non-operational career fields have similar gender attrition trends, but non-operational fields have slightly more disparity between males and females. Attrition is slightly higher for females in non-operational career fields than males.

Ms. Izawa then stated that the Air Force uses retention data as a tool to determine how many individuals will need to be recruited in a career field each year using a career field health chart over a 30-year period. The gaps are analyzed to determine what is necessary to fill the gaps and sustain those career fields by creating a Program Guidance Letter and developing targets for each career field in each year. The Air Force also tries to use the data to predict future shortages in certain career fields. Ms. Izawa then explained the opportunities for rebranching or reclassifying that are available to airmen. For officers there are several options available including the Air Force officers missilier crossflow board, a nonrated line crossflow board, and a rated crossflow board. She mentioned that the Air Force consistently experiences a shortage of rated officers, so they are constantly evaluating airmen who qualify as rated officers. Special circumstances can also warrant a crossflow in some situations. For enlisted members, the Air Force offers First Term Airmen Retraining, which allows airmen to retrain in a new field if that field is facing shortages. There is also a similar program for noncommissioned officers.

Coast Guard: LCDR Russ Mayer, Team Leader, Military Personnel Policy and Standards Division, Office of Military Personnel

LCDR Mayer began by stating the bottom line up front, which is that the job females choose has a significant impact on the retention rates for females across the Service. He explained that analysis of retention rates by career field is limited to enlisted members only, as officers can change from nonrated to rated classification without any formal process, so it is difficult to track that information. The Coast Guard is broadly divided into operational and mission support, but many non-operational ratings have significant presence in the operational world.

LCDR Mayer stated that Culinary and Operations are the career fields that are most popular among females, but the retention rates in those fields are low. LCDR Mayer attributed the low retention rates in those fields to the job itself, not to a female-specific issue. LCRD Mayer stated that the expected career or contract termination points in those fields are between 4 and 8 years of service. The initial entry period is the biggest attrition point for women, and there is no difference in women leaving the Service because of their rating that is attributable to gender alone.

LCDR Mayer then stated that the Coast Guard is fully integrated and does not treat females differently than males except for pregnancy and maternity leave policies. The Coast Guard continues to support affinity and mentoring groups that assist females in deciding to remain in the Coast Guard. These programs mainly consist of enlisted females who are 1 to 2 years away from being rated. The mentorship allows them to learn about the ratings before choosing one. LCDR Mayer stated the Coast Guard has seen a difference in behavior that they attribute to those programs. The programs also help decrease changing fields later in the career because they provide a period of time in which the members can choose the field they want to go into.

Discussion

MG (Ret.) John Macdonald asked MAJ Miller (USA) what the high amount of entry level separation can be attributed to. He added that it is concerning because of the amount of resources that the Army puts into getting people to basic training. MAJ Miller responded by stating that is actually more cost-effective to eliminate unqualified recruits during basic training than it is to screen them out later because there are not a lot of screening processes in the Army after the initial entry period. People in basic training who do not want to be in the military will use the most expedient means to get out.

VADM (Ret.) Carol Pottenger thanked the panelists and addressed the Navy. She mentioned that the briefers said that the jobs that are hardest to recruit women into are the toughest, which could have been inferred as saying that women do not want to do the tough jobs or do not think that they are capable of doing the tough jobs. The Services have not been successful in getting women into nontraditional roles, although they have done a better job with officers than with enlisted females. She asked if there are any specific strategies being implemented that aim to show women that they can be successful in the nontraditional and largely male-only jobs. CDR Poe (USN) stated that the best way to get female sailors to realize that they can be successful in the field. When it comes to attracting sailors to particular jobs with particular skillsets, the Navy does not cater to one demographic over another. They hold all sailors to the same occupational standards and try to help the sailors in whatever way they can, such as with childcare or removing other personal distractions. He added that those jobs are tough jobs for male and

female sailors. CDR Levells (USN) added that mentorship is difficult because most female mentors chose to be located in the high-traffic duty stations, so the Navy is attempting to evenly distribute quality mentors throughout all of its stations so that more sailors can have role models. VADM (Ret.) Pottenger stated that it is hard to get female members interested because there are currently no other female members serving in those roles. She added that all of the Services should think about a different approach to show Servicewomen that they can be successful in all areas. She recognized that the Air Force has done a great job of that so far.

Ms. Kyleanne Hunter mentioned that she noticed a large reduction in retention for enlisted females compared to enlisted males in the first few years of service. She added that members ages 18 to 23 are the biggest targets of sexual assault and sexual harassment, and asked the Services if they are making any efforts to help young Servicewomen see that sexual harassment and sexual assault are not a part of the military. She also asked how the Services can retain the women who have experienced sexual assault and/or harassment and may not have felt comfortable reporting the incident to their chain of command and if those who do experience it can be transferred to a different unit or career field. She mentioned that sexual harassment and sexual assault may be another factor impacting the attrition of females in the first years of service.

LCDR Mayer (USCG) stated that there have been recent policy changes that help Service members who have experienced sexual harassment or sexual assault to help them get back on the proper career path following the incident. Capt Garza (USMC) stated that the female retention rates during the initial enlistment period are actually higher than male retention rates during the same period. MAJ Miller (USA) stated that he does not believe that sexual harassment and sexual assault are driving the large difference in retention rates at all. The main loss happens during initial entry training, and reenlistment behavior trends show that male soldiers are getting out at far higher rates than female soldiers. CDR Levells (USN) stated that, in the case of harassment and sexual assault, the two involved parties will not be in the same unit or area for the duration of their careers. The culture the Navy tries to maintain is one of zero-tolerance, and they annually train across the service to help address those issues. Ms. Izawa (USAF) stated that enlisted female retention rates are slightly higher than enlisted male retention rates. Airmen have military family life consultants that are utilized if an airman does not feel comfortable reporting to his or her command. These consultants are licensed social workers, psychologists, and victim advocates. The Air Force dedicates lots of time to the conduct and behavior of airmen in all ranks, and there is a policy that allows for the immediate move of an airman who feels uncomfortable.

LtGen (Ret.) Judy Fedder asked the Services if they have ways of assessing the effectiveness of their mentorship programs and if they can be implemented across all of the Services. She also asked if Services with specialized programs target specialties that have low retention or if they target people during certain periods of their careers. LCDR Mayer (USCG) stated that the Office of Inclusion assesses the initiatives, and they are currently seeking better feedback on all of their initiatives to assess effectiveness. CDR Poe (USN) stated that the Navy does not have anything formal in place to assess the effectiveness of their initiatives. They ask sailors about their experiences with mentorship, but there is no formal policy or process in place. Ms. Izawa (USAF) stated that the Air Force employs a survey system that airmen can use to evaluate mentorship services. Retention surveys show that airmen regard mentorship as important, but it is difficult to match Airmen with mentors. The Air Force also uses a robust tool that can help

airmen match with a mentor with similar skills, demographics, family, work hours, and outside interests and hobbies anywhere in the world.

FLTCM (Ret.) JoAnn Ortloff asked how each of the Services actually captures retention data and information on why Service members leave or reenlist. She also asked if the Services then use that data to develop recruitment and retention policies. CDR Levells (USN) stated that the Navy will have to follow up on the survey system details. He added that the Navy uses exit surveys and other retention surveys that allow the Navy to capture the reasons why people choose to stay in certain career fields. Ms. Izawa (USAF) stated that the Air Force uses exit surveys and retention surveys to help inform career field managers on specific retention and reenlistment strategies. She added that, if the Committee would like specific data points, then she would have to follow up with them. LCDR Mayer (USCG) stated that the Coast Guard uses service-wide surveys that ask members about their 5- and 10-year plans. It asks the members why they intend to stay in the Coast Guard. They are also trying to link those findings to recruiting strategies, although members may have different reasons for staying in than younger prospects would have for joining.

MAJ Miller (USA) stated that the Army tries to implement the findings from exit surveys into policies for job placement. There is a fleet of job placement NCOs that try to convince soldiers to stay in the Army. MAJ Miller added that the post-9/11 G.I. Bill, which is a major recruitment and retention tool, might actually encourage soldiers to leave. There are certain benefits in place for soldiers after they leave the service that may encourage soldiers to separate earlier in their careers. The Army has implemented retention surveys, but they have not been systematic. LCDR Mayer (USCG) stated that attrition behavior may change in 2018 because there are policy changes that will allow members to receive some retirement benefits after 8 to 12 years of service. The Coast Guard does not currently distribute annual retention surveys, but they expect retention behavior to change starting next year given the new blended retirement policy. Capt Garza (USMC) stated that the Marine Corps uses an exit survey and incentivizes moving locations as ways to improve retention rates. The USMC Headquarters collects the retention data. He also mentioned that the surveys have recently been modified to prompt more insightful responses and better data as to why people choose to stay in the Marine Corps.

The Army uses exit surveys, but no programmatic retention surveys. Although the Navy uses exit surveys, the panelists were not familiar with any specific retention surveys. However, information on retention is captured in several other surveys that they implement. The Marine Corps and the Air Force use exit surveys and retention surveys. The Coast Guard uses exit surveys but no annual retention survey.

Ms. Monica Medina mentioned that there are areas with large discrepancies in retention behavior between males and females in the Army and Marine Corps, but not in the Air Force. She added that the Marine Corps has segregated boot camp and that the Army tries to wash people out during basic training because it's more cost-effective. She asked the panelists if they thought there was something during that initial time period that makes female Service members drop out or fail at a higher rate. She specifically asked if females could be being pushed out or facing a difference in treatment from their male counterparts. MAJ Miller (USA) stated that the Services are indirectly comparable in terms of retention. The Army does not run an attrition model during basic training, but they use basic training as a screening model to see whether recruits are fit for Army service. In regards to whether drill instructors treat recruits differently based on their gender, MAJ Miller stated that there is no evidence that suggests that, but that does not mean that

it is not happening. Ms. Medina asked that, when referring to "fit" in the Army, whether that means physically fit or it includes other factors. MAJ Miller stated that the purpose of basic training is a vetting mechanism to make a recruit into a soldier and see the inclination for future service. Ms. Izawa (USAF) stated that the purpose of basic training is to make civilians into airmen. All of the Services use basic training as a screening mechanism for fitness.

Ms. Medina asked if there was possibly some bias in the screening and the ways that recruits are tested. She stated that because the Air Force does not have a big difference between males and females and other Services do, there may be some bias involved and that the difference in retention between males and females is concerning. Capt Garza (USMC) stated the Marine Corps does not look at basic training in their retention analysis. There is currently a study being conducted within the Marine Corps to look at other possible options for basic training.

Ms. Janie Mines noted that the information provided by the Navy on the highest and lowest retaining career fields did not include data that directly compared male and female retention rates in those fields. She asked if that information was available. CDR Poe (Levells) stated that they did not have that information currently, but it is available and they can follow up and send it to the Committee.

Panel Discussion: Propensity to Serve (RFI 2)

The Committee requested a briefing from the Military Services on their efforts to increase propensity among women. The Committee specifically requested information from each of the Services regarding: 1) how each Service has adjusted its recruitment strategies within the last year to attract the high caliber women needed to fill newly opened and other positions, 2) how each Service has adjusted their marketing and branding, 3) what unconventional or non-traditional methods each Service is using to recruit, and 4) what primary reasons newly accessed Service members gave for joining each Service branch and how each Service regularly surveys this information.

Army: Ms. Andrea Zucker, Consumer Market Research Chief for the Army Marketing and Research Group

Ms. Zucker began her briefing by stating that the Army has had a steady accession rate of 17% for women over the last 10 years. In addition, with the opening of all career fields to women, the Army now has global marketing highlighting women in all positions. Recruiting the female demographic is now an assigned "goal" of 20%, which is a change in strategy and missioning for Army recruiting. Ms. Zucker stated that the Army targets women in its total marketing approach and described a partnership with RAND to formalize an experiment about how the Army showcases women on social media to determine the best strategies for reaching men and women. She referenced several examples of social media posts highlighting women in the Army. The Army is currently researching the best ways to engage female prospects to help them consider Army service, and the Army will continue to feature women across its marketing.

Ms. Zucker then discussed both male and female enlisted recruits' most common reasons for joining the Army. Female recruits were more likely than male recruits to list travel, bettering their life, and gaining experience and work skills as reasons for joining. Ms. Zucker similarly discussed enlisted recruits' most common reasons for joining the Army by race. Black recruits were more likely to list travel, bettering their life, and/or pay as main reasons for joining. White

and Hispanic recruits were more likely to list pride/self-esteem/honor, and Asian recruits were more likely to list gaining experience/work skills. Similarly, female ROTC Cadets were more likely than male ROTC Cadets to list self-improvement/leadership skills as a top reason to join. Male ROTC Cadets were more likely to list patriotism as a top reason to join. Ms. Zucker added that her presentation included additional relevant slides, but the information had been briefed to the Committee in previous years.

Marine Corps: LtCol John Caldwell, National Director of Marketing and Public Affairs, Marine Corps' Recruiting Command

LtCol Caldwell began his briefing by discussing how the Marine Corps gathers information about why Marines decide to serve. The Marine Corps has conducted extensive research to determine the main drivers of interest in joining the Marine Corps. This research, which included interviews with Marines of all ranks, helped the Marine Corps reach the conclusion that female Marines decide to join for many of the same reasons that male Marines do (honor/prestige, challenge, belonging to something elite). The research also revealed that female prospects want to see themselves in advertisements alongside male Marines and in operational situations rather than in training situations.

LtCol Caldwell described the implementation of a gender agnostic brand strategy, *Battles Won*, which enables the Marine Corps to retain "tough/elite" brand attributes while broadening reach to more female prospects. This strategy will be the first of its kind, and it will showcase the key points in time in the fighting story of the Marine Corps. One advertisement will feature a female marine protagonist in an operational environment in Afghanistan, and another advertisement will feature a female marine who embodies the fighting spirit throughout her youth and her service. LtCol Caldwell explained that, because male prospects typically prefer to view advertisements featuring only males, and because male prospects make up 90 to 93% of accessions, it's important to not alienate the base by producing this type of advertisement. However, LtCol Caldwell added that he believes that it is time to make the change, despite these possible risks. The Marine Corps also recently began investing in direct mail marketing for women, although they spend more on direct mail to males than females. LtCol Caldwell mentioned that female prospects prefer not to be specifically targeted and to see themselves alongside male counterparts in recruiting materials.

The Marine Corps expanded their Semper Fidelis All-American Program, a high school sport focused engagement which previously only included football, to welcome all sports and split participation evenly between males and females. LtCol Caldwell also mentioned that wrestling has become an increasingly popular sport among females and that female wrestlers would have a high likelihood of being successful in combat arms. The Marine Corps has made a substantial investment into wrestling programs in the first year of implementation, and they are anxiously awaiting the results of the initiative. The Marine Corps previously had a student athlete program with Sports Illustrated, but they have transitioned to a CBS Sports High School Athlete of the Month program because it is more cost-effective. LtCol also described a partnership with Reebok, a female-oriented fitness brand, which included a 241-mile run in honor of the Marine Corps' 241st birthday.

LtCol Caldwell then described other recruiting strategies the Marine Corps is using to attract high caliber females. Marine Corps recruiting command has directed supervisors to tell recruiters that there is no cap on the number of women that the Marine Corps can recruit. They will be recruiting anyone who is eligible, regardless of gender, but the goal is to have 10% of recruits be women. LtCol Caldwell then showed a video of an advertisement that featured women in the Corps and highlighted various types of recruiting materials. LtCol Caldwell then showed a second video of an advertisement featuring Capt Ashley McMillan that illustrated the points made during the briefing.

Navy: CDR Chris Chadwick, NRC Washington Liaison Officer, Navy Recruiting Command

CDR Chadwick began his briefing by stating that women's propensity to serve is an important topic. The Navy has continued to be successful in recruiting females, with an increased percentage of females in accessions at the highest rate in history (25%). The Navy maintains this rate consistently, and it has transitioned from a target to a goal. CDR Chadwick stated that it is important to maintain and grow the numbers of females. The recruiting force of the Navy responds to the increased demand signal for females by focusing more of their prospective efforts into the female market.

The Navy's marketing and branding strategies have not been altered and female targeted messaging is integrated throughout all marketing and advertising channels. Females are depicted in branding, and female leadership is depicted in a virtual reality experience. CDR Chadwick also mentioned that the Navy has hired a new marketing advertising firm. The complete inclusion of females is paramount in the Navy's marketing strategy. The strategy for recruitment and retention will include reaching out to the general population for recruiting, reaching out to sailors within the Navy, and recognizing that recruiting is something that every member does as part of their career as a sailor.

CDR Chadwick then discussed the unconventional methods that the Navy is using to recruit. The Navy is conducting female Delayed Entry Program meetings, which will decrease attrition and increase referrals by relying on increased mentorship opportunities a. There will be future reports on the program successes and whether the approach is sustainable. CDR Chadwick then discussed the most common reasons that sailors gave for deciding to join the Navy: 1) travel, 2) pride/self-esteem/honor, 3) to better their lives, 4) pay/money, 5) gain experience/work skills, 6) experience adventure, 7) to pay for future education, 8) educational opportunities within the Navy, 9) to develop discipline, and 10) to help others. CDR Chadwick explained that these data come from JAMRS' "State of the Market Brief" and were tailored for the presentation. JAMRS does not segregate by gender.

Air Force: MSgt Tiffany Bradbury, Air Force Recruiter Superintendent, Air Force Enlisted Accessions Policy, Accessions and Training Division, Military Force Management Policy Directorate, Headquarters United States Air Force

MSgt Bradbury began her briefing by stating that the newly opened positions (in Battlefield Airmen specialties) are historically difficult to recruit for. The Air Force is expanding their efforts to include strategies that target females, such as reaching out to high school female lacrosse teams to attract high caliber females to the newly opened career fields. The Air Force previously had an Officer Diversity Campaign that was targeted at women and minority officer candidates that expired in December 2016. The Air Force has not adjusted its marketing and

branding for women in the past year, apart from including women in its Special Operations verbiage.

MSgt Bradbury then discussed a non-traditional approach for finding female officer candidates using large database analytic with little success. More traditional efforts, which include featuring female speakers at events and including females in social media conversations, have produced significantly better results. MSgt Bradbury explained that the Air Force relies on JAMRS data for information on the reasons why prospects decide to join the Services. MSgt Bradbury mentioned that the Air Force places significantly more emphasis on how youth describe their perceptions of what career values are most important to their career decisions. The most important career value to young people is "making a good living" followed by "doing great things with your life." Young people associate those career values with the Air Force more than any other Service are: 1) allows you to use your talents and abilities, 2) provides good work-life balance, 3) offers a lifestyle that is attractive to me, and 4) provides a safe work environment. MSgt Bradbury mentioned that these career values are far more important drivers in the Air Force's marketing and branding than more specific reasons such as "travel".

The top reasons that male and female college students gave for joining are 1) benefits, and 2) doing something meaningful/making a difference. The third highest reason for males is to do something they're proud of, and the third highest reason for females is to pay for education.

Coast Guard: LT Leslie Downing, Southeastern Regional Leader, Coast Guard Recruiting Command

LT Downing began her briefing by discussing the Coast Guard's recruitment initiatives on social media. The USCG has significantly increased its presence on social media in the last year. LT Downing mentioned the "lifestyle video" series that focuses on the real-life stories of several active duty women. The most recent video featured a woman going to the USCG Flight School. These videos are posted on the Coast Guard's social media accounts and gocoastguard.com. LT Downing described several national outreach events, such as the Capitol Hill Classic Volleyball Tournament, where they were able to reach a significant number of young women from across the country. The Coast Guard recently purchased advertising space with companies with high levels of female viewership, such as Women's Health and Bustle. The Coast Guard experienced a significant decrease in marketing funding for the year, decreasing from \$2.91 million in FY16 to \$1.25 million in FY17.

LT Downing then described the recruiting office's efforts, which are the main sources for finding events and ways to recruit. Recruiters focus on local- or state-level female-oriented outreach events and sponsorships. Some of the sponsorships the USCG has had in the past have been with high school women's soccer teams, volleyball teams, and swim teams. The USCG also sponsored a high school women's basketball team that allowed them to highlight the Coast Guard at a national event. Most of the sponsorship involves funding for new gear and uniforms and putting up banners and announcements at home games for the season.

Due to the small size of the USCG's recruiting branch in comparison to the other Services and the small proportion of female recruiters (20%), brand ambassadors are another way to increase female lead recruitment within the Coast Guard. The ambassadors serve as the face of the Coast Guard at events in areas where there may not be a female recruiter. LT Downing then described the "Everyone is a Recruiter" initiative, which is designed to mobilize the entire Coast Guard

network to support recruiting, especially the recruitment of women and other minorities. If a Coastguardsman finds a person who is interested in joining the Coast Guard, they can make a referral directly to a recruiter. If the interested party goes to the recruiter with the form, the member receives an award.

LT Downing then discussed the reasons that female recruits decide to join the Coast Guard. She stated that the Coast Guard relies on data from JAMRS for this information because they do not collect this data themselves. The most common reasons that female recruits decide to join are 1) Service-covered education costs, 2) opportunities for continued education, 3) travel, and 4) to better their lives. Female recruits placed a higher emphasis on educational opportunities and benefits than recruits of other demographics.

Discussion

RADM (Ret.) Cari Thomas asked the Coast Guard if there was additional information on the recruitment of officers, because there was not a lot of information on that in the briefing. LT Downing (USCG) replied that the Coast Guard is the only Service that does not have officer recruiters. Recruiters seek out both officers and enlisted members. There is an ambassador team for officer members of the Coast Guard, and officer ambassadors will attend events all around the country and help augment the recruiting efforts.

Ms. Sharlene Hawkes thanked the panel and mentioned that the Marine Corps has shown a significant improvement since last year. In her interviews with active duty Service members and veterans, the number one reason they listed for joining was wanting to serve their country. She mentioned that the only Service that showed patriotism as a reason for joining was the Army and asked if the other Services included patriotism as part of pride. The panelists nodded to confirm that they did. Ms. Hawkes then asked if any of the Services have identified a difference between males and females as it relates to pride and patriotism. LtCol Caldwell (USMC) replied that the main reasons women join the Marine Corps are honor and prestige, which are directly related to patriotism. Ms. Zucker (USA) stated that the honor and self-esteem that one experiences when joining comes from serving your country. She added that patriotism includes several reasons that members give for joining. LtCol Caldwell (USMC) added that the reasons related to patriotism are the same for males and females. For the Marine Corps, work-life balance is not as important as other factors because both male and female Marines join for reasons directly related to patriotism and serving your country. CDR Chadwick (USN) echoed what the Army and Marine Corps panelists stated and added that serving your country is intrinsically related to several other reasons for joining. MSgt Bradbury (USAF) agreed with the other panelists and added that 66% of males and 65% of females listed pride as a primary reason for joining the Air Force. LT Downing (USCG) stated that the Coast Guard does not conduct internal surveys to study the reasons why members join, but did agree with the other panelists' statements about pride and patriotism being linked.

CSM (Ret.) Michele Jones thanked the panelists and mentioned that she noticed a big difference in the presentations since the last time the Committee was briefed. She asked if any of the other Services have something similar to the Female Engagement Teams that the Army briefed on to use successful female veterans to engage other females. She also asked if the Army is planning to partner with any other entities that connect with female veterans for their Female Engagement Teams. Ms. Zucker (USA) stated that she knew there were discussions regarding that strategy, but would have to get back to the Committee with that exact information. LtCol Caldwell (USMC) stated that the Marine Corps does not having any programs by that specific name, but all recruiting stations have both men and women to recruit and select officers. The Marine Corps hosts gender-specific events and has some events that feature drill instructors speaking to recruits. The Marine Corps has worked with veterans who are currently coaching high school sports. The Marine Corps has additionally invested \$2 million into engagement partnerships that help connect recruits interested in the science, technology, engineering, and math (STEM) field to veteran mentors who have worked in STEM. LtCol Caldwell added that, although the Marine Corps does not having anything explicitly like the Army's Female Engagement Team, that type of engagement is embedded in a lot of what they do as recruiters.

CDR Chadwick (USN) echoed the Marine Corps' statements. He stated that recruiting specifically to females is embedded in everything that Navy recruiting already does. The diversity in the Navy encourages individuals with various experiences and backgrounds to consider joining. The Navy views diversity as a strength and will continue to move forward with that idea in their future strategies. MSgt Bradbury (USAF) similarly stated that the Air Force does not have a specific female-only team, but that they regularly seek out airmen to engage with recruits. For example, the Air Force asks an Air Force doctor to speak to medical applicants. The Air Force seeks out those individuals who they believe will be able to reach a group of applicants. LT Downing (USCG) stated that the Coast Guard does not have a specific female engagement program like the Army. She added that ambassadors are used extensively in their recruiting efforts. LT Downing identified herself as an ambassador, and stated that she frequently tries to align her visits with events that require a female presence so that she can fill that role. The Coast Guard does not have officer recruiters at their recruiting stations, but all recruiters know how to connect an applicant with another member if need be.

Ms. Hunter thanked the panelists and mentioned that the Marine Corps has reached out to her specifically to speak at the types of recruiting events that the panelists were speaking of. LtCol Caldwell (USMC) added that the Marine Corps has a program similar to the Coast Guard's ambassador program that attempts to link members and veterans to appropriate events to speak at events and reach applicant audiences. Ms. Hunter stated that there has been a large effort across the Services to tap into female audiences. She then asked the panelists if the Services were doing anything to ensure that the female recruitment numbers are not artificially constrained by the number of female berths at basic training facilities and that the Services are tapping into every possible eligible recruit. LtCol Caldwell stated that the Marine Corps has a goal of 10% female recruits, but they tell their recruiters that there is no cap on recruits. The Marine Corps will manage the numbers if more people qualify than what they planned for. He added that the recruiting command is given a very specific mission, with a goal of recruiting a certain percentage of female recruits. He stated that he cannot give an answer as to why there is a 10% goal, but that he will look into it and provide the information to the Committee. The Army only experienced a facilities restriction in the first class of integrated basic training because they were mandated to have segregated facilities. The Army has since fixed the issues with facilities and only the first integrated class of females was affected.

CDR Chadwick (USN) stated that the Navy is consistently recruiting at a rate of 25% female. He added that there is no cap on qualified female applicants to the Navy, and that the more qualified females that they can have join, the better. The Navy is working towards new ship designs that ensure an integrated Navy. MSgt Bradbury (USAF) stated that she was not aware of any facility restrictions that would result in a limit on the number of female applicants to the Air Force. LT

Downing (USCG) stated the Coast Guard's goal is 20% female accession, and that they were slightly below that goal last year. She echoed the Air Force's statements and said that she was not aware of any facility constraint that would restrict the number of qualified female applicants. She caveated that some ships (i.e., cutters) have female berthing issues that may constrain the number of women that can be sent to sea, but that is the only facilities constraint that she is aware of.

MG (Ret.) Macdonald applauded the panelists and stated that, in the past, the panelists have given briefings to the Committee that did not really contain the information the Committee was looking for. He commented that he believes the national programs for branding that reach out to specific sports teams will go a long way in bringing in quality applicants and grow a diverse force. He addressed the Marine Corps specifically and commented that the briefing provided was much improved from other Marine Corps briefings in the past, so he applauded them again.

Dr. Jackie Young asked the Marine Corps if they had a plan for recruiting strategies that would not alienate their base. LtCol Caldwell (USMC) responded by stating that the Marine Corps makes tough ads that speak to the eliteness of the Corps and feature intense combat action that will be appealing to everyone, so the integration will happen in a natural way. There are male and female Marines all around the world that are doing what Marines are known for, and although it is a risk, the Marine Corps is committed to it. He added that DoD has been warriorized in the past decade of war, so the ads will feature a fighting spirit that includes females. He added that the Marines cannot inspire people if they continue to depict them separately, so although it is a risk, it is a calculated one and it's necessary.

Ms. Therese Hughes thanked the panelists. She referenced earlier comments made about patriotism as a reason for joining and that the Services were going out to high schools and colleges to recruit. She added that a sense of patriotism can begin in a much younger age. She applauded the Marine Corps' video that depicted a female marine from a young age having a sense of pride and the fighting spirit. She recommended that the Services begin to go deeper into the communities to plant the seed of patriotism starting at a young age to build a larger applicant pool. She added that young females need to see representation of someone who looks like them in order to be inspired. Ms. Zucker (USA) stated that they cannot directly recruit to anyone under the age of 16 and a junior in high school. She added that there are ways they can indirectly recruit to younger people in the community, because it is possible to impact someone in their formative years and inspire them. The Army is always looking for ways that they can reach all Americans, since 99% of Americans are not serving. As the number of children with parents who have served decreases, it's important to ensure that the Army is reaching as many people as possible.

LtCol Caldwell (USMC) mentioned the legal restrictions with recruiting to young people, but added that the Marine Corps works around them with their community engagement activities that are not paid for with advertising dollars. For example, Marine Week, an outreach program that involved Marines going out into the communities, such as at a Youth Center, and engaging with younger people to show who the Marines are and what they do. The Marine Corps has relationships with community schools across the country that allow them to tap into the younger population to inspire them by going into schools and engaging in physical activity with or reading to the students. Ms. Hughes stated that her comment was directed more towards media initiatives and showing members from a young age in advertisements in order to instill patriotism into young children. LtCol Caldwell (USMC) stated that the advertisement he previously spoke about that will be airing in May features the female marine from a young age, and that it will be like nothing the Marine Corps has previously done. CDR Chadwick (USN) echoed what the other panelists stated. He mentioned that the Navy does community outreach. He mentioned that people generally do not understand what the Navy does because the number of people who have served is so low, so it is the Navy's job to reach out to the communities they are in as sailors and make them understand what the Navy does. LT Downing (USCG) mentioned the Coast Guard's partnership in education with elementary schools where members and recruiters can read to students. There are also programs that allow members to go into the community and teach boating and water safety to children. The advertising is not directed at children, but there are robust programs across the Service that can engage younger children.

Ms. Medina echoed MG (Ret.) Macdonald's praise. She addressed the Marine Corps and acknowledged how far they have come in working to change the culture. The Marine Corps previously stated that you can't inspire people if you continue to depict them separately. She asked the Marine Corps if it's possible that the people they are attracting get discouraged when they get to basic training and it is segregated by gender. Ms. Medina asked if, given the effectiveness of their new advertising campaigns, they've considered making the cultural shift and integrating basic training. LtCol Caldwell (USMC) responded by mentioning several advertising campaigns that will be released in the coming months that will feature female Marines alongside male Marines. He stated that he does not know whether the advertisements will have an impact on the patriarchal society and an organization that has been male-dominated for all of its history. He added that there were no female Marines featured in television advertisements or in direct mail marketing before 2014, so beginning to feature them will be a big step. Ms. Medina asked if the Committee could receive the advertising content as they are released, and LtCol Caldwell (USMC) said that he would send them as they become available.

FLTCM (Ret.) Ortloff referred to the Marine Corps' research conclusions that say that female prospects are averse to exclusively female advertising and that male prospects prefer to see maleonly advertising. She asked if any of the other Services have seen similar preferences in their applicant pools. LT Downing (USCG) stated that the Coast Guard does not have any data to say either way. MSgt Bradbury (USAF) echoed the Coast Guard's response and added that she would pose the idea of studying it to the marketing team. CDR Chadwick (USN) stated that those preferences are not something that he has heard even anecdotally, so it does not seem to affect how the Navy recruits. The Navy strives for complete integration, so they are working hard to ensure that good sailors are seen, not male or female sailors. Ms. Zucker (USA) stated that she briefed the Committee on the Army's total marketing approach, which includes marketing to everyone with the same message. She added that more diverse populations may be more influential in driving the youth culture, and that the Army will continue to show everyone in their marketing campaigns because that represents who and what the Army is. LtCol Caldwell (USMC) stated that this finding went beyond the media advertisements and was true for direct mail advertisements as well. The Marine Corps found in focus groups that when females were presented with a female-only ad and a male-only ad, they preferred the male-only ad because it more accurately depicted the Service they thought they were joining. He added that the Marine Corps is working to move the needle on what images look "right" to recruits.

COL Kominiak closed the public meeting period for the day.

23 March 2016

Morning Remarks

The Designated Federal Officer and DACOWITS Military Director, COL Kominiak, opened the meeting to the public and introduced the agenda topics for the day. DACOWITS Chair, Gen (Ret.) Wolfenbarger, announced that this is COL Kominiak's last quarterly business meeting with DACOWITS. She recognized COL Kominiak's 30 year career of leadership, professionalism, and dedication. Gen (Ret.) Wolfenbarger thanked COL Kominiak for her service to DACOWITS. COL Kominiak thanked the Committee for the honor of working with them.

Physiological Gender Differences

The Committee requested a briefing from the Army, Marine Corps, Navy, and Air Force on the physiological differences between genders. The Committee was particularly interested in how research and data on physiological differences was used to inform decision making on women's integration efforts pertaining to physical fitness and occupation specific training and performance.

Navy: Dr. Karen Kelly, Ph.D., Research Physiologist, Naval Health Research Center

Dr. Kelly began by noting that the Navy has been open to women for many years and has not had to review physiological or gender differences when looking at integration. Many of the physical fitness tests used by the Navy are based on absolute workloads and environmental stressors, not gender. The question that the Navy has to ask is how to use available research and information to better prepare Sailors, regardless of gender, to succeed in their occupation.

When looking at the most physically demanding occupations, such as Navy divers, representation of women is small, but it is significant that women are in this occupation. For Navy divers, there is a 20% success rate for women compared to a 40% success rate for men. The challenge with representation in demanding fields is that few women want to go into physically demanding occupational specialties.

The most important thing is for the Navy to examine what men and women need to do to perform their job in demanding occupational specialties while reducing their risk of injury. Research suggests that the biggest physiological difference between men and women is upper body strength and anaerobic power. The Navy has found that there are sex differences in injury type due to the anatomical differences between men and women, and they are currently collecting data on at Camp Pendleton on lumbar spine injury rates for men and women from lifting weights. Information from research like this can help the Navy create better training for both men and women to reduce risk of injury.

Dr. Kelly stressed that no physical and occupational standards are based on gender, but on a sailor's ability to perform his or her job. As the Marine Corps integrates women into combat arms they should continue to research the physical effects on women which could lead to better training. There is a limitation to the research, however, because only a small number of women go through combat arms training. Currently there are only three female Marines coming through

the infantry training which is not a large enough sample to make generalizations for other women or know the long term effects.

Dr. Kelly concluded her briefing by stressing that the biggest issue to the research is a lack of longitudinal studies to see how certain occupations affect the health of sailors over time. The Navy also needs more information on sex differences in health for positions based on land and at sea; this will also inform how to best fit equipment and gear. All of this information would make it easier to provide training and equipment to help men and women better perform in their occupations and decrease their risk of injury.

Dr. Kelly was unable to stay for the questions during the discussion period of the panel.

Army: Ms. Marilyn Sharp, Senior Investigator, Military Performance Division, U.S. Army Research Institute of Environmental Medicine.

The U.S. Army Research Institute of Environmental Medicine (USARIEM) was tasked by the U.S. Army and Training Command (TRADOC) to devise a method to identify recruits that would be the most successful in physically demanding combat arms specialties. USARIEM spent several years conducting a study of active duty soldiers who performed physical fitness type tests and then performed the physically demanding tasks of different occupational specialties to determine which exercises best predicted successes on which tasks. From this study, the USARIEM developed the Occupation Physical Assessment Test (OPAT). OPAT was implemented by the USARIEM and it has been very predictive of a soldier's ability to perform their occupation- specific training.

Ms. Sharp then noted some of the physiological differences between men and women. Compared to men, women are shorter, do not weigh as much, have more fat mass, and have less muscle mass. When you put all of these factors together, the average man will outperform the average woman in a basic physical test.

When looking at a muscle strength test, you can see in the distribution that overall men tend to be stronger than women. The distribution shows, however, that there is an overlap in the middle where some women are stronger than some men. When looking at average run time, again, men have a faster run time whereas women generally tend to be slower than men, but there are some women faster than some men.

Ms. Sharp noted that it is important when developing physical fitness tests and trainings to look at the requirements of the task and make sure that standards accurately reflect what soldiers in a certain occupational specialty will be required to do in the field. She highlighted two tasks: resupplying rounds to a tank and lifting a casualty. When you look at what is required for these tasks 100% of men could meet the standard for both tasks compared to 78% of women who met the standard for the resupply task and 86% who met the standard for the casualty lift. It is important to know that the majority of the women who took the test could successfully perform the task in the field, it is less important that they outperform the test. The most important question to ask is, "Does the soldier have the physical capacity to complete the task to standard?"

When developing the OPAT, Ms. Sharp and her colleagues wanted to make sure the tasks and standards were correct. Minimal acceptable standards have to be based on the actual job requirements. The OPAT is not based at zero. Receiving a score of zero doesn't give any information on that soldier's strength and weaknesses. If you ask a solider to do pull ups and they can't complete one, then you don't have an accurate read on what upper body strength that

soldier may have. Overall, the most important factor is to ensure that performance on predictor tests is statistically related to performance of critical job tasks.

Ms. Sharp highlighted that one of the critical issues for integrating women in initial entry training is injury. Women are injured at twice the rate of men in initial entry training, with three times as many stress fractures. These rates decrease once a female soldier is through initial entry training, but the rate varies by occupational specialty and deployment. Lower fitness is correlated with increased risk of injury no matter the sex. It makes a difference if a soldier is just over the acceptable fitness standard or well over the fitness standard.

Ms. Sharp concluded her presentation by discussing the implementation of research on the OPAT on women's gender integration. She stressed how a select group of women will be able to do physically demanding jobs and the Army needs to find these women and get them in the correct positions. The USARIEM believes that the OPAT will do a good job of finding women who can fill critical occupational specialties. The Army also needs to continue to track musculoskeletal injuries as women work through the first several years of a demanding occupational specialty. The access to data on performance, injury, attrition, and soldiers moving from one job to another is one of the biggest challenges in this field.

Marine Corps: Lt Col Lawrence Coleman, Integration Section Head for Manpower Military Policy, Manpower Plans and Policies, Manpower and Reserve Affairs

Lt Col Coleman began by highlighting the three main sources of data the Marine Corps has used to assess physiological gender differences between men and women. The University of Pittsburgh conducted a study of male and female Marines during the Ground Combat Element Integrated Task Force to study physiological differences during their training. The second source was information collected by the Marine Corps from two comprehensive literature reviews on physiological aspects of gender differences, conducted in 2012-2013 and 2014-2015. The third source is the Smart Adaptations Study conducted by the Marine Corps which analyzed how equipment fit women differently based on their physiological design compared with men.

To assess physiological differences between male and female Marines, the Marine Corps took body system and musculoskeletal measurements of a select group of Marines when they were performing actual tasks required of them in combat. After the tasks were complete each member of the group took a stress test. Women were 52% as strong as men in the upper body, 66% as strong as men in the lower body, and fat mass relative to body mass averages 20-25% in women compared to 13-16% in men.

Lt Col Coleman stressed the importance of the study results in preparing Marines for combat fitness readiness. Lean body mass is one factor that affects combat fitness readiness. Lean body mass is a common identifier for high performing male and female Marines. Another important finding is that women fatigue more quickly when conducting military tasks due to exerting themselves considerably more than male Marines. The Marine Corps found that for women, stride length is likely the greatest factor contributing to injury. In a study on marching with loads, the Marine Corps found that women were shortening their stride and striding faster or lengthening their stride to catch up. Both of these adaptations increased injuries among women.

All of the research conducted helps to inform Training and Education Command when they develop and implement physical fitness standards. The most significant impact of the research was on equipment sizing of combat gear. The Marine Corps is now increasing the size

differences for small and large personal protective gear given to Marines when they go to combat. The Marine Corps is reviewing the Plate Carrier (PC) as the standard body armor vest which can bend and form the material to fit different body types, but still maintain ballistic capacity. The previous standard for equipment was that it had to fit up to the 95th percentile of male Marines. Now, the bottom 2.5 percentile of female Marines is the basis for a size small in equipment and the 98th percentile for male Marines is the basis for a size large.

Air Force: Neal Baumgartner, Ph.D., Chief Air Force Exercise Science Unit and Lt Col (Dr.) Candy Wilson, Senior Nurse Scientist

Lt Col (Dr.) Wilson began by discussing her research on iron stores in Airmen during training. Iron stores decrease during basic training from walking and sweating. Women also have additional avenues to lose iron when compared to men due to monthly menstruation and diet choices like eating less meat and more vegetables during training. Decreased aerobic capacity among women in basic training could be due to high iron loss. Iron could be one of the contributing factors to the higher attrition rate among women from basic military training compared to men. There are currently two projects underway to improve the iron stores of military women.

The first project is to screen women for iron deficiency so that they can be treated before the deficiency affects training. The study will begin in May 2017 at Joint Base San Antonio (formerly known as Lackland Air Force Base). Female recruits will first be screened when they arrive at basic training. They will be scanned four weeks later to measure any deficiencies in iron as a result of training.

The second project is a study funded by Military Research Material Command to develop a small hand-held device that will test for iron deficiency. To test for iron stores currently, a recruit has to be removed from training to have their blood drawn. With this device, if there is a concern that a woman in training could be suffering from an iron deficiency, she could be quickly screened, treated, and returned to training. This project has already gone through Phase 1 of technology development and the prototype is currently being developed. In two to three years the final product should be available.

Dr. Baumgartner then continued by discussing the Air Force's research on producing occupationally-specific, operationally-relevant (OSOR) and gender neutral physical tests and training that can be used to successfully integrate women. The OSOR prototype testing and training will be recommended for policy in the next two months.

To develop the OSOR, the Air Force first had to determine the critical tasks for each occupational specialty that an Airman needs to complete in the field in order for a mission to succeed. To do this, the Air Force developed Air Force Specialty Code (AFSC) specific Critical Physical Tasks (CPTs) that would be the new occupational standards. Once this was completed, there were five major steps to fully develop and validate the OSOR.

The first step was to conduct a physical demand job analysis which examined what duty tasks were both physically demanding and critical to mission success. From this analysis, the study team identified over 100 tests that were in use, but narrowed them down to 39 for the study on the OSOR.

Next the researchers used CPTs to develop Physical Task Simulations (PTSs). PTSs are designed to mimic physical tasks that Airmen must perform in the field to complete a mission such as drag

a 185 lb. causality from a vehicle hit by an IED to a viable vehicle and lift the causality into the viable vehicle. Researchers then compared PTSs to currently used fitness tests (PFTs) to validate and evaluate the PTSs. They conducted testing with 171 Airmen, 62 of whom were female, to determine the optimal tests. After this round of testing the CPTs prototype was narrowed from 39 tests to 10.

To measure the validity of the OSOR, researchers scored separate sets of subjects on the same tests. They also accounted for mission environmental stressors such as a hot and humid jungle conditions or high altitude. To do this, the researchers took a group of 16 airmen to a jungle setting in Hawaii and a group of 13 airmen to high altitudes and had them perform the CPTs test, complete a test mission, and then an hour after the test mission, complete the CPTs test again. They found that the CPTs prototype test had strong predictive validity. Those who scored high on the test also score high on the test mission, regardless of gender.

To continue to confirm validity, Dr. Baumgartner and the other researchers then implemented the test with a larger group of Airmen across 13 units with 809 Airmen. Over a six month period, all units conducted the CPTs tests. Data from this test also confirmed that the CPTs prototype is a viable predictor of how an Airmen will perform in a mission. In February of 2017, the researchers again had 46 subjects including women take the 10 component test and then complete a simulation task, this confirmed again that if an Airmen succeeded on the CPTs prototype they also excelled on the task simulation.

Dr. Baumgartner then showed two videos from the study. The first video showed Airmen in the physical task simulations in the field. The second video showed Airmen taking the ten task CPT prototype tests. Dr. Baumgartner closed his briefing by emphasizing that the point of this research was to strengthen the validity of the physical readiness tests and to mitigate the deficiencies of the traditional test. This research did show that gender differences do exist and that women need different training to increase their physical fitness as compared to men. Dr. Baumgartner then distributed an abstract and pamphlet to the Committee which described the study and explained the relevance of the CPTs components to occupations.

Discussion

Lt Gen (Ret.) Fedder noted that in Ms. Sharp's briefing (USA), she implied that variances in training can make women more successful in meeting task demands based on physiological differences. She then asked all of the briefers how each Service was progressing in developing specific fitness training for women.

Ms. Sharp (USA) responded that the knowledge on specialized training for women is there, but there is a lack of communication and education on the appropriate training. Currently, few elements of basic training have anything to do with power and strength and are focused more on aerobic exercises. The information is there, but the facilities that the Army has are currently geared towards aerobic exercises. This new approach requires equipment to focus on strength. The Army would also need to change perception of exercises and scheduling. Instead of always beginning each day with physical training first thing in the morning, units may be able to go to the weight room mid-day if that was when it was available. There needs to be more focus on progressive and power training for all recruits.

Lt Col Coleman (USMC) noted that the Department of Defense physical fitness policy is a general physical fitness test. For gender integration, the Marine Corps was required to determine

occupationally specific tasks for each occupational specialty. Physical fitness training does not differ by gender, but rather by occupational specialty. The Marine Corps is now training selected Marines to be fitness instructors in their own units so they can help personalize workouts and training to specific individuals that are tailored to their occupation.

Lt Gen (Ret.) Fedder asked Lt Col Coleman (USMC) if the adaptation of training for specialties has also included adaptations for the physiological differences between men and women or if it is focused solely on the occupation.

Lt Col Coleman (USMC) responded that the training is the same for men and women. However, the Marine fitness instructors in the unit can work specifically with any Marine to build particular strengths similar to the approach of a personal trainer in a civilian gym.

Dr. Baumgartner (USAF) noted that in the CPTs prototype test, the Airmen are not told how to do tests like the causality test. By watching the different ways Airmen attempt or adapt the test, the Air Force can learn the best techniques to teach others and see what is effective and ineffective for different body types. He then noted that the biggest challenge is getting specialized training techniques out to the masses. The Air Force needs to place greater emphasis on education and marketing appropriate fitness from the top down.

Col (Ret.) John Boggs noted that occupation- specific physical training and testing seem to be a real focus of the Services. He asked the panelists to clarify what they were doing to create fitness instructors for a unit, particularly infantry training for enlisted and infantry officers.

Lt Col Coleman (USMC) responded that the Marine Corps uses the Initial Strength Test (IST) during recruiting, and the Combat Fitness Test (CFT) and Physical Fitness Test (PFT) at boot camp. Then Marines move on to their specialty school. At the specialty school there is an occupational specialty specific standard that the Marine must reach, including at the Infantry School. Marines take an inventory PFT and the results are used to show where they are weak so they can train specifically to those areas and pass the test before they graduate.

Dr. Baumgartner replied that the fitness test drives behavior. Once there is a solid test in place, then the Air Force has to work with the various career fields to help them develop the right training behavior. It isn't just the test, but what training you do the other 364 days of the year. It is essential to educate airmen on continuous training.

Ms. Hawkes asked the panelists about research that can lead the Services to better find women who have the innate ability to train to a higher level and what adaptations that training might require.

Ms. Sharp (USA) responded that everyone has a certain genetic potential when it comes to physical training. If a person has a potential below a certain point, then they can receive the best training in the world and still have a higher risk for injury. She agreed that at some point the focus does have to be on selecting the best and giving them the best training.

Lt Col Coleman (USMC) noted that the USMC conducted an experiment where they had proctors watch how different units of Marines got over an 8 foot box as a team. The proctors wrote down any adaptations that the units used to get over the box, but didn't instruct units how to get over. There was a unit of female Marines who were too short to get over the box, so they all took off their belts and linked them together to use as leverage to get each other over. The proctors and researchers were then able to take that information back to equipment teams and ask if they could create a tool to serve that function so that Marines don't have to use their belts. The USMC is constantly looking at ways to adapt training and equipment to benefit all Marines.

Dr. Baumgartner (USAF) noted that scientific research shows us that women's lower body strength is about 90% of men's, but upper body strength is only about 65% of men's. The Air Force has to look for females who have the genetic potential and give them the best training. Currently, there are not a lot of women who are physically capable of performing the most physically demanding occupational specialties. Only a minority of men are able to perform in these positions as well. Having a standard for these positions is important because it drives behavior. The Air Force suspended their initial entry test in the past, and the career field managers started receiving recruits of less quality. The point is not to go away from the tests, but to have the best tests.

CSM (Ret.) Jones noted that the purpose of the Army physical fitness test is to prepare for readiness. When CSM (Ret.) Jones was in the Army there were master physical fitness trainers to work with soldiers to build up their physical fitness. CSM (Ret.) Jones asked the panelists what is needed in all the Services so that the information presented in the briefing can be implemented and disseminated, She asked for suggestions to implement and disseminate the information.

Dr. Baumgartner (USAF) thanked CSM (Ret.) Jones for her question and stressed that any Service can create a great product, but it must be able to successfully deliver it. From basic training to advanced technical or officer school, there must be a greater focus on education. Delivering the best trainings properly and consistently is a huge factor in promoting new fitness standards throughout the Service.

Lt Col Coleman (USMC) noted that something done initially by the Marine Corps was to send a mobile training team to different bases and units to provide education on the fitness training plan. They focused on best practices and the physiological differences in training that came out of the research. The mobile training team left tools kits with a tier one person at the command who could continue to run that kind of program.

Ms. Sharp (USA) deferred to her colleague in the audience, Tom DeFillipo, to answer this question. He noted that the Army stopped the master fitness course for a number of years, but reinstituted it about 3 years ago. The Army is currently teaching 1 out of 3 drill sergeants in this course. He can provide the Committee with more detailed information on the reimplementation of the master fitness course as needed.

Ms. Mines asked the panelists what is being done to reduce the loads in Service members' packs.

Ms. Sharp (USA) responded that reducing a soldier's load has been a focus since she has been with the Army. Every time the load is lightened, new equipment is developed that a solider needs. The Army faces a continual challenge to lighten the load and it is at the forefront of everyone's mind.

Lt Col Coleman (USMC) agreed with Ms. Sharp (USA) that the greatest contributor to the weight increase over time has been the introduction of new technology. About twice as many batteries are included in the pack as ever before. The Marine Corps is looking at alternative power sources to reduce the amount of batteries needed. The research shows that a lot of injuries come from marching with the weight. There is a lot of motivation from the Marine Corps to lighten the load while also retaining ballistic and equipment integrity.

Ms. Sharp (USA) agreed with the other briefers that body armor and battery power were the contributing factors for heavy loads.

Boxing Program at the Military Services Academies

The committee continues to be interested in information on the boxing programs at the U.S. Military Academy, the Naval Academy, and the Air Force Academy. Ms. Kate Rose is a graduate student at the Harvard Kennedy School of Government who conducted research on the boxing programs at the military service academies. Her research results are her own and her research is being presented to the Committee for their consideration in their work on integrated boxing programs at the military service academies.

Ms. Kate Rose, Graduate Student, Harvard Kennedy School of Government

Ms. Rose began her briefing by thanking the committee and the DACOWITS staff for allowing her to work with them. She also clarified that her research is her own and does not reflect the views of Harvard or DACOWITS.

In the fall of 2016, West Point and the Air Force Academy required women to complete the boxing course in order to graduate. Requiring women to take the boxing course brought renewed attention from the media on the academy boxing programs. This attention highlighted three key areas of concern in the boxing programs: 1) the training debate at large, 2) concussion and injuries, and 3) public relations and communications. The main focus of Ms. Rose's research was to determine if the boxing programs could reach their intended objectives while also decreasing risk of injury.

Ms. Rose then discussed the important implications of the boxing program. The first factor is that the Services need a return on investment for the officers coming out of the military academies. Over \$400,000 is spent over four years to graduate each officer. It is important that these officers receive the best training and least amount of injury as possible. This research is also important to the gender integration discussion at large. Oftentimes the policy in gender integration is blamed for problems; however, problems can arise from bad implementation not necessarily from a bad policy.

For her research, Ms. Rose assessed only students in the 4th class boxing course in the first year and first semester at West Point, the Air Force Academy, and the Naval Academy. Ms. Rose also reviewed data on safety risks, concussion factors, and the barriers and accelerants to implementing the boxing program at the military service academies. The boxing programs at the military service academies differ from club boxing programs in two key aspects 1) most students in the military academy programs are complete novices, and 2) students at the military academies complete the course in a short amount of time. This makes them difficult to compare to boxing clubs. For her study, Ms. Rose utilized published studies on injury rate data, information collected by DACOWITS, as well as conducted interviews with boxing directors, athletic directors, and assistant coaches.

Ms. Rose then gave an overview of the concussion research. Military academies are unique with regards to concussions because a student at the military academy is at an increased risk of suffering from more than one concussion than at a non-military university, due to concussions resulting from high school athletic programs. The research shows that there is a significant detrimental effect on a person if they receive more than one concussion. The research is

inconclusive whether women suffer from more frequent or more severe concussions. There also is a reporting bias in the research that suggests women report more injuries than men. However, coaches at the military academies found that male students tend to report injuries more than female students.

Another important source of information for concussion safety will come from the Grand Alliance Study, a joint research project between the NCAA and the Department of Defense currently underway. This three year study will be the most comprehensive investigation of sport-related concussions conducted to date. This study will include 35,000 student athletes including students at the military service academies which will allow for a direct comparison for the injuries suffered from boxing related concussions.

Next, Ms. Rose examined the objectives of the military service academies' boxing program. Ms. Rose concluded that ultimately, the boxing programs are intended to develop a future Service member's acute stress response. Acute stress response is resiliency in the face of pressure and conditioning the fight or flight response. The medulla is the part of the brain that processes a person's response, or fight or flight instinct. The research shows that until people engage a fight or flight response in the medulla, they are not able to condition themselves to get out of an acute response and weigh options based on other training. The objective is to engage this response in future Service members and have them practice keeping control during a high stress situation.

Ms. Rose next discussed her research on safety factors in the military service academies boxing programs. There are six main categories of safety factors for a boxing class: protective gear, briefings & trainings, concussion protocols, punch restrictions, exposure time, and safety checks. Ms. Rose then compared the six safety factors to the current protocols used by the three military service academies to see where the academies align in their safety practices. There were three areas (protective gear, concussion protocols, and exposure time) where two of the three Services were aligned and three areas where all of the academies were doing something different (briefings & trainings, punch restrictions, and safety checks). Ms. Rose noted that because of the unique nature of these programs, the importance of sharing best practices across the three academies is paramount. Ms. Rose then gave more detail on the structural differences between the programs.

The final item to consider is how to achieve the military service academies' key objective (engaging and conditioning a student's Acute Stress Response) while also decreasing risk of injury. She looked at several strategies that may achieve the objective while reducing risk such as eliminating the boxing requirement all together or replacing it with other courses, etc. However, the only strategy that achieved the objective and decreased risk was to retain the boxing requirement and increase punch restrictions. Since concussions depend on the angle and speed with which a person is hit, restricting punches could ban hits that are more likely to cause concussions while also allowing a person's Acute Stress Response to be engaged.

Ms. Rose made several recommendations to the committee based on the results of her research. She first recommended keeping the boxing programs at the military service academies because the objective of the program is extremely valuable for future soldiers, sailors, and airmen. Ms. Rose also recommended standardizing concussion identification rather than relying on instructor discretion. Another recommendation was for the military service academies to formalize sharing lessons learned and to work towards institutionalizing knowledge, standards and procedures at their own institutions and across the three academies. West Point currently has an annual lessons

learned program which is a good model of what could occur in the future among all the institutions. Ms. Rose also recommended that the military service academies give more information to the public on safety protocols and information about the boxing program. Most of the information available to the public is from news sources and may mislead the public on the safety risks and objectives of the program. The final recommendation was that the military service academies and DACOWITS should capitalize on the results of the Grand Alliance study to reevaluate concussion protocols and build public trust.

Discussion

Gen (Ret.) Wolfenbarger opened the discussion by reminding the committee and the public that this research came out of a request from West Point to take a deeper look into the boxing program.

MG (Ret.) Macdonald wanted to highlight the quote Ms. Rose said that negative outcomes were not always due to bad policy, but can happen due to bad implementation. He noted that this is an important thing for the Committee to remember. He also suggested that the Committee take all of Ms. Rose's recommendations and relate them to the physiological panel briefing. MG (Ret.) Macdonald also noted that the information on Acute Stress Response was very applicable to his experience in the boxing program.

RADM (Ret.) Thomas asked Ms. Rose if there was anything that could be done operationally to improve the readiness of our forces in Acute Stress Response for those not at the military service academies. She asked whether Ms. Rose discovered anything in her research that could be an applicable parallel to use in basic training to condition Acute Stress Response. Ms. Rose responded that she did not review basic training or officer candidate school. Gen (Ret.) Wolfenbarger also noted that the military service academy briefers were asked at the December 2016 quarterly business meeting why boxing was not included in basic training. The briefers responded that it was difficult to maintain a structured environment in a large capacity across all units, bases, services, etc. At the military service academies they are able to create a very structured environment which is a key factor in reducing injury. Ms. Rose agreed with Gen (Ret.) Wolfenbarger that the structure of a program could only be maintained in a very well controlled lower risk environment.

Ms. Hunter asked Ms. Rose if she knew of any evidence that the boxing program also helped to increase unit cohesion. Ms. Rose responded that she did see findings to suggest an increase to unit cohesion and it was particularly relevant at the Naval Academy. The Naval Academy integrated their gyms with men and women for the first time when they began the integrated boxing program. When women were first integrated, the Navy was worried about unit cohesion. However, the Navy boxing coach was amazed at how much more seriously the midshipmen took the commitment and support to the unit when men and women were training together. Ms. Hunter noted that it is important when thinking about gender integration to acknowledge that men and women need to feel comfortable getting physical together in a combat situation. DACOWITS should take note of that in future work on integration.

Ms. Hawkes then asked Ms. Rose to further discuss the returns on investment (\$400 thousand spent to graduate a cadet). Ms. Rose responded that the \$400,000 includes tuition, room and board, and all other components that go into graduating a student in 4 years. Ms. Hawkes asked Ms. Rose if she was able to interview any students who were in the integrated boxing classes.

Ms. Rose responded that she did not interview students, but did talk to graduates and watched news clips of student interviews.

Public Comment Period

CDR (Ret.) Pat Cerchio-Vieira, Life After the Military

CDR (Ret.) Cerchio-Vierira was inspired by Arianna Huffington's book Thrive: *The Third Metric to Redefining Success and Create a Life of Well-Being, Wisdom, and Wonder* and how its message relates to the Services. The book focused on the idea that a person can be successful without burning out. Research has shown that in order to perform at high levels, a person must have a well-rounded life. The primary barrier to a well-rounded life in the military is sleep deprivation. Sleep deprivation is commonly thought of as a rite of passage in the military, but research suggests that lack of sleep is detrimental to physical and mental performance. Digital overload is another issue affecting the health of Service members. Unplugging from technological devices can increase resilience and mindfulness which are necessary for succeeding in high stress environments. Sleeping with technological devices at arms-length can decrease REM sleep. Research from the military and other organizations such as the RAND Corporation gives good guidance on increasing sleep, hydration, and other healthy behaviors. In order to make changes, the Department of Defense would not need to spend a lot of money, but could simply use existing research to change policy.

Ms. Medina thanked CDR (Ret.) Cerchio-Vierira for her comments. Ms. Medina agreed with CDR (Ret.) Cerchio-Vierira that sleep is an issue that DACOWITS should look at in more detail. Ms. Medina also commented that she is thankful that DACOWITS exists and is open to the public for their comments and recommendations. She suggested that the Committee look for relevant people in the public sector who can provide vital information to the Committee on issues they are interested in.

Final Remarks

Before closing the session, Gen (Ret.) Wolfenbarger recognized COL Kominiak and Lt Gen Ruark, Military Deputy for Personnel and Readiness, who are both retiring before the next quarterly business meeting. Gen (Ret.) Wolfenbarger presented Lt Gen Ruark with a DACOWITS coin.

Designated Federal Officer and DACOWITS Military Director, COL Kominiak, thanked the remaining attendees and closed the public meeting.

Meeting was adjourned.

Report Submitted by: COL Aimee Kominiak, USA DACOWITS Military Director

Report Certified by:

Gen (Ret.) Janet Wolfenbarger, USAF DACOWITS Chair

Members in Attendance:

Gen (Ret.) Janet Wolfenbarger, USAF, Chair SMA (Ret.) Kenneth Preston, USA, Vice Chair Dr. Kristy Anderson Col (Ret.) John Boggs, USMC Maj Gen (Ret.) Sharon Dunbar, USAF Lt Gen (Ret.) Judy Fedder, USAF Ms. Sharlene Hawkes SGM (Ret.) Norma Helsham, USA Ms. Therese Hughes Ms. Kyleanne Hunter, USMC Veteran

CSM (Ret.) Michele Jones, USA Ms. Pat Locke, USA Retired MG (Ret.) John Macdonald, USA Ms. Monica Medina, USA Veteran Ms. Janie Mines, USN Veteran FLTCM (Ret.) Jo Ann Ortloff, USN VADM (Ret.) Carol Pottenger, USN RADM (Ret.) Cari Thomas, USCG Dr. Jackie Young