LEANING IN:

ACCESSION & RETENTION OF FEMALE AIR FORCE INTELLIGENCE OFFICERS

BY

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APPROVAL

The undersigned certify that this thesis meets a master's level standards of research, argumentation, and expression.

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The conclusions and opinions expressed in this document are those of the author. They do not reflect the official position of the US Government, Department of Defense, the United States Air Force, or Air University.

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ABSTRACT

The United States is facing a return to great power competition with rising regional powers and technological advancements of increased automation, hypersonic weapons, networked sensors, and artificial intelligence, which has the potential to change the character warfare. Due to this shifting global and technological landscape, the United States Air Force must attain and retain the best talent from across the country to meet our nation's demands. Women account for over fifty percent of the college-educated workforce, but only twenty-one percent of the officers in the Air Force. The rate of female officers joining the Air Force has remained stagnant for decades. However, the intelligence officer career field has produced a statistically significant higher percentage of female officers across grades from O-1 to O-6 over the last fifteen years. This project strives to answer the following research questions: *Why is the intelligence career field able to attain and retain female officers in higher proportions than the Air Force average? Are there remaining obstacles for continued service for these officers?* Through empirical data and research, this study highlights the importance of career interest, career path flexibility, strong female representation, mentorship, and female role models, which allows female Air Force intelligence officers to succeed and thrive in a traditionally male-dominated environment.

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Introduction

We face an expanded battlefield that is ever more lethal and disruptive.

— U.S. National Defense Strategy

The 2018 National Defense Strategy (NDS) asserts that the United States is entering a new period of "great power competition." Nations like Russia and China are challenging the sole superpower status that the United States has enjoyed since the collapse of the Soviet Union in 1989. They seek to expand their influence on the international stage while disintegrating the United States' relationship with our partners and allies. Additionally, technological advancements have the potential to change the character of warfare. Hypersonic weapons, spectrum warfare, and artificial intelligence will exponentially increase the speed of combat. Due to these changes, the United States must be ready to confront the realities of an increasingly depopulated battlefield. Brute physical strength and endurance are less likely to be the determining factor in mission success on the battlefield. Mental endurance, agility, and the ability to synchronize air operations throughout multiple domains within reduced time constraints proves vital, and this new environment calls for the Air Force to acquire and retain the talents equally of men *and* women.

The Future Battlespace

The strategic environment facing the Air Force over the next two decades is challenging. To deter conflict with major world powers, the U.S. must correctly understand its potential capabilities in the 2030 timeframe and obtain the mix of capabilities that will best meet U.S. national security objectives. The Air Force has followed a roadmap to prepare for a future of autonomous technologies in warfare. The focus of the roadmap is increased use of autonomy and autonomous systems, and the augmentation of human performance to increase battlefield capabilities and reduce manpower needs.[1] The Air Force had embraced the use of autonomous systems like remotely-piloted aircraft (RPAs) in conventional and unconventional operations for

[1] United States Air Force Chief Scientist. "Technology Horizons A Vision for Air Force Science & Technology During 2010-2030." *Office of the Chief Scientist of the Air Force*, 15 May 2010.

decades. Still, the Air Force's ambition lay far beyond the employment of RPAs. The Air Force vision was to use autonomous systems and processes to cognitive functions of control and reasoning that were usually done by humans.[2] The increased operational tempo gained through greater use of autonomous systems represents a significant capability advantage over an adversary. Off-loading human cognitive processes to machines could enable greater use of highly adaptable and flexible autonomous systems and processes that could increase significant time-domain operational advantages over adversaries who are limited to human planning and decision speeds.[3]

This new environment is a paradigm shift for the Air Force that moves away from manned aircraft, operating systems, and data processing. The ramifications of this new reality will see a depopulation of the battlefield. Former Chairman of the Joint Chief of Staff General Joseph F. Dunford, stated, "While war will always be chaotic and violent, its character is changing rapidly…consequently, we must invest in adaptive, innovative, and critically thinking leaders who can thrive at the speed of war in the 21st century."[4]

For the Air Force, the crux of our fighting forces lies in the men and women who fly into enemy territory to deny, degrade, and destroy their military forces and capabilities. In air combat, the Observe, Orient, Decide, Act (OODA) loop is a cognitive process pilots go through when engaging enemy aircraft. Air Force strategist John Boyd, the originator of the OODA loop, describes the objective as "collapse the adversary's system into confusion and disorder by causing him to over and under react to activity that appears simultaneously menacing as well as ambiguous, chaotic, or misleading."[5] If the advantage comes from completing this cognitive process faster, then one can see the tremendous potential for computers to exceed human decision-making speeds, creating less of a need to put human warfighters directly over the battlefield. Air Force operations

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[2] United States Air Force Chief Scientist. "Technology Horizons A Vision for Air Force Science & Technology During 2010-2030."
[3] Air Force Deputy Chief of Staff, Intelligence Surveillance, and Reconnaissance. Next Generation ISR Dominance Flight Plan: 2018-2028, United States Air Force, 24 July 2018.
[4] General Joseph Dunford, Jr. "From the Chairman: Maintaining a Boxer's Stance" *National Defense University Press*, Joint Force Quarterly 86, 19 June 2017. https://ndupress.ndu.edu/Publications/Article/1218381/from-the-chairman-maintaining-a-boxers-stance/ (accessed 18 Feb 2020).
[5] Paul Scharre. *Army of None Autonomous Weapons and the Future of War (*New York: W.W. Norton & Company, 2018), 23.

in a future battlespace will rely less on physical prowess and endurance and more on mental endurance, agility, dynamism, and synchronization within reduced time constraints. Those latter factors will play a greater role in determining wins and losses on the battlefield. A future that portends proliferated autonomous systems that can cognitively process information faster than humans to create kinetic and non-kinetic effects on the battlefield, is a future that reduces the need for the Air Force to put humans into harm's way in direct combat roles.

This conduct of warfare would be a significant change for the Air Force. As with most military services, the quickest way to get promoted is through direct combat. Most of the Air Force general officers are pilots with numerous combat hours. For much of the Air Force's history, women were legally barred from assuming combat roles and contended with a glass ceiling for many decades. A future of spectrum warfare, autonomous weapons, and artificial intelligence that enables less direct human combat on the battlefield will create an opportunity for women in the Air Force to potentially accelerate the breakdown of barriers for women in a male-dominated military culture.

Women in the Air Force

As the Air Force pursues a plan for future wars, it will need to cast a wide net on the recruitment of potential talent in society, and this includes an increasing number of women. In the future, the preeminent Air Force leader in battle may not be a traditional male pilot leading a four-ship against an enemy's integrated air defense system (IADS). Instead, it could be an operations center leader who has a holistic picture of the battlespace through networked sensors, and can apply the right tactical effect—whether it be cyber, fires, command and control (C2), or maneuver—to gain an advantage over the enemy.

Today, females are just as likely as males to become that operations center leader. In 2011, Major General Margaret Woodward was the first female commander to oversee air operations for a major campaign during Operation Odyssey Dawn. She serves as a trailblazer for female air operations center leads of the future. In the Air Force, aviation has been the career path that often leads to the highest levels of leadership. Unfortunately, for most of the Air Force's history, women were prevented from pursuing a career in aviation. It has been only twenty-nine years since the United States Senate formally lifted

the ban on women flying in combat. However, even with limitations, through generations of male leaders at the top of the pyramid, women have succeeded through aviation and other career fields. In the past eight years, 2012-2020, four female officers have reached the rank of four-star general, compared to zero in the previous sixty-five years since the inception of the Air Force in 1947.

Given the impending change in the character of warfare and increased global competition, the retention of talented women is critical for the Air Force mission. Furthermore, the cultivation of women's professional growth can be maximized by women having other female peers, mentors, sponsors, or supervisors to illuminate the path to success.

Sheryl Sandberg's seminal book *Lean In* highlighted reasons why there are too few women leaders in the American workforce. She emphasized that women have what it takes to succeed at the highest professional level. Still, they face many obstacles to include: the leadership ambition gap between men and women, work-life balance, mentorship, and equality.[6] Although Sandberg's focus was primarily on corporate America, her observations could apply to female officers in the Air Force.

The Air Force has expressed the importance of diversity to enable innovation, agility, and, ultimately, mission success.[7] To this end, in March 2015 and September 2016, the Air Force implemented a series of initiatives to determine how to improve diversity, including female representation within the officer ranks.[8] A 2018 study published by the RAND corporation found that the impediments to female Air Force officer representation and retention revolved around the same issues that Sandberg explored in her book. It examined factors like career field flexibility, family support, discrimination, and the importance of female role models. When it comes to improving female representation in the officer corps, military personnel statistics have shown a pattern for many years in which female officers, in all services, are generally less likely

[6] Sheryl Sandberg. *Lean In*, (New York, New York: Knopf Publishing, 2013).
[7] Kirsten M. Keller, Kimberly Curry Hall, Miriam Matthews, Leslie Adrienne Payne, Lisa Saum-Manning, Douglas Yeung, David Schulker, Stefan Zavislan, & Nelson Lim. "Addressing Barrier to Female Officer Retention in the Air Force." Project Air Force. *RAND Corporation.* 2018.
[8] Ibid.

to progress through career milestones at rates similar to male officers.[9] However, the Air Force intelligence officer career field seems to have cracked the code on increasing female representation and retention.

Intelligence work has historically been a career path that allows women to contribute significantly to national security, even as the military barred them from other sectors of service. Today, women in the Air Force intelligence officer career field carry on that tradition of dedicated service to the nation, while maintaining increased representation, above the Air Force average, of female officers. Over the last fifteen years, the average percentage of female second lieutenants across the Air Force (the rank of most officer accessions) was 23%.[10] In contrast, the average rate of female intelligence second lieutenants was 38%.[11] A higher percentage of second lieutenants at the start of an officer's career is likely to produce a higher percentage of officers in the higher ranks since the military grows talent from within its ranks over time. Air Force intelligence officers have been consistently more female throughout the Company Grade Officer (CGO, O-1 to O-3) and Field Grade Officer (FGO, O-4 to O-6) ranks compared to the Air Force average.[12] Does the intelligence officer career field give female intelligence officers more of a capacity to "lean in" and achieve higher representation and progression through career milestones than the Air Force as a whole?

Research Question

Considering the Air Force's dedication to fielding a diverse force to address increasing global competition and meet the technological challenges posed by the future of warfare, this project strives to answer two questions:

Why is the intelligence career field able to attain and retain female officers in higher proportions than the Air Force average? Are there remaining obstacles for continued service for these officers?

[9] Kirsten M. Keller, Kimberly Curry Hall, Miriam Matthews, Leslie Adrienne Payne, Lisa Saum-Manning, Douglas Yeung, David Schulker, Stefan Zavislan, & Nelson Lim. "Addressing Barrier to Female Officer Retention in the Air Force." Project Air Force. *RAND Corporation.* 2018.
[10] This data was obtained from the Air Force Interactive Demographic Analysis System (IDEAS.)
[11] Ibid.
[12] Ibid.

Given the high percentage of female intelligence officers, it is essential to understand how to retain and cultivate their talent. As the character of warfare changes and the speed of combat increases, the Air Force must grow and develop global intelligence, surveillance, and reconnaissance (ISR) leaders who can operate through and within a multi-domain battlespace increasingly dominated by autonomous systems to ensure it remains the most lethal Air Force in the world. This research paper seeks to explore the drivers and impediments to the retention of female Air Force intelligence officers.

Organization of Study

Chapter One recounts historical impediments to women's service in the military and the ways women contributed to war efforts through intelligence operations. Chapter Two provides the reader with an overview of the intelligence officer career field. Through a series of interview responses, Chapter Three examines the reasons why female officers chose the intelligence career pathway at their commissioning source and some of the benefits and drawbacks of the career field. Chapter Four further explores the career experiences of female Air Force intelligence officers (FAIOs) as they progress through the ranks from Second Lieutenant (O-1) through Brigadier General (O-7), while examining similar themes and comparisons to females in the Air Force as a whole and the larger American workforce. This chapter seeks to provide a qualitative characterization that reveals a better understanding of the factors that exist in the career field, which help or hinder women from excelling as CGOs and get through the FGO ranks. Chapter Five offers broad theme findings, conclusions, and recommendations for further study.

Chapter 1

History of Women in the Military and Intelligence

The Past Is Not Dead. It's Not Even Past.

— William Faulkner

Women in the Military

Fifty percent of the college-educated workforce are women, which is significantly higher proportion than are represented in the Air Force.[1] Today twenty-one percent of Air Force officers are female.[2] At face value, there might be an expectation that women tend to pursue a career in a traditionally male-dominated environment at a lower rate than men. However, to understand the reasons why women are underrepresented in the military generally, and the Air Force specifically, it is crucial to examine the historical ways the U.S. barred women from military service.

The significant strides of the integration of women into the U.S. military have been the result of policy changes through executive action, legislation, and judicial rulings. Since 1918 when the first women could enlist in the Reserves of the Navy, Marine Corps, and Coast Guard, several key legislative bills have been enacted into law. Legislation has enabled women to serve in times of peace and war, and has led to equal pay and benefits for women service members.[3] The removal of barriers to promotion,

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[1] Matias, Dan "New Report Says Women Will Soon Be Majority Of College-Educated U.S. Workers." *NPR*, 20 June 2019, https://www.npr.org/2019/06/20/734408574/new-report-says-collegeeducated-women-will-soon-make-up-majority-of-u-s-labor-f (accessed 4 November 2019).

[2] Service Women's Action Network. "Women in the Military: Where They Stand", 10th ed. 2019. https://www.servicewomen.org/wp-content/uploads/2019/04/SWAN-Where-we-stand-2019-0416revised.pdf (accessed 29 April 2020).

[3] Legal Information Institute "Frontiero v. Richardson." *Cornell Law School*, https://www.law.cornell.edu/supremecourt/text/411/677 (accessed 29 April 2020).

command, and in many cases, occupational specialties, have influenced and promoted the integration and advancement of women in the military.

Table 1: Legislation Impacting Women in Military

Year	Event
1948	Women's Armed Services Integration Act of 1948
1951	Defense Advisory Committee on Women in the Service (DACOWITS)
1967	Removal of Career Restrictions for Women Officers
1973	Draft Ends and DoD creates All-Volunteer Force
1973	*Frontiero v. Richardson* (Supreme Court case)
1976	Women Permitted to Enter Service Academies
1980	Defense Officer Personnel Management Act (DOPMA)
1991	Defense Authorization Act of 1992
1993	Ban Lifted on Combat Exclusion of Women in Aviation
2013	Lifted Ban of Women in Various Combat Roles
2015	Full Ban Lifted on Women in Combat Roles Across Every Service

Source: Author's Original Work

The Women's Armed Services Integration Act of 1948 gave permanent status to women in the military, opening the door for women to serve in peacetime. Although this was the first official step of integrating women into the military, there were a considerable number of restrictions limiting their advancement in the law:

- Women could constitute no more than two percent of the total force. The number of women officers could total no more than ten percent of the two percent.
- Promotion of women officer capped above pay grade O-3 (Captain/Lieutenant). Pay grade O-5 (Lieutenant Colonel/Commander) was the higher per rank women could obtain.
- Women were barred from serving aboard Navy vessels (except hospital ships and certain transports) and from duty in combat aircraft engaged in combat missions.
- Women were eligible to enlist at age 18 but needed to obtain parental approval if under the age of 21
- Women denied spousal benefits for their husbands unless the servicewomen could prove she provided over 50 percent of the family income.

- By policy, women precluded from having command authority over men.[4]

The passing of the Women's Armed Services Integration Act of 1948 was a monumental step forward for women in the military, but it failed to integrate and advance women during peacetime. The possibility of career progression for women officers was minimal at best, and even if they managed to get promoted, the number of billets available to them was even less. Women officers could only aspire to reach O-5, but even that was limited as there was a ten percent restriction on the number of O-5s in each of the branches. Even women successfully promoted to O-5 were often not included in any type of policy or decision-making, including those involving decisions about women.[5] The policy toward women got even worse as laws passed that disallowed women from enlisting if they had children, became pregnant, or adopted children.[6] The Women's Armed Services Integration Act of 1948 authorized the enlistment of women into the military, but true integration would have to wait.

In 1951, the Secretary of Defense created a committee of prominent civilian women, known as the Defense Advisory Committee on Women in the Services (DACOWITS). At conception, its main function was to advise the Secretary of Defense on recruitment and retention of women in the military. Within the committee, five separate working groups formed: Training and Education; Housing and Welfare; Utilization and Career Planning; Health and Nutrition; and Recruiting and Public Information. For almost 70 years this advisory committee has led the way in recommending several key policy changes for women in the military creating more opportunities for women.[7]

On November 8, 1967, President Johnson signed PL 90-130. This new law essentially repealed several of the restrictions in the Integration Act of 1948. Most notably, it opened promotions for women to general and flag ranks, lifted the ceilings on

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[4] Women's Research and Education Institute. "Women in the Military: Where They Stand." 4th ed. 2003.
[5] Jeanne Holm. *Women in the Military: An Unfinished Revolution.* (Novato, CA: Presidio Press, 1992), 134.
[6] Francine D'Amico, & Laurie Weinstein. *Gender Camouflage*. (New York: New York University Press, 1999), 56.
[7] Ibid, 135.

the other ranks and removed the two percent cap on the total number of women allowed on active duty. In signing, President Johnson stated, "There is no reason why we should not one day have a female chief of staff—or even a female commander in chief."[8] By 1972 each of the services had opened its Reserve Officers Training Corps (ROTC) programs to women, and they became eligible to attend War Colleges.[9] The Air Force allowed women to request waivers to remain in the service if they became pregnant, and the United States Supreme Court ruled in *Frontiero v. Richardson* that benefits given by the United States military to the family of service members could not be given out differently because of sex.[10] The Frontiero case established that women must be considered on an equal plane as men in terms of pay and allowances.

As support for ending the U.S. military draft increased, Secretary of Defense, Melvin Laird, created the Central All-Volunteer Task Force. This task force chartered with studying the possibility of recruiting more women to help alleviate some of the projected shortage. Based on the recommendations from the task force and the House subcommittee, over 80 percent of all occupations opened to women. As a result, the proportion of women in the military began to increase.[11] The Secretary of Defense ordered the services to increase the number of women they recruited. By 1976, the service academies opened to women for the first time. Improvements in the integration of women helped to increase the number of women serving from 55,000 in 1973 to over 171,000 in 1980.[12]

By the early 1970s, Congress became concerned with the number of senior officers each branch of the service accumulated. Each of the services had separate promotion systems; there was no standardization in terms of whom or how many officers promoted to each rank, and women still promoted using a different process from the men. At the request of Congress, the Secretary of Defense submitted a report outlining a set of

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[8] Breuer, 87.
[9] Adrienne Evertson & Amy. Nesbitt. "Glass Ceiling: Effect and Its Impact on Mid-Level Female Officer Career Progression in the United States Marine Corps and the Air Force."
[10] Legal Information Institute "Frontiero v. Richardson." *Cornell Law School*, https://www.law.cornell.edu/supremecourt/text/411/677 (accessed 29 April 2020).
[11] William Bowman, Roger Little, & G. Thomas Sicilia. *The All-Volunteer Force after a Decade*. (McLean, Va: Pergamon-Brassey's International Defense Publishers. 1986), 270.
[12] Adrienne Evertson & Amy. Nesbitt. "Glass Ceiling: Effect and Its Impact on Mid-Level Female Officer Career Progression in the United States Marine Corps and the Air Force."

standards that detailed the number of officers who should serve in each grade. The standards set forth the number of officers in each grade from O-4 to O-6. It was not based on gender or occupation. These standards became the basis for the Defense Officer Personnel Management Act (DOPMA) approved by the House in both 1976 and 1978 but stalled in the Senate during both years.[13] Finally, congress reached a compromise in 1980, and DOPMA (PL 96-513) passed in November of the same year. The purpose of DOPMA was to maintain a high quality, numerically sufficient officer corps that provided career opportunities that would attract and retain the number of high caliber officers needed and provide reasonably consistent career opportunities among the services.[14] With the passing of DOPMA, women achieved greater integration into the service. Promotion systems for men and women were no longer separate, regardless of branch of service, thus removing one more restriction from the Women's Armed Service's Integration Act of 1948.[15]

The debate over the role of females in combat raged throughout the 1980s and 1990s. Operation Desert Storm proved critical is demonstrating that women could excel in traditional combat roles. In January 1991, over 30,000 women found themselves deployed to the desert theater for the first war in Iraq. Aside from the conventional billets of medical and administrative personnel, women piloted aircraft and drove vehicles into combat zones. Additionally, they served on support ships, assisted in construction units, and supervised enemy prisoners of war.[16] The difference this time was that their presence was publicly known. Although the combat was short-lived, women were among those on Iraq's list of prisoners of war and those killed in action. Along with 12 other women killed in Desert Storm, Major Marri Rossi (U.S. Army) died on March 1, 1991 while flying her Chinook helicopter (CH-47) into enemy territory to supply fuel and ammunition to the 101st and 82nd Airborne divisions.[17] Receiving Purple Heart medals for combat-sustained injuries, the heroic efforts of women like Major Rossi provoked a

[13] Adrienne Evertson & Amy. Nesbitt. "Glass Ceiling: Effect and Its Impact on Mid-Level Female Officer Career Progression in the United States Marine Corps and the Air Force."
[14] Ibid.
[15] Ibid.
[16] Ibid.
[17] Ibid.

reconsideration of combat policies, in particular the exclusion laws of females in direct combat.[18] After notable performances from so many women in the Gulf War, there was a push for legal action to accelerate their career potential.

New attention on women's abilities to perform in combat areas following the Gulf War led to a hotly debated Congressional decision to repeal part of the 1988 Combat Exclusion Policy.[19] Through the Defense Authorization Act of 1992, Congress lifted the ban on female combat aviators in the Air Force and females aboard combat vessels in the Navy.[20] On April 28, 1993, the combat exclusion was finally lifted from aviation positions by Secretary of Defense Les Aspin, permitting women to serve in almost any aviation capacity. However, some restrictions remained on aviation units in direct support of ground units and special operations aviation units. The Pentagon declared:

> Service members are eligible to be assigned to all positions for which they are qualified, except that women shall be excluded from assignment to units below the brigade level whose primary mission is to engage in direct combat on the ground.[21]

Those units and positions routinely collocate with direct ground combat units. In 2013, Defense Secretary Leon E. Panetta began the process of lifting the military's official ban of women in combat in certain roles, which opened hundreds of thousands of additional front-line jobs to them. Women had been restricted from artillery, armor, infantry and other such combat roles, even though women have frequently found themselves in combat in Iraq and Afghanistan.[22] In 2015, Defense Secretary Ashton Carter completed the process Secretary Panetta started and officially lifted the ban on women in combat roles in each branch of the U.S. military.[23] As a result of the hard-fought advances of

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[18] Adrienne Evertson & Amy. Nesbitt. "Glass Ceiling: Effect and Its Impact on Mid-Level Female Officer Career Progression in the United States Marine Corps and the Air Force."
[19] Ibid.
[20] Ibid.
[21] Paula Broadwell. "Women at War", *New York Times*. 3-20 October 2009. https://www.nytimes.com/2009/10/21/opinion/21iht-edbroadwell.html (accessed 15 March 2020).
[22] Elisabeth Bumiller & Thom Shanker. "Pentagon set to lift combat ban for Women", *New York Times.* 23 January 2013. https://www.nytimes.com/2013/01/24/us/pentagon-says-it-is-lifting-ban-on-women-in-combat.html (accessed 15 March 2020).
[23] P.J. Tobia. "Defense Secretary Carter Opens All Combat Jobs To Women". *PBS,* 3 December 2015. https://www.pbs.org/newshour/nation/watch-live-defense-secretary-carter-to-lift-ban-on-women-in-combat-jobs, (accessed 15 March 2020).

female integration into military service, women are now entering and graduating from elite combat training schools like the Army's Ranger School and the Green Berets.

The historical milestones examined above show that women have made significant progress toward integration into military service. Still, there is more progress to make to achieve higher female representation amongst the Air Force officer corps. Institutional barriers to women's advancement that enshrined in legislation, executive decree, and DoD policies slowly fell over time. Today, the Air Force boasts the highest percentage of female officers of any military service, as the Air Force has traditionally had more jobs open to women.[24] The Air Force promotes the belief that having diverse teams creates a force multiplier for mission accomplishment, and has openly embraced diversity initiatives. The Air Force Diversity and Inclusion Initiative states, "the challenges we face today are far too serious, and the implications of failure far too great, for our Air Force to do less than fully and inclusively leverage our nation's greatest strength—our remarkably diverse people. Across the force, diversity of background, experience, demographics, perspectives, thought, and organization are essential to our ultimate success in an increasingly competitive and dynamic global environment."[25]

However, the percentage of female officers has been stagnant around an average of 20.5% for the last fifteen years.[26] Kaleth O. Wright, Chief Master Sergeant of the Air Force, stated, "to remain the world's most dominant Air Force, it's important that we have the right Airmen with the right skill sets and the right attitude in the right place at the right time."[27] But for women to be truly embraced as leaders in the Air Force, it is not enough to identify and instill the "right" skills and competencies. The workplace environment must also support a woman's motivation to lead and also increase the

[24] Service Women's Action Network. "Women in the Military: Where They Stand", 10th Edition 2019. https://www.servicewomen.org/wp-content/uploads/2019/04/SWAN-Where-we-stand-2019-0416revised.pdf (accessed 29 April 2020).
[25] United States Air Force. "Air Force Diversity & Inclusion." Air Force website. 2020 https://www.af.mil/Diversity.aspx (accessed 7 March 2020).
[26] This data was obtained from the Air Force Interactive Demographic Analysis System (IDEAS)
[27] United States Air Force. "Air Force Diversity & Inclusion."

likelihood that others will recognize and encourage her efforts—even when she does not look or behave like her male counterparts.[28]

Integrating leadership into one's core identity is particularly challenging for women, who must establish credibility in a military culture which historically has been deeply conflicted about whether, when, and how they should contribute to military operations. A significant body of research shows that for women, the subtle gender bias that persists in organizations and society disrupts the learning cycle at the heart of becoming a leader. Studies have shown that in the workplace, there is a tendency to see women workers as women first and workers second.[29] This narrative appears most clearly in explicit expressions that suggest women's personal lives and roles as wives and mothers make them less invested and less reliable workers.[30] However, throughout American history, intelligence work has consistently been a military career field where women could thrive, even when their larger roles in society were undervalued.

Women's Contributions To Intelligence Operations

American Revolution. During the American Revolution, the eighteenth-century notions that colonists had regarding gender made it possible for women to work as spies during this war. Colonists regarded women as innocent and incapable of such espionage and deceit compared to the male population.[31] Some women displaced by the War for Independence were not passive victims traumatized by events, but active participants whose decisions affected the course of the war.[32] Women had means outside their home and family. Many left the comforts of home to follow the armies. Female camp followers,

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[28] Herminia Ibarra, Robin J. Ely, and Deborah M. Kolb. "Women Rising: The Unseen Barriers." *Harvard Business Review*, September 2013. https://hbr.org/2013/09/women-rising-the-unseen-barriers. (accessed 3 March 2020).

[29] Donna Bobbitt. "Gender Discrimination at Work: Connecting Gender Stereotypes, Institutional Policies, and Gender Composition of Workplace." *Gender and Society* Vol. 25, No. 6 (December 2011), https://www.jstor.org/stable/23212199?read now=1&refreqid=excelsior%3Ae 6a7ab4dcee9e18e526b87aeb0bdb5da&seq=10#page_scan_tab_contents (accessed 29 April 2020).

[30] Ibid.

[31] Carol Berkin, *Revolutionary Mothers: Women in the Struggle for America's Independence* (New York, NY: Vintage Books, 2005), 51.

[32] Joan R. Gundersen, "We Bear The Yoke With A Reluctant Impatience: The War for Independence and Virginia's Displaced Women," *War & Society in the American Revolution: Mobilization and Home Fronts,* ed. John Resch and Walter Sargent (Dekalb, IL: Northern Illinois University Press, 2007), 263.

some of whom had a hidden agenda to gain military information, surrounded soldiers to perform gendered activities such as laundry, cooking, and nursing.[33] Women were able to cross into military lines and spend time amongst the other side due to these gender conceptions. Female spies made use of the gender norms of the eighteenth century to their benefit to gain entry to military posts and secure information.[34] These women took up the potentially dangerous means of espionage and managed to move information between the army camps.[35] The backgrounds of female spies and their families' beliefs and attitudes all played a part in these expeditions. The social view of women made it easier for those who chose to spy. There was less suspicion concerning women who crossed military lines. The assumptions that women were either visiting family members or selling goods to soldiers, kept the spies' true task hidden.[36]

Some women in the eighteenth century were not content with the gender norms expected of them during this revolutionary period.[37] The onset of war brought new opportunities to those willing to risk the threats of imprisonment or death. Whether women were seeking ways to be loyal to their country in a war or looking for an adventure to break away from the everyday routine, female spies were in a unique position that drastically changed their daily lives. The American Revolution was a war that brought army camps to people's homes. While men left to fight battles, women came to be in charge of the homestead. Women like Lydia Darragh (1729-1789, Pennsylvania) took drastic and unexpected actions that helped the war effort, thereby revealing women to be political actors in their own right, not just bystanders.

The location of the homes that housed female spies was an essential feature in their roles for espionage. Women who stayed home while their male family members were at war had to interact with soldiers from the other side, placing them in direct

[33] Gundersen, "We Bear The Yoke With A Reluctant Impatience: The War for Independence and Virginia's Displaced Women," *War & Society in the American Revolution: Mobilization and Home Fronts,*54.
[34] Ibid, 54
[35] Ibid, 54
[36] Ibid, 54.
[37] Carol Berkin, *First Generation: Women in Colonial America* (New York, NY: Hill and Wang, 1997), 126.

contact with enemy soldiers.[38] In September of 1777, after several victories over Washington's army, the British marched triumphantly into Philadelphia. When Washington's October bid to retake the city failed, he and his troops retreated to the city of city Whitemarsh. Nearly one-third of Philadelphia's population evacuated the city.[39] As well-known Quakers, the Darraghs felt relatively safe remaining in their home. British General Sir William Howe established his camp across the street from the Darraghs, where Lydia easily spied him.[40] Her fourteen-year-old son John smuggled her coded notes about British activities to her eldest son Charles, a Patriot soldier.[41] In the late fall of 1777, British troops demanded the use of the Darragh's home for meetings. Darragh—aided by a cousin in the British army—persuaded the British to allow her family to stay in their home.

On December 2, 1777, British officers held a secret meeting at the Darragh home, ordering the family to remain in their bedrooms. But Darragh hid in a closet where she overheard their plans for a surprise December 4th attack on Washington's army at Whitemarsh.[42] Determined to warn Washington, Darragh used her role as a homemaker to receive a pass from Howe to visit her children and obtain flour from the Frankford mill. On December 4th, Darragh made the long and dangerous walk past patrol stops to the mill.[43] She filled her flour sack and journeyed toward the Rising Sun Tavern, a known Patriot message center. In Darragh's account to her daughter Ann, she informed an American officer she recognized about Howe's planned attack, and he then told Colonel Elias Boudinot, who warned Washington [44] Darragh's bravery gave Washington time to prepare his troops, which ultimately resulted in a standoff, instead of a defeat for the Patriot army.[45]

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[38] Debra Michals Ed. "Lydia Darragh" *National Women's History Museum* https://www.womenshistory.org/education-resources/biographies/lydia-darragh (accessed 30 April 2020).
[39] Ibid.
[40] Ibid.
[41] Ibid.
[42] Ibid.
[43] Ibid.
[44] Ibid
[45] Ibid.

Civil War. The Civil War had female spies on both sides of the Mason-Dixon Line. Some women masqueraded as men and joined the army. Others learned of army plans for attack and informed their respective blue and grey commands. Belle Boyd is perhaps one of the most famous civil war spies. Historical accounts described her as a "raw-boned country girl." She conveyed an important intelligence communication to General Stonewall Jackson when she learned of Union army plans to attack a Front Royal position.[46] Another Confederate sympathizer was Rose O'Neal Greenhow. She was a widow of a state department official who served as a secret executive agent for the United States before his death.[47] Known as "Rebel Rose," she was a capital confidant of statesman, congressmen, Army, and Naval officers stationed in Washington.[48] Her greatest coup took place early in the war when she penetrated Union lines through her effective courier service, sending intelligence to Richmond that General Irwin McDowell was marching on Manassas, Virginia.[49]

On the Union side, General P. H. Sheridan detailed in his memoirs of a Quaker school teacher in Winchester, Virginia, Miss Rebecca Wright. She tremendously helped shape the outcome of a critical battle.[50] Through a secret courier service, the general was able to identify her as a Union loyalist even though she lived in Confederate Virginia. The General wrote: "I learn that you are a loyal lady and still love the old flag. Can you inform me of the position of Early's forces, that number of divisions, and his probably or reported intentions? Have any more troops arrived from Richmond?" Miss Wright came back with the much-needed information: "The rebels have been sent back to Richmond, and no more are expected as they cannot be spared. I do not know how the troops are situated, but the force is much smaller than reported."[51] General Sheridan asserted that it was Miss Wright's information that persuaded him to at last attack the Confederate position. After the battle, he visited Miss Wright's house, "where I met for the first time

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[46] Elizabeth P. McIntosh. "The Role of Women in Intelligence.", *Association of Former Intelligence Officers,* 1989. https://www.afio.com/publications/monographs/McIntosh%20Elizabeth%20Role%20of%20Women%20in%20Intelligence%20AFIO%20Monograph%205.pdf. (accessed 17 February 2020).
[47] Ibid.
[48] Ibid.
[49] Ibid.
[50] Ibid.
[51] Ibid.

the woman who had contributed so much to our success." After the war, he sent her a beautiful gold watch with an inscription commemorating her services in 1864.[52]

The first woman to serve in the Union forces, Dr. Mary Edwards Walker, was also the first woman to win the Medal of Honor. She was the only women prisoner of war exchanged for a man of equal rank.[53] At Chattanooga, Tennessee, Walker served as a scout, frequently going behind enemy lines to gather vital information for General Sherman.[54] He recommended her for the Medal of Honor, and it was awarded to her by President Andrew Johnson in 1865.[55]

World War I. The United States entered World War I in 1918, and the military recruited women as translators, telephone operators, drivers, and cryptologists.[56] This period was a turning point for American intelligence activities, with notable advancements in communications technology, requiring improved encryption techniques. Breaking new ground, the Army Signal Corps actively recruited women as "Hello Girls" (bilingual telephone switchboard operators) for overseas duty**,** marking the first time in the history of warfare that commanders serving on the front lines could communicate directly with the general command.[57] To help protect these and other military and diplomatic communications networks, the American Black Chamber, America's first peacetime cryptanalytic organization and a precursor to the National Security Agency (NSA), was established under Herbert O. Yardley.[58]

As code breakers and linguists, women helped to advance the use of electronic messaging technologies by enhancing security. Unlike many occupations women entered during WWI, cryptology was not traditionally considered a male job. Since the beginning of permanent cipher bureaus post-WWI, female civilians had worked in the Army and

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[52] Elizabeth P. McIntosh. "The Role of Women in Intelligence."
[53] Ibid.
[54] Ibid.
[55] Ibid.
[56] Lorraine Boissoneault. "Women On the Frontlines of WWI Came to Operate Telephones." *Smithsonian Magazine*, 4 April 2017. https://www.smithsonianmag.com/history/women-frontlines-wwi-came-operate-telephones-180962687/ (accessed 18 March 2020).
[57] Ibid.
[58] National Security Agency. "The Black Chamber", *NSA*. https://www.nsa.gov/about/cryptologic-heritage/center-cryptologic-history/pearl-harbor-review/black-chamber/ (accessed 18 March 2020).

Navy code rooms.[59] One of the best cryptanalysts of the time, Agnes Meyer Driscoll, worked for the Navy as a civilian. Known to some as "Miss Aggie," she was a math teacher before joining the Navy in 1918. Following WWI, she worked for the NSA and was credited for making breaks into most of the Japanese naval codes that the Navy's Enigma Office (OP-20-G) worked on.[60]

Although women were quickly released from their wartime occupations in intelligence networks after the war ended in 1919, many were awarded civilian honors and military war medals. Some even received pensions.[61] Women's participation in World War I intelligence organizations set a precedent for their later work in WWII and established their vital roles in espionage. Only a few women remained working in government intelligence departments during the interwar period. Still, women were hired immediately in even greater numbers for service in World War II, suggesting that women's participation in intelligence between 1914-1918 had a lasting effect.[62] Women spies of the Great War both enabled the creation of the modern intelligence industry and gave the twentieth century its popular and enduring images of female secret service agents—cultural icons that still inform our visions of gender and secrecy today.

World War II. During World War II, female intelligence operatives played a large role in military operations. When the United States entered the war after Pearl Harbor, thousands of women joined the military or worked as civilians for the military as cryptanalysts, intercept operators, and technicians. There was no central intelligence organization, but the attack on Pearl Harbor spearheaded the creation of the nation's first intelligence agency. Founded and headed by Major General William J. Donovan, the Office of Strategic Services (OSS) allowed women to play roles in service from clerical to operational missions.[63] Approximately 4,500 of OSS women continued to stay in the field after the war, providing breakthroughs and contributions throughout the Cold War.[64]

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[59] National Security Agency. "Agnes Meyer Driscoll", *NSA*. https://www.nsa.gov/About-Us/Current-Leadership/Article-View/Article/1623020/agnes-meyer-driscoll/ (accessed 19 March 2020).
[60] Ibid.
[61] Tammy M. Proctor. *Female Intelligence; Women and Espionage in the First World War*. (New York: New York University Press, 2003), 5.
[62] Ibid, 5.
[63] Elizabeth P. McIntosh. "The Role of Women in Intelligence."
[64] Ibid.

Many of the women who had helped break Germany's and Japan's encoding systems were recruited into the NSA and the Central Intelligence Agency (CIA) as communications and intelligence analysts during the Cold War.[65] Eventually, women rose to the highest ranks of management and today continue to support, develop, and build the cryptologic legacy.

Some examples of noteworthy women in the field include Virginia Hall and Eloise Randolph Page. Virginia Hall was one of the only American civilian women during WWII to receive the Distinguished Service Cross for heroism. After Hall briefly attended Radcliffe and Barnard colleges, she went to study in Paris and fell in love with France.[66] She decided to stay in France and eventually began working with the OSS.[67] Her intelligence operations against the Germans destroyed bridges and disrupted enemy communications.[68] Hall organized three Free French battalions, distributed radios, and weapons, aided downed airmen, and worked with the French Resistance movement on many highly dangerous missions.[69] Eloise Randolph Page worked during WWII as a secretary to Major General Donovan, chief of the OSS, until the founding of the CIA.[70] The National Security Act of 1947 established the Central Intelligence Agency (CIA) along with the Air Force, fostering a close connection between the two organizations. In the years after WWII, competition for jobs overseas became fierce. One woman who retired from the Air Force as a Women's Army Corps (WAC) Lieutenant Colonel, went to work for the CIA with hopes of serving overseas. She said, "I was sent out to the Far East, first Japan, then Korea, and finally Vietnam. I was in grade for 13 years, in important work, and often as deputy to the chief. I got splendid jobs, I worked with the

[65] Elizabeth P. McIntosh. "The Role of Women in Intelligence."
[66] Ibid.
[67] Ibid.
[68] Ibid.
[69] Brigit Katz. "How a Spy Known as the 'Limping Lady' Helped the Allies Win WWII" *Smithsonian Magazine*, 9 April 2019. https://www.smithsonianmag.com/history/how-spy-known-limping-lady-helped-allies-win-wwii-180971889/ (accessed 19 March 2020).
[70] Defense Intelligence Agency "Women in Intelligence, Part 2" *DIA,* 20 March 2014. https://www.dia.mil/News/Articles/Article-View/Article/566954/women-in-intelligence-part-2/. (accessed 18 March 2020).

bright boys, And I am grateful for the experience. If I had not been a female, there is no telling how far up the ladder I would have gone."[71]

Women of the CIA: A Fight for Equality. The Central Intelligence Agency is considered the American crown jewel of foreign intelligence operations, and female intelligence officers today are the beneficiaries of the struggle for equality that female intelligence agents fought for during the 1980s and 1990s. The CIA began to recruit more women in the 1980s and '90s, but their ability to move into senior positions was limited. In 1991, a CIA-commissioned "glass ceiling" study found that women were not achieving at the same pace or to the same degree as men, and were receiving proportionately fewer awards, while men got the choice assignments.[72] The report also noted that to be accepted, female officers tolerated widespread sexual and racial harassment.[73] The study found that women made up forty percent of the CIA's workforce, with seventeen percent as operations officers, and held only nine percent of the Senior Intelligence Service positions.[74] In the Directorate of Operations, there was a strong belief that women could not recruit agents due to the low standing women have in the Arab culture, as well as the lack of acceptance of women in authority by the Latino culture.[75] While a few women got opportunities to work as operations officers in the Latin America and Near East Divisions, many found it a struggle working with a sense of unequal status for women and left the Agency.[76]

In 1992, a woman began a class-action lawsuit, eventually joined by 250 female operations officers, against the CIA for sexual discrimination and systematic denial of promotion opportunities for women. When female employees complained about these issues while in service they were instructed to have a psychological evaluation.[77] The CIA paid more than $1 million in back pay and salary increases to settle charges and gave

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[71] Elizabeth P. McIntosh. "The Role of Women in Intelligence."
[72] Melissa B. Mahle, *Denial and Deception an Insider's View of the CIA.* (New York: Nation, 2005), 204.
[73] Ibid, 204.
[74] Ibid, 204.
[75] Ibid, 204.
[76] Ibid, 311.
[77] Jeffrey Smith, CIA bias settlement is inadequate, says group of female agents. *The Seattle Times,* 5 June 1995, https://archive.seattletimes.com/archive/?date=19950605&slug=2124820. (accessed 23 March 2020).

twenty-five retroactive promotions.[78] The settlement brought short-term benefits and provided for a few long-term changes.

By 2012, the struggle for women's equality started to materialize when the Director's Advisory Group on Women in Leadership (DAG) was established by former CIA Director David H. Petraeus to help the Agency's leadership continue the advancement of women in the workplace.[79] Comprised of senior agency officers and led by Secretary Madeleine Albright, the team reviewed the organizational and societal factors affecting women's careers. They analyzed information provided by nearly half of the CIA's workforce over ten months through surveys, focus groups, and interviews. The DAG published its final report in February 2013 and has formed a team and several working groups to implement ten recommendations, including establishing clear promotion criteria from GS-15 to Senior Intelligence Service and expanding the pool of nominees for promotion to SIS.[80] The DAG found that there is no single reason why CIA women from the GS-13 level and above were not achieving promotions and positions of greater responsibility and that organizational and societal challenges factor into the issues affecting women. The CIA pledged to focus on three key areas to improve the progression of women, including fostering intentional development, valuing diverse paths, and increasing workplace flexibility.[81]

Conclusion. Many American women have demonstrated throughout the history of the United States the ability to contribute significantly to national interests even as gender bias permeated across American culture. Women's struggle to attain the same opportunities as their male counterparts in the military was arduous. Integrating more women into the military has only gradually taken hold due to long-existing cultural norms that manifested themselves by restricting women to only limited, non-combat roles. As women began to occupy more positions within the military, it took many years

[78] Robert Pear. "C.I.A. Settles Suit On Sex Bias". *The New York Times,* 30 March 1995. https://www.nytimes.com/1995/03/30/us/cia-settles-suit-on-sex-bias.html. (accessed 23 March 2020).
[79] Central Intelligence Agency "Director's Advisory Group on Women in Leadership." *CIA.* 2013, https://www.cia.gov/library/reports/CIA_ Women_In_Leadership_March2013.pdf. (accessed 23 March 2020).
[80] Ibid.
[81] Ibid.

to break down pre-existing cultural norms. Legislative restrictions on women in combat fell, and today, they are allowed to serve in combat roles. However, virtually no growth in the proportion of female Air Force officers since 2005 reflects a pause and possible downward trend in their future representation.[82] As the Air Force attempts to increase female officer representation across the service, which must overcome a legacy of exclusion, intelligence has proven to be a viable path historically for women whose roles were often marginalized by society.

Women in the intelligence career field today stand on the shoulders of the women spies detailed above who greatly helped secure America's security through formal and informal roles. The women of the CIA in the 1990s fought hard for gender equality. They paved the way for the female case officer whose critical intelligence work led to the fatal demise of arguably America's biggest terrorist adversary, Osama Bin Laden. These women also paved the way for Gina Haspel, who in 2018 became the first female CIA director in the agency's history. The strong historical lineage of female intelligence agents also runs through the Air Force. In 2016, the first career intelligence officer to occupy the top Air Force intelligence post was occupied by Lieutenant General VeraLinn "Dash" Jamieson and is carried through today by her successor Lieutenant General Mary O'Brien. We have come a long way…and it is worth exploring how we can go further.

[82] Data was obtained from the Air Force Interactive Demographic Analysis System (IDEAS).

Chapter 2

Overview of Air Force Intelligence Officer Career Field

The centralized control of the application of airpower is an important feature and a critical one for efficient use of airpower…the air is really a powerful weapon…but to use this power effectively, you need both integrated all-source intelligence and an integrated all-resource reaction.

— General Creighton Abrams
Chief of Staff of the Army (72-74)

The Air Force ISR Enterprise

The job of an Air Force intelligence officer is to integrate the global intelligence, surveillance, and reconnaissance (ISR) enterprise by using multiple assets across geographic commands to leverage national capabilities to meet strategic, operational, and tactical objectives. Working in the intelligence field involves gathering, analyzing, and synthesizing data. This data turns into information for offensive and defensive military operations.

Figure 1: Global Intelligence, Surveillance, and Reconnaissance Enterprise
Source: Air Force Doctrine Document 2-0. "Globally Integrated ISR."

The information is used by national, joint, coalition, or allied personnel. Air Force intelligence officers lead the integration of this collected information to deliver intelligence to the right person at the right time, anywhere on the globe, and ranges from identifying a terrorist cell network to uncovering an adversary's weapons development program.[1] The intent is always to provide the Air Force with a strategic advantage before and during combat.

The Air Force conducts globally integrated ISR operations through a five-phase cyclical process commonly known PCPAD: planning and direction; collection; processing and exploitation; analysis and production; and dissemination. Air Force intelligence officers lead Airmen through the PCPAD process across four main functional competencies: Analysis, Collection, Sensing Grid Activities, and Targeting. Analysis is the backbone of the ISR Enterprise. Intelligence analysts use cognitive and technological methods and tools to produce intelligence through discovery, assessment, and explanation to deliver products and services for known or anticipated requirements.[2]

Analysis determines the "why" instead of the "what," which in turn allows intelligence analysts to provide the best support to strategic campaign planning and execution. Providing accurate and timely Indications and Warning, Force Protection, and Intelligence Preparation of the Operational Environment and Situational Awareness are the cornerstones of intelligence support. Intelligence officers apply analytic objectivity to determine adversary intent and deliver keen assessments to the tactical, operational, and strategic decision-makers. Collection is the acquisition of information and involves both processes and activities. Collection processes encompass developing collection capabilities and tasking assets while collection activities encompass sensing, identification, attribution, and sharing (SIAS) of data required to satisfy intelligence requirements.[3] Intelligence officers gain knowledge in collection requirements management (CRM), which involves establishing priorities, tasking, or coordinating with appropriate collection sources or agencies, monitoring results, and retasking.

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[1]Air Force Doctrine Document 2-0. "Globally Integrated Intelligence, Surveillance, and Reconnaissance." 6 January 2012."

[2] Headquarters Air Force A2 "14N Talent Management Framework" United States Air Force 2019.

[3] Ibid.

Additionally, intelligence officers are involved in collection operations management (COM), which consists of the direction, scheduling, and control of specific collection platforms, sensors, and sources. Both CRM and COM support operations across multiple domains and functions. Targeting is the process for selecting and prioritizing targets and matching appropriate actions to those targets to create specific desired effects that achieve tactical, operational, and strategic objectives, taking account of operational requirements and capabilities.[4] Targeteers collaborate across the sensing and analytic grids to Find, Fix, Track, and Target (F2T2) elusive targets.[5] Targeting can be both kinetic (i.e., bombs on target) and non-kinetic (i.e., offensive cyber operations within the electromagnetic spectrum) The Air Force ISR Enterprise strives to fully integrate space and cyber targeting operations into the Sensing Grid to maintain custody of elusive threats and targets in those battlespaces.

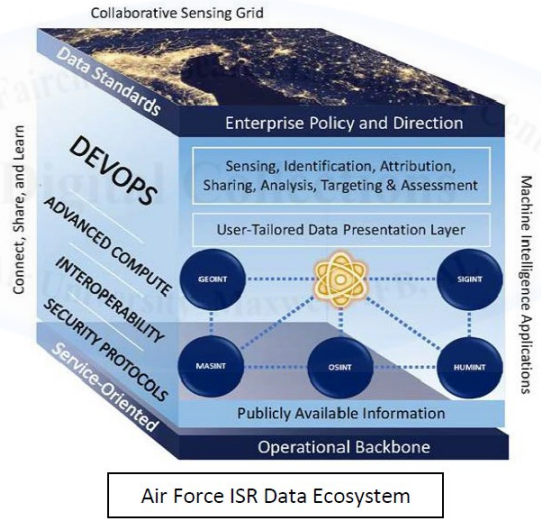

Figure 2: Collaborative Sensing Grid
Source: Headquarters Air Force A2 "14N Talent Management Framework."

The Collaborative Sensing Grid (see Fig. 2) is a functional intelligence competency that incorporates machine intelligence algorithms that can ingest and attempt to collaborate and output a desired function or capability.[6] It is designed to share intelligence at decision speed by leveraging automated, human-machine teaming

[4] Headquarters Air Force A2 "14N Talent Management Framework."
[5] Ibid.
[6] Ibid.

environments that enable rapid, reliable identification and attribution of activity.[7] Within this Sensing Grid, intelligence officers perform activities such as collection operations (sensing), analysis (identify and attribute), delivering information to customers, and collaborating with partners (sharing).[8] The Sensing Grid spans sensors in space, airborne platforms, cyber, and the electromagnetic spectrum to exact kinetic and non-kinetic outcomes.

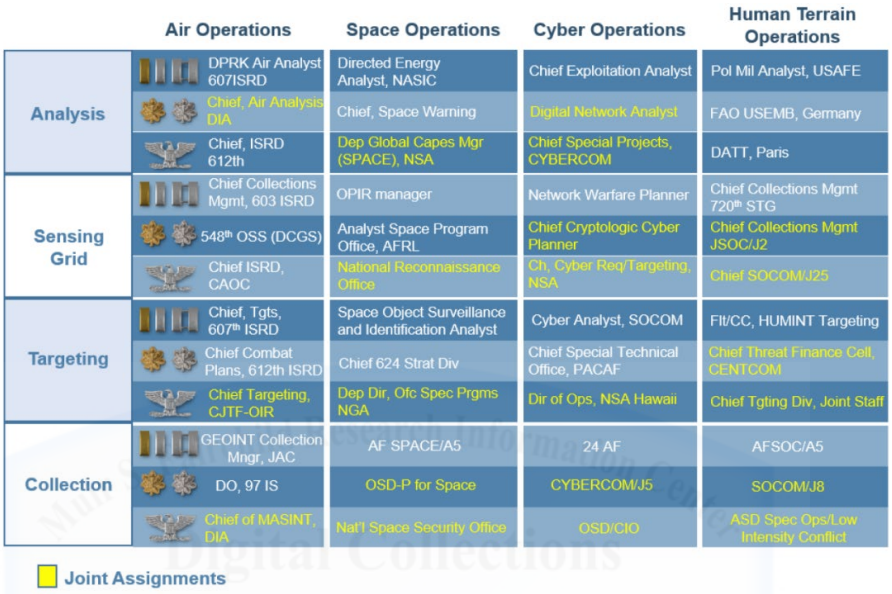

Figure 3: 14N Operational and Functional Competencies
Source: Headquarters Air Force A2 "14N Talent Management Framework."

To execute Analysis, Collection, Targeting and Sensing Grid functional competencies, intelligence officers utilize subject matter expertise in the six intelligence disciplines of geospatial intelligence (GEOINT), human intelligence (HUMINT), measurement and signature intelligence (MASINT), open source intelligence (OSINT), signals intelligence (SIGINT), and technical intelligence (TECHINT); utilize professional tradecraft to include assessment, counterdrug, counterproliferation, counterterrorism, current intelligence, general military intelligence, indications and warning, irregular warfare and target intelligence; and integrate thoroughly throughout operational areas such as air, space, cyber, and the human terrain within cross-functional capabilities, missions, and organizations (figure 3) to include airborne ISR, the Air Operations Center

[7] Headquarters Air Force A2 "14N Talent Management Framework."
[8] Ibid.

(AOC), the Air Support Operations Center (ASOC), cyberspace ISR, the Distributed Common Ground Station (DCGS), flying unit level support, force protection, information operations, space, and special operations forces (SOF).

Intelligence Officer Duties & Responsibilities

Air Force intelligence officers direct ISR activities and establish goals and objectives by reviewing requirements for objectives and relative priorities. They serve as a commander's senior intelligence advisor and prepare intelligence budget estimates and financial plans. They develop and implement standardization, evaluation, and training programs as well as evaluate and conduct force development, management, and structure planning. They confer with government, business, professional, scientific, and other nations' organizations to provide support, exchange ideas, participate in studies, and coordinate on proposals and findings.[9] Additionally, they coordinate with personnel, materiel, planning, programming, and operational functions on the allocation of resources, availability of funds, and preparation and implementation of operational plans.[10]

Officers apply all-source intelligence information to sustain combat operations at the operational wing, group, and squadron levels. Contextualizing intelligence for the mission at hand and then synthesizing it into the planning, training, and execution of tactical mission areas is key to achieving kinetic and non-kinetic effects across air, space, and cyberspace. Officers produce timely and accurate fused intelligence analysis and use structured analytical techniques to convert processed information into finished intelligence through the integration, evaluation, analysis, and interpretation of all-source data and the preparation of intelligence products in support of known or anticipated user requirements.[11] Intelligence is produced from the information gathered by the collection capabilities assigned or attached to the joint force and from the refinement and compilation of intelligence received from subordinate units and external organizations.[12] Officers enable the integration, evaluation, analysis, and interpretation of processed

[9] Air Force Personnel Center. "Air Force Officer Classification Directory (AFOCD): The Official Guide to the Air Force Officer Classification Codes" *United States Air Force*, 30 April 2018.
[10] Ibid.
[11] Ibid.
[12] Ibid.

information to create products that will satisfy the commander's priority intelligence requirements (PIRs) and requests for information (RFIs).

Various intelligence officers perform targeting functions to include kinetic and non-kinetic target development, weaponeering, precision point mensuration (PPM), force application, execution planning, and combat assessment. They select and prioritize targets and match appropriate actions to those targets to create specific desired effects taking account of operational requirements and capabilities.[13] Those targeteers analyze enemy personnel, units, disposition, facilities, systems, and nodes relative to the mission, objectives, and the capabilities at the Joint Force Commander's disposal, to identify and nominate specific centers of gravity (COG) and high-value targets (HVT) that, if exploited systematically creates the desired effects and support accomplishment of the commander's objectives.[14]

Career Progression

The new 14N (Intelligence Officer) Talent Management Framework (TMF) was developed in 2018 and strives to grow and develop ISR leaders who can successfully navigate multi-domain environments with strategic relevance.

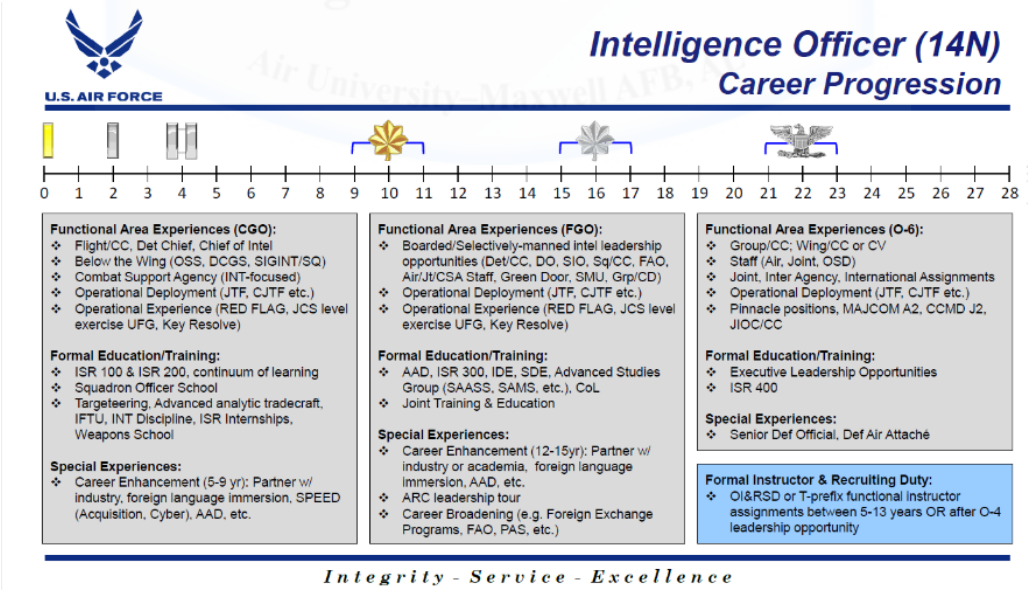

Figure 4: 14N Career Progression
Source: Headquarters Air Force A2

[13] Air Force Personnel Center. "Air Force Officer Classification Directory (AFOCD): The Official Guide to the Air Force Officer Classification Codes."
[14] Ibid.

The intent is to optimize the alignment of an officer's training, education, and experience and their chosen path that meets the needs of the Air Force, joint warfighter, and the Intelligence Community.[15] For many years in the intelligence officer career field, there was a debate about whether officers should strive to be ISR specialists or generalists. The common refrain in the Air Force intelligence community is that officers are a "jack of all trades, but masters of none," leading to frustration among some officers who want to gain deeper experience in a functional competency or mission area. The TMF seeks to rectify this dynamic by giving officers the choice of specialization in an area of interest or continuing down the path of exposure to multiple mission sets, functional capabilities, and competencies to become generalists. The ISR Enterprise is striving to maintain the right balance of ISR specialists and generalists across the ISR functional competencies while developing leadership skills and the ability to operate in multi-domain, joint, and interagency environments.[16]

For the first 6-8 years of an intelligence officer's career, intelligence officers explore the career field and gain an understanding of the functional competencies and operations in all domains. After the initial development timeframe, they select a career pathway. There are three primary pathways to choose from to gain the breadth and depth required, based on personal desires and their definition of success.[17] They are the Operations, Strategy, or Academic career pathway. Approximately 85% of 14Ns will follow an Operations pathway, meaning careers focused in Air, Space, Cyber, and the Human Terrain.[18] About 14% of 14Ns will choose the Strategy pathway, indicating positions in the Intelligence Community (i.e., DIA, NGA, NRO), positions within staff organizations supporting planning, and jobs as a Foreign Area Officer (FAO) and Defense Attaché (DATT).[19] A small percentage (approximately <1%) will choose to pursue the Academic pathway, including the award of a Ph.D.[20]

[15] Headquarters Air Force A2 "14N Talent Management Framework."
[16] Ibid.
[17] Ibid.
[18] Ibid.
[19] Ibid.
[20] Ibid.

Future Focus

The Air Force ISR Enterprise is transitioning from an industrial-based, human-powered heavy force to one that is digitally adept, networked, agile, and more lethal.[21] Human-machine teaming will form the basis of the ISR force, capable of scaling the operations tempo to defeat adversaries in a data-rich, evolving environment.[22] Within the vast data ecosystem, machines will use automated human-powered-heavy processes to allow officers to apply critical thinking and answer the "why" not the "what" to inform national decision-makers.[23] To align with the National Defense Strategy and its focus on a return to great power competition, the ISR Enterprise shift from a permissive environment of conducting counterterrorism and counterinsurgency operations in the Middle East over the past nineteen years to an automation intensive peer threat environment. Through a combination of implementing machine intelligence (MI) and developing more robust net assessment processes, the ISR Enterprise is striving to repurpose its mission and retool and automate processes.[24] As MI matures and along with net assessment strategic planning, intelligence officers will be at the forefront of instantiating a culture that embraces human-machine teaming, automation, and artificial intelligence to meet the Department of Defense and national requirements.[25] Moreover, women will play a large role in meeting those requirements and delivering strategic and tactical intelligence to national decision-makers and warfighters alike.

[21] Headquarters Air Force A2 "14N Talent Management Framework."
[22] Ibid.
[23] Ibid.
[24] Ibid.
[25] Ibid.

Chapter 3

Interviews Part 1: Reasons & Benefits of Choosing the Intelligence Career Field

> *People are our most important asset and the Air Intelligence Enterprise needs to develop our Airmen to support the mission while giving opportunities to our intelligence officers to retain the best talent. Our goal is to empower our Enterprise to realize its full potential along paths that improve the Air Force's readiness and lethality.*
>
> *— Lieutenant General VeraLinn "Dash" Jamieson*
> *Deputy Chief of Staff, Intelligence, Surveillance, and Reconnaissance (2016-2019)*

Methodology of Female Air Force Intelligence Officer Interviews

To identify reasons for higher accession and retention rates among female Air Force intelligence officers (FAIO) compared to the average of female officers across the Air Force, the author conducted a series of interviews with FAIOs from January – May 2020. Interviewees spanned across 11 different continental United States installations and two overseas locations across various MAJCOMs, joint commands, and centers.

Table 2: Breakdown of Female Air Force Intelligence Officers Interviews

	Number of FAIOs Interviewed	Median Time in Service (TIS)
Pay Grade		
O-1	4	1.8
O-2	3	3
O-3	10	6.5
O-4	11	14
O-5	7	18
O-6	4	23
O-7	1	27
Total Interviewed	40	

Source: Author's Original Work.

Interviewees. Across the fourteen geographic locations, the author conducted interviews with forty FAIOs. The FAIOs who participated in interviews ranged in pay grade from O-1 to O-7. The breakdown of interviewees by pay grade and median time in service is detailed in Table 2. Thirty-six interviewees were active duty officers, three were reservists, and one was retired.

Table 3: Interviewee Identifier & Time in Service

Rank	FAIO	Time in Service (TIS)
Brigadier General	(A)	27 years
Colonel	(A)	28.5 years
Colonel	(B)	22 years
Lieutenant Colonel	(A)	21 years
Lieutenant Colonel	(B)	19 years
Lieutenant Colonel	(C)	18 years
Lieutenant Colonel	(D)	15.5 years
Lieutenant Colonel	(E)	15 years
Major	(A)	15 years
Major	(B)	15 years
Major	(C)	15 years
Major	(D)	14.5 years
Major	(E)	14.5 years
Major	(F)	14 years
Major	(G)	14 years
Major	(H)	12 years
Major	(I)	12 years
Major	(J)	12 years
Major	(K)	12 years
Captain	(A)	23 years
Captain	(B)	8 years
Captain	(C)	7 years
Captain	(D)	7 years
Captain	(E)	6 years
Captain	(F)	6 years
Captain	(G)	5.5 years
Captain	(H)	5.5 years
Captain	(I)	5 years
Captain	(J)	5 years
First Lieutenant	(A)	3.7 years
First Lieutenant	(B)	3 years
Second Lieutenant	(A)	1.8 years
Second Lieutenant	(B)	1.5 years

Source: Author's Original Work.

Interview Protocol. Before the interview process began, an interview protocol was explained to each respondent, and permission obtained to conduct the interview. Interviews were conducted in person and over the phone to encourage a relaxed atmosphere and elicit sincere and candid responses. In-person interviews were conducted at Maxwell AFB, Alabama. Interview questions were open-ended, allowing respondents to freely express their opinions on the topics asked. Separate protocols were used for mid-level and senior-level officers to capture any similarities or differences between the groups. Data was analyzed to identify the perceptions of the women interviewed. From these perceptions, themes developed. Comparison and contrast of themes across all levels were created to facilitate a discussion concerning the career paths of FAIOs. Participant selection began with volunteers from Maxwell Air Force Base and the author's former coworkers. From there, the author used a snowball technique to establish possible participants and to contact them, especially the officers at more senior levels.

Interview Structure. Interviews began by providing participants with background information about the study and assuring interviewees that any individually identifying information they provided would be kept confidential by the author. The interviews ran roughly 45-70 minutes in length, during which time interviewees were asked about: career choices, perception of the intelligence career field, factors that could influence whether they decide to stay in or leave the Air Force, female mentorship, discrimination, and general background questions. Each session was conducted by the author asking questions and taking notes. The author did not include names or other identifiable information about the interviewees in their notes. For the Reserve Component officers who did participate, their responses regarding the factors that led to their accession into the intelligence career field and the decision to leave active duty were consistent with the themes heard from current active duty officers.

A series of data pulls from the Air Force Personnel Center Air Force Interactive Demographic Analysis System (IDEAS) database was conducted to determine the average percentage of female officers in the intelligence officer career fields compared to the Air Force as a whole, from 2005-2019. The data, as presented in the graph below, shows that for the past fifteen years, the intelligence officer career field consistently has a higher percentage of female officers compared to the Air Force as a whole in every rank.

Although the disparity between lieutenant colonels and colonels compared to the rest of the Air Force is smaller than second lieutenant to majors, a three and six percentage point difference respectively makes a difference as these ranks hold positions of senior management, which has a broader impact on mission outcomes. The higher percentage of

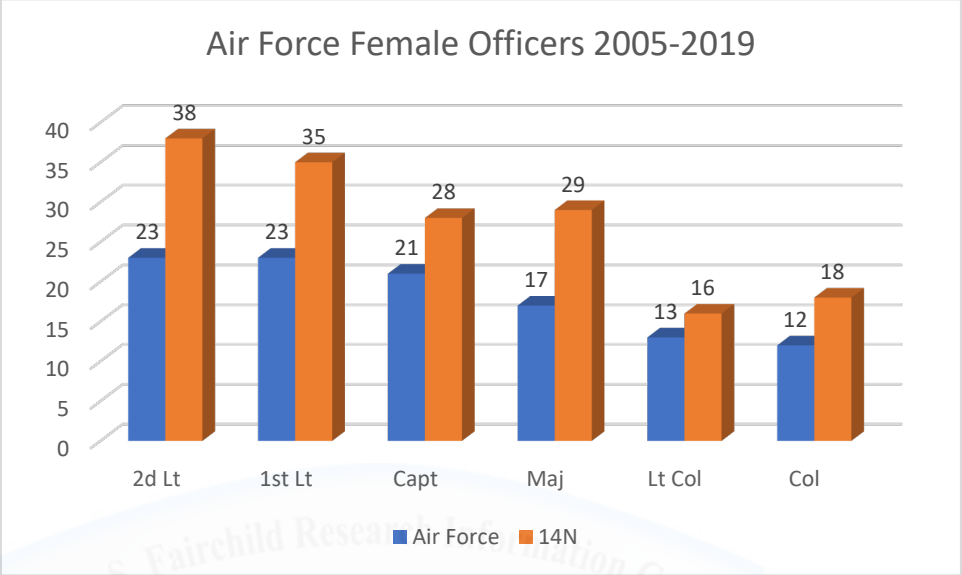

Figure 5: Percentage Comparison of Air Force and 14N Female Officers
Source: Author's Data Retrieval from Air Force Interactive Demographic Analysis System (IDEAS)

female intelligence lieutenants is significant because the Air Force must grow its senior and mid-level leaders from within its ranks. The Air Force cannot reach out and tap the successful chief executive officer of an aerospace company to fill a general's slot or hire a finance executive as a squadron commander. For example, Lt Gen Mary O'Brien has risen to become the chief intelligence officer in the Air Force, but back in 1989 she was a just a second lieutenant, entering the basic intelligence officer course. The higher percentage of female intelligence second lieutenants—the rank of most officer accessions into the service—begs the question, what is driving female intelligence officers to the Air Force in higher percentages?

Background on Officer Accessions & Career Field Assignment Matching

The Air Force commissions thousands of officers each year. Three sources provide the vast majority of these officers: the U.S. Air Force Academy (USAFA), Air Force Reserve Officer Training Corps (AFROTC), and Officer Training School (OTS). Typically, about 3,000 of these newly commissioned officers become what are called line

officers.[26] Within the line category, they subdivide into two additional categories, rated and nonrated. Line officers exercise command authority and lead the combat and combat support elements of the service. Rated officers serve in flying assignments as pilots, pilots of remotely piloted aircraft, combat systems officers, and air battle managers.[27] The nonrated officers serve in assignments related to such specialties as logistics, maintenance, and personnel. The intelligence career field is nonrated.[28]

The Air Force spends considerable effort matching the skills and abilities of these incoming officers with career field assignments. It uses the type of academic degree the newly commissioned officers have earned as one proxy for the skills and abilities desired for specific career field assignments.[29] A multitude of staff and field activities manage the accession process to ensure the Air Force obtains officers qualified to perform various Air Force missions in particular career fields.[30] The key to this goal is satisfying the academic degree requirements that functional authorities and career field managers (CFMs) have established. Table 4 details the commissioning sources and academic background of FAIO interviewees. The number of officers accessed each fiscal year (FY) is regulated as one means of keeping the Air Force officer end strength at programmed budgetary levels. Additionally, accessions are spread across career fields to meet Air Force execution-year requirements. The classification process, which occurs near the end of an annual accession cycle, matches officer cadets to career fields given their educational backgrounds; academic performance, including standardized aptitude scores and grade point averages; military and leadership skills. At their commissioning source, Air Force cadets are allowed to rank order their list of career field preferences. After the cadets enter active duty, they attend initial skills and pipeline training in their assigned career fields.

[26] Lisa M. Harrington, Tara L. Terry. "Accessing Key Gaps in Meeting Career Field Academic Degree Requirements for Nonrated Officers." *RAND Corp*, 2016.
[27] Ibid.
[28] Ibid.
[29] Ibid.
[30] Ibid.

Table 4: Commissioning Source and Academic Background of FAIOs

	FAIOs Interviewees
Commissioning Source	
Academy	5
ROTC	32
OTS	3
College Majors	
International Studies	11
Political Science	10
Criminal Justice	5
History	2
Liberal Arts	8
STEM	3
Business	1

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The goal of the Air Force officer accession process is to ensure the Air Force obtains and classifies officers qualified to perform various Air Force missions in particular career fields.

Reasons and Benefits of Choosing the Intelligence Career Field

As explained above, because the Air Force determines the number of career field assignment requirements each year, there is no guarantee that an officer candidate will be able to attain their one number career field preference upon accession as an officer. The "needs of the Air Force" reign supreme when matching career field assignments. Therefore, during the interviews, FAIOs were asked if intelligence was their first choice when they listed their career field preferences at their commissioning source. The overwhelming majority of FAIOs interviewed expressed that intelligence was their number one on their list of preferences. Controlling for FAIOs medically disqualified from pursuing a rated career, thirty-five FAIOs said that intelligence was their first choice, two said it was their second choice, one officer said it was their third choice, one officer was involuntarily cross-trained into the career field, and one officer could not recall their list of preferences.

Choosing a career path is often the norm in the civilian workforce, but it is less often the case in the military where the needs of the service determine the level and number of accessions by career field. As stipulated in Table 4, the majority of FAIOs received their bachelor's degree in international relations, political science, or criminal

justice, areas of study that align with the intelligence career field. This level of interest in a particular career field is a crucial factor for success.

The Role of Interest in Career Success

Researchers have found that interest plays a large role in future success. Three factors contribute to the development of interest: knowledge, positive emotion, and personal value.[31] As individuals learn more about a topic, they become more skilled and knowledgeable. An increase in knowledge can bring about a positive effect as individuals feel more competent and experienced through task engagement.[32] Additionally, as they spend more time with the activity, they may find personal meaning and relevance in the activity, such as when a high school student discovers that an understanding of biology that can help her pursue her dream of becoming a doctor. An individual's goals can also contribute to the development of interest by leading her to become more engaged in her learning, develop competence, and to explore the topic further.[33]

Interest in a topic is a mental resource that enhances learning, which then leads to better performance and achievement.[34] Research has demonstrated that both situational and individual interest promote attention, recall, task persistence, and effort.[35] In a meta-analysis of over 150 studies that examined the relationship between interest and performance, it found that individual interest correlates with both academic and laboratory performance.[36] From this perspective, then, interest appears to play a crucial role in learning and achievement. Expectancy-value models of motivation posit that an individual will be motivated to engage in a task to the extent that they feel they can be

[31] Judith M. Harackiewicz & Chris S. Hulleman. "The Importance of Interest: The Role of Achievement Goals and Task Values in Promoting the Development of Interest." *Social and Personality Psychology Compass,* 1 April 2010.
[32] Ibid.
[33] Ibid.
[34] Suzanne Hidi, "Interest and Its Contribution as a Mental Resource for Learning," *Review of Educational Research,* 1 December 1990.
[35] Mary Ainley, Suzanne Hidi, & Dagmar Berndorff. "Interest, Learning, And The Psychological Processes That Mediate Their Relationship."*Journal of Educational Psychology*, 2002. & Suzanne Hidi & K. Ann Renninger. "The Four-Phase Model of Interest Development." *Educational Psychologist.* June 2006.
[36] Ibid.

successful at it (expectancy), and they perceive the task as being important to them in some way (value).[37]

The fact that interviewees had aligned interests with the intelligence career field presents implications for the Air Force in matching officer candidates and officer cross-trainees with the option of pursuing their desire interests. It can lead to more motivation and time dedicated to learning the nuances of a job. Aligning natural interest with the duties and responsibilities of the career field was a key theme discovered in interviews when FAIOs revealed what they liked most about being an intelligence officer.

Making a Difference In Foreign Policy. A variety of FAIOs said that they chose the intelligence career field to make a difference in foreign policy. Major (D) explained that she was in college around the kickoff of the Iraq War and thought that none of the justifications of the war made sense. She wanted to be a part of the national security apparatus that made decisions about war.[38] Captain (E) stated she grew up in a very liberal area and wanted to be able to make an impact and fix foreign policy from the inside.[39]

Alignment with Academic Backgrounds. Many others commented that the career field closely aligned with their background and majors in college and where encouraged by their commissioning source mentors or instructors to pursue the career field. Major (K) revealed that she had studied Russian as part of her International Relations major, and the career field aligned with her preferences. When she got to her first assignment, she was pleasantly surprised to be able to make a fundamental impact on military operations at such a young age. She liked that intelligence provided her opportunities to have broad geopolitical influence. Throughout her career, she was able to experience different cultures in various organizations. When comparing her experiences to some of her peers in other career fields, she stated that it is hard to beat the job satisfaction she gets with intelligence.[40]

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[37] Jacquelynee S. Eccles, J & Allan Wigfield, A. "Motivational Beliefs, Values, and Goals." *Annual Review of Psychology*, February 2002.
[38] Major (D), Interview.
[39] Captain (E), Interview.
[40] Major (K), Interview.

Variety of Geographic Locations and Assignments. Others commented on the option of being assigned to a variety of geographic locations. Major (H) expressed she was initially drawn to intelligence because of TV shows like *CSI* and other pop culture references to intelligence. It seemed exciting to her, but she was surprised when she got to the basic intelligence officer course that it was not like pop culture indicated. However, the career field has been great for her family as her husband serves in a career that is more geographically limiting than intelligence, thereby providing them both the career flexibility to move to a variety of locations without having to sacrifice keeping their family together.[41] From another perspective, Major (A) astutely points out the potential downside of consistently switching different kinds of assignments. She explained that although she liked the diversity of different assignments and jobs one can get in intelligence, the flip side of complete change is you never know what is next. "It is like a magic hat; you do not know if you will pull out a rabbit or if you will pull strings that are connected."[42] Also, she expressed that it can be a struggle at times to work with other career fields that have little familiarity with the intelligence career field. In her experience, when she was able to make progress in intelligence support to space operations, it was because she built specific relationships with others. But she suggested that support to various communities that are not as familiar with intelligence needs to be more structural. "You need to develop a cultural habit, and sometimes that may take generations to get through."[43] Her observation is one of the reasons why the career field has moved to allow officers to specialize in a particular functional competency, as discussed in chapter 2. This benefits the officer by giving them greater expertise. They are then able to provide that expertise to various operational communities, enhancing mission effectiveness. Additionally, she went on to explain that depending on where intelligence troops go, they can end up representing the entire Air Force. "It can be challenging when you are there to do a specific role, but you end up doing something else. You must expect the unexpected. Sometimes they just might ask a broader Air Force

[41] Major (H), Interview.
[42] Major (A), Interview.
[43] Ibid.

question that you do not know the answer to, but you must be ready to meet that challenge."[44]

Colonel (A) also expressed that while the intelligence career field does a good job with providing officers with many options to pursue different assignments and intelligence disciplines, it can hurt more junior officers. She explained the places where the 14N community misses talent is at the lower levels of the pyramid. Supervisors and commanders can do glove saves at higher levels; for example, when she was a senior officer at NATO, she was able to save a young captain's career. But the career field cannot do that for everyone, and if someone is a junior officer and they end up at a one-off position, and their career might be doomed. Also, junior officers do not always know how they are evaluated, so they lack the skills to be able to navigate effectively through a less-desirable job.[45]

Higher Percentage of Female Intelligence Officers. Major (I) commented that she was aware of the high percentage of females in intelligence and it was a key factor in her decision to list the career field number one as her preference. When she was in college, it was right around the time that the Air Force Academy was going through its major sexual harassment scandal. She believed that intelligence would be a better career field for women. Given the fact she was also tri-lingual, the career field would also allow her to use her language skills and make a great transition to the civilian sector when she ultimately decided to leave the Air Force.[46]

Close Relationship between Intelligence and Operations. Many interviewees commented on the relationship between operations and intelligence. Captain (C) enjoys the relationships she built with the operations community. She liked being about to have direct conversations with rated operators, pushing and pulling information from them. She expressed satisfaction with living in a "tactical bubble" that is directly impacting battlefield operations.[47] Lieutenant Colonel (B) enjoyed being "close to the fight." After commissioning, she went through the basic intelligence officer course and during the mission planning block, instructors would say "your job is to bring aircrew home alive."

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[44] Major (A), Interview.
[45] Colonel (A), Interview.
[46] Major (I), Interview.
[47] Captain (C), Interview.

She stated because "my husband is a fighter pilot, that really resonated with me."[48] Second Lieutenant (A) highlighted in her experience intelligence is more than a support role. The career field allows members to steer decision-making, which at times can be challenging, but also rewarding. She emphasized that a small team can make a huge impact in ways she never could just by herself.[49]

Problem Solving Skills & New Challenges. Problem-solving skills involved in intelligence work struck a variety of interviewees as one of the best aspects of the job. Major (F) expressed the career field allows officers to develop critical thinking skills. They can see the macro and micro picture. Knowing where to find information and quickly synthesize, communicate, and present it in a way that is digestible for an audience was very satisfying for her.[50] Major (A) pointed out that over time an officer can develop an analytical framework that applies throughout many different kinds of intelligence disciplines and assignments. She believed that the complexity and variety of problems develop an intelligence officer in ways other career fields might not. She found it hard to imagine job satisfaction with jobs focused on just one discipline.[51]

Second Lieutenant (A) pointed out that although the career field presents officers with complex problems to solve, which is an exciting challenge, intelligence can feel like a thankless job at times. She explained that an intelligence officer could produce many great assessments, but if there is one report that goes awry, that is a small trigger that changes everything, and people begin to doubt their credibility. She acknowledged it was part of the fog and friction of intelligence. "There are many stressors, and sometimes you feel like you have the weight of the world on your shoulders."[52] The challenges of being an intelligence officer are one reason why First Lieutenant (A) remarked, "You never get bored. The mission sets are always interesting, and it never loses your attention."[53] Colonel (A) expressed the same sentiment and added that if an officer is good at their job and competent, they can go anywhere. She believed the intelligence career field did a

[48] Lieutenant Colonel (B), Interview.
[49] Second Lieutenant (A), Interview.
[50] Major (F), Interview.
[51] Major (A), Interview.
[52] Second Lieutenant (A), Interview.
[53] First Lieutenant (A), Interview.

great job of identifying talent. When combining talent with work ethic, officers can succeed. She stated that in her experience, that was not always necessarily true of other career fields.[54]

The Caliber of Intelligence Personnel and Breath of Leadership Opportunities. Captain (F) loved the fact intelligence officers got many opportunities to lead and work with high caliber Airmen. "Compared to my peers in other career fields, I do not have to deal with as many 'you'll never believe what my airman did' stories."[55] Major (G) liked the fact she was able to interact with many Defense Intelligence Agency (DIA) experts who were highly competent at their jobs. They provided a measuring stick for her own level of performance. She was also able to work with analysts at the National Security Agency (NSA), who were also inspiring to her in the way they dedicated themselves to their tradecraft. "I like being able to see intel tradecraft in action."[56] Lieutenant Colonel (A), who also worked at NSA, was amazed at the consequential impact young intelligence airmen were able to make on national security decisions, and she was proud to lead them.[57] Captain (B) highlighted that the career field provided officers the chance to lead earlier than other career fields. As a captain, she was directly supervising fifty people.[58] Captain (I) believed the best aspect of being an intel officer hands down was the people. Like others, she also noticed that the caliber of airmen and non-commissioned officers (NCOs) was high. She stated they were motivated in "every single way" and was impressed by their motivation and intellectual curiosity.[59]

As examined above, many FAIOs joined the intelligence career field because it aligned with their preferences and interests. As researchers have discovered, a high interest level can lead to more satisfaction in a career of choice, and individuals have a greater chance of success. High interest is important as the intelligence career field embarks on a path toward specialization, and the Air Force seeks to retain a higher percentage of female officers. The needs of the Air Force come first. That is the reality of

[54] Colonel (A), Interview.
[55] Captain (F), Interview.
[56] Major (G), Interview.
[57] Lieutenant Colonel (A), Interview.
[58] Captain (B), Interview.
[59] Captain (I), Interview.

military service. However, more satisfied Airmen have a greater potential to produce better outcomes for the Air Force mission. This observation might not seem surprising, but it is important for Air Force leaders to remember not to automatically abandon consideration of their Airmen's interest for the sake of expediency.

Chapter 4

Interviews Part 2: Retaining Female Intelligence Officers

> *Recruiting and retaining diverse Airmen cultivates innovation. Like different aircraft and missions make up one Air Tasking Order, different people make the best teams when integrated purposefully together*
>
> — *General David L. Goldfein*
> *Air Force Chief of Staff*

Intelligence Career Field Environment

The Air Force has spent several years making diversity a priority. Senior leaders spend a significant amount of time and good intentions on efforts to build a more robust pipeline of upwardly mobile women. Still, the percentage of female officers has not budged in fifteen years, and the rate of female officers in senior positions is still anemic.[60] The problem with the Air Force approach is that it does not address the often fragile process of coming to see oneself and to be seen by others as a leader. Leadership is at the core of officership. Becoming a leader involves much more than being put in a leadership role, acquiring new skills, and adapting one's style to the requirements of that role. It involves a fundamental identity shift.[61] As highlighted in chapter 1, researchers found in male-dominated environments, women are seen as women first and workers second. Organizations inadvertently undermine the process of creating an environment where women are encouraged to seek upward mobility when they do not address policies and practices that communicate a mismatch between how women are seen and the qualities and experiences people tend to associate with leaders.[62] However, FAIOs expressed that

[60] Burrows, Matthew. "Women in a Man's Air Force: Why are there so Few Women General Officers?", School of Advanced Air and Space Studies, Air University, June 2018.
[61] Herminia Ibarra, Robin J. Ely, and Deborah M. Kolb. "Women Rising: The Unseen Barriers." *Harvard Business Review*, September 2013. https://hbr.org/2013/09/women-rising-the-unseen-barriers. (accessed 3 March 2020).
[62] Ibid.

their environment provided them with the chance for upward mobility and unique opportunities.

Many FAIOs expressed having great success in the career field and it was a crucial factor in their decision to continue to serve. Lieutenant Colonel (D) said that in addition to the possibility of using her language skills, one of the reasons she has stayed in the Air Force is the chance for upward mobility. She believes the intelligence career field is a meritocracy that allows women greater rank and positions and believes there are many places in the Air Force where that was not the case.[63] Major (F) loved the Air Force lifestyle, especially compared to people not in the Air Force. She highlighted there are things officers can do in the intelligence career field that they just cannot do in the outside world to include having access to classified information to understand the true nature of foreign affairs and having the opportunity to explore a diversity of intelligence disciplines. Intelligence taught her how to be more flexible and resilient.[64] Major (D) believed that the intelligence career field exposed officers to be out in front of senior leadership at an early point in their career. She was briefing four-star generals when she was a junior officer. She did not believe that opportunity existed as much in other career fields. That type of exposure at an earlier age builds confidence in officers that they can succeed in their career over the long-term.[65]

Several interviewees expressed that exposure to a variety of opportunities propelled them to continue serving. Major (E) said she spent the first five years of her career in the Air Force Special Operations Command (AFSOC) community and really enjoyed her time in those assignments. It was a non-traditional mission, and it was fun and exciting. When she got married and had her first joint spouse assignment, it was at that point when she started to have reservations about staying in the Air Force. She did not know if she had the same purpose as when she was younger. She just wanted to be in the same location as her husband. Going to graduate school was always a personal goal of hers, and luckily the intelligence career field provided her with an opportunity to pursue getting a doctorate at a civilian institution without having to sacrifice leadership

[63] Lieutenant Colonel (D), Interview.
[64] Major (F), Interview.
[65] Major (D), Interview.

opportunities later on in her career.[66] Lieutenant Colonel (C) said, "when the national anthem stops giving me chills or when I stop having fun, I have told myself I would get out. Every time it seems like I was getting burned out, I went to a different assignment that gave me purpose."[67] She had a variety of jobs, but squadron command positively changed her. When she got selected for command, she did not want to leave her family but was convinced by intelligence supervisors at the time. Some of her peers told her that as a mom, she would not be able to pull the hours necessary. However, commanding an intelligence squadron allowed her to balance family and work life.[68] Colonel (A) said she thought about getting out as a captain, but when she went to work at the Defense Intelligence Agency (DIA), someone mentioned the Air Force Weapons School (AFWS) to her (attendance to the AFWS is a prestigious opportunity for stand-out officers to become tactical experts). Her favorite part of her career was getting the chance to work with aircrew, and someone told her after Weapons School she would get opportunities for assignments with flying units. Her O-6 boss wrote her a letter recommendation, she applied and got into AFWS.[69] Colonel (A) stated going to AFWS was the real turning point for her to stay in the Air Force, "I found a tribe who recognized qualities in me and did what was necessary that allowed me to be the best me I could be…they cared enough to make me a more effective officer and leader."[70]

Career Path Flexibility

In a 2018 RAND study of female officers across the Air Force, more than half in focus groups (52 percent) raised the inflexibility of career paths as a factor affecting female officers' decision to leave or stay in the Air Force. Participants described the Air Force career pyramid as a rigid career path they must follow that allows for minimal deviation and few alternatives. Female officers also perceived this strict career path to be somewhat incompatible with family and personal lives.[71] In particular, balancing the

[66] Major (E), Interview.
[67] Lieutenant Colonel (C), Interview.
[68] Ibid.
[69] Colonel (A), Interview.
[70] Ibid.
[71] Kirsten M. Keller, Kimberly Curry Hall, Miriam Matthews, Leslie Adrienne Payne, Lisa Saum-Manning, Douglas Yeung, David Schulker, Stefan Zavislan, & Nelson Lim "Addressing Barrier to Female Officer Retention in the Air Force." Project Air Force. *RAND Corporation.* 2018.

demands of dual-military marriages and children were viewed as difficult because of the rigidness of the Air Force career path. Several participants in the RAND study volunteered that an inflexible career path was the biggest factor influencing their decisions whether to stay in or leave the Air Force.[72] For the vast majority of FAIOs interviewed identified career path flexibility was one of the critical factors that propelled them to stay in the Air Force.

Captain (H) stayed in the Air Force because of the career opportunities that the intelligence career field has. She believed there was a wide diversity of jobs she could do. Every assignment can be different. The new intelligence officer talent management framework (explained in chapter 2), offered even more promise that officers could have control over their assignments.[73] Major (A) believed that the career field rewarded officers for their curiosity. The fact officers could pursue a variety of intelligence disciplines but still stay in the same career field was a huge advantage over other career fields. She had assignments working with the C-130 community, space operations, the National Air and Space Center (NASIC), and staff positions. She pointed out that if an officer did not like a particular job, there was always an opportunity for change in the next assignment.[74] Major (A) highlighted that because every assignment is different, officers get a chance to do a job they never thought they could do or in which they could excel.[75] Captain (B) added that the career field allowed officers to speed up or slow down, depending on where they were in their lives.[76]

Some FAIOs countered the majority opinion on career path flexibility. Major (I) believed the Air Force's inflexibility on assignments put her in a position to choose between the Air Force and her family. When she first joined the Air Force, she thought she would get out after four years and earned a master's degree in preparation for that possibility. But she got picked up for the Language Enabled Airman Program (LEAP) and got a chance to deploy and use her language skills and was enjoying what she was doing. She would have stayed on active duty, but she believed she was forced to choose

[72] Kirsten M. Keller, et. al, "Addressing Barrier to Female Officer Retention in the Air Force."
[73] Captain (H), Interview.
[74] Major (A), Interview.
[75] Ibid.
[76] Captain (B), Interview.

between her career and her family. Her husband got a job working at a defense attaché for a U.S. embassy in Central America. The intelligence assignment team could not find a job for her even though it appeared there was a vacancy for someone with her skill set. She decided to leave active duty but continue to serve as a reservist because she wants to serve her country. She felt the Air Force had made progress on being family-friendly, but there is still much room for improvement. Even though she expressed bitterness about how her active duty career ended, she was able to make lifelong friends and was grateful for the education and skills that got her ready for life after the Air Force.[77] Captain (G) commented that if an intelligence officer was not looking for opportunities to broaden their experience, they could get stuck working in the same intelligence discipline for multiple assignments. She opined that might be the reason some officers get out because they were not able to get other opportunities to do different things that interested them. She was assigned to a SIGINT job for four years. When she got stationed at one of the Air Force Distributed Ground Stations (DGS), she was initially excited, but then her squadron leadership vectored her to be a SIGINT mission operations commander.[78] She had wanted the opportunity to branch out into a different mission area.

The intelligence officer career field offers female officers the ability to pursue vast experiences in multiple locations around the world, but as explained in the anecdotes above by FAIOs and highlighted in the 2018 RAND of female officers across the Air Force, some career inflexibility still exists in the career field, and it has the potential to undermine retention.

Professional Networks

Studies of corporate America find that organizations that have historically focused on bottom-up approaches to diversity, such as mentorship and leadership training, improve gender diversity. Since there are few women at senior organizational levels, a woman's intraorganizational network is unlikely to include the senior female members who could support her career progression.[79] Informal networks are a precious resource for would-be leaders, yet differences in men's and women's organizational roles and

[77] Major (I), Interview.
[78] Captain (G), Interview.
[79] Amy J. Hilman, Christine Shrospire, & A. A. Jr. Cannella "Organizational Predicators of Women on Corporate Boards." *The Academy of Management Journal*. August 2007.

career prospects, along with their propensity to interact with others of the same gender, can result in weaker networks for women.[80] The connections women do have tend to be less efficacious: Men's networks provide more informal help than women's do, and men are more likely to have mentors who help them get promoted.[81] Meanwhile, men in positions of power tend to direct developmental opportunities to junior men, whom they view as more likely than women to succeed. Successful women compensate for the lack of internal access to powerful sponsors by broadening their network beyond their immediate workplaces to provide greater access to information and resources.[82] As a result, women tend to develop broader professional networks, with more interorganizational contacts, than men.[83] By the time she achieves a senior role, a woman's professional network is likely to give her access to many women at other organizations who are suitable for management roles.[84]

In interviews, FAIOs expressed that a strong network of fellow FAIOs has provided essential support throughout their career. Lieutenant Colonel (E) said she had a small network of go-to female mentors with whom she was able to develop a specialized bond.[85] Captain (J) stated her network of fellow FAIOs was around sixteen to twenty women whom she could call and ask questions about career or personal matters.[86] Second Lieutenant (B) expressed that social media has helped to create a platform to find and sustain her professional network.[87] However, a few mid-grade officers (O-4/O-5) explained that their network did not develop until later on in their careers. Major (K) stated during her first four years in the Air Force, she did not believe there was a network of women, but when she deployed to an air operations center, she started seeing more female mentoring other females.[88] Lieutenant Colonel (D) said that when she was a

[80] Amy J. Hilman, Christine Shrospire, & A. A. Jr. Cannella "Organizational Predicators of Women on Corporate Boards."
[81] Sandberg, 75.
[82] Ibid,75.
[83] Amy J. Hilman, Christine Shrospire, & A. A. Jr. Cannella "Organizational Predicators of Women on Corporate Boards."
[84] Ibid.
[85] Lieutenant Colonel (E), Interview.
[86] Captain (J), Interview.
[87] Second Lieutenant (B), Interview.
[88] Major (K), Interview.

young company grade officer, she saw more "backstabbing" among fellow FAIOs than she does today. She believed that now there is more empowerment and support of fellow FAIOs among the junior ranks.[89]

Based on interviews with female intelligence officers, the basic theme is that most of them have attained a healthy network of other female officers in the profession that they can reach out to for professional and personal advice. For mid-grade officers, their professional networks grew over the past five to seven years, as many commented female networks did not exist when they were junior officers but observed more effort was taking place today to build professional networks, especially with the existence of social media even if those networks are informal. The existence of these professional networks can help FAIOs build resiliency and continue to serve in the Air Force even when they face discrimination.

Discrimination

The Air Force has attempted to establish gender equality, diversity, and inclusion programs by implementing policies and forums to facilitate female officers' careers and professional networks. Nevertheless, unconscious gender bias continues to impact women in the workplace. Sexual harassment and discrimination laws and policies enacted over that last thirty years have given women recourse to confront and stop poor behavior by male colleagues. However, implicit discrimination still has a negative effect on women's feelings of acceptance in the workplace. Most FAIOs in interviews indicated that they did not face overt discrimination. They did not think that their gender prevented them from advancing in their careers. However, they did indicate gender plays a role in how men treat women directly and indirectly.

Although female interviewees believed they were able to succeed in the Air Force despite certain cultures that seemed to demean women, it is important to understand how even semi-hostile environments toward females can take its toll on female workers over time and create institutional obstacles for retention. Studies show a negative link between discrimination in the workplace and women's mental health and well-being. Researchers found that experiencing sexism in the workplace reduces a sense of belonging because it represents a form of bullying, rejection, and ostracism by men against their female co-

[89] Lieutenant Colonel (D), Interview.

workers.[90] This reduced sense of belonging then impacts negatively on women's mental health and job satisfaction due to its association with feelings of loneliness and alienation.[91] Many interviewees indicated that they faced discrimination as a female officer at some point in their Air Force career. Major (E) explained that during one of her assignments, she was one of two females, and the other female was totally incompetent, so she became a trusted agent with her boss. They had a good working relationship, but he and his wife had a rule that he would never have a meal with a female officer, and he tried to avoid any settings where it was just the two of them. Because of this, she believed she was denied one-on-one mentorship that could have been helpful for her career. Her boss even tried to force the no-meal rule on her by telling her before a TDY that she should not go out to dinner with any males on the trip to avoid any misperceptions.[92]

Colonel (A) explained early in her career she was sexually harassed while she was on deployment, and it was hard for her to deal with as a junior officer. She eventually ended up going to her boss about it, and he confronted the harasser and told him, "if you harass her again, I will cut your balls off.'[93] After the confrontation, the harassment stopped. Major (I) also experienced discrimination on a deployment, when she was serving as the Wing commander's briefer in Kyrgyzstan. There was a male director of operations (DO) who was known as a hot-head and would say very explicit derogatory things about females. She spoke to his boss about it, but she said he never confronted the DO on his behavior.[94] Females are often faced with the weighty decision to report their harasser, and many times they do not report them because of fear of backlash or the inconvenience of having to go through the reporting process.[95] In the case of Major (I) above, male officers told her to report her harasser, and to this day, she regrets not doing

[90] The Representation Project. "Sexism is Bad for Women's Health." 16 September 2019. http://therepresentationproject.org/sexism-is-bad-for-womens-mental-health/ (accessed 2 May 2020).
[91] Ibid.
[92] Major (E), Interview.
[93] Colonel (A), Interview.
[94] Major (I), Interview.
[95] Claire Cain Miller. "It's Not Just Fox: Why Women Don't Report Sexual Harassment." *New York Times*, 10 April 2017. https://www.nytimes.com/2017/04/10/upshot/its-not-just-fox-why-women-dont-report-sexual-harassment.html (accessed 7 May 2020).

so.[96] Major (F) also expressed regret of not reporting harassment she had faced earlier in her career when a difficult flight commander created a sexist toxic environment. "I wish I had gone to the inspector general with my complaint, but I did not. But in the end, [the officer who discriminated against me] got an Article 15 on a deployment, so some justice was served."[97]

Others commented that leadership plays an important role positively and negatively on their views of discrimination. Major (F) said her experience soured her on the Air Force at first. Her faith was restored at her next assignment by superb flight leadership.[98] Major (I) said that discrimination was an additional contributing factor to her decision to leave active duty; she did not want to become like the horrible leaders she encountered.[99] Major (G) detailed that while she was working at a headquarters staff position her supervisor who was a lieutenant colonel demeaned her by using language like "honey" and "sweetie" and would demand that she talk to him first before initiating contact with other divisions on the staff. He constantly wanted to know her whereabouts, and would act nice in public, but scream at her when she was in his office. Major (G) said that discrimination did not affect her decision to leave the Air Force, but that was because she dealt with her harasser for a short period of time. "If I were under [his] supervision for much longer than I was, I would have gotten out. Bad leaders make you get out."[100] Captain (G) explained she had a squadron commander who was harder on the females than he was the males. She was not sure if he was resentful because he had a lot of females in leadership positions. Her director of operations, operations superintendent, and squadron chief were all females. There was a male flight commander who, in contrast, seemed to get everything he asked for. She said, unfortunately, the female DO took a lot of hits for the other females in the squadron.[101]

[96] Major (I), Interview.
[97] Major (F), Interview.
[98] Ibid.
[99] Major (I), Interview.
[100] Major (G), Interview.
[101] Captain (G), Interview.

Micro-Aggressions. Micro-aggressions are defined as "brief and commonplace daily verbal, behavioral, and environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or negative racial, gender, sexual orientation, and religious slights and insults to the target person or group."[102] The fourth annual Women in the Workplace report from LeanIn.Org and McKinsey & Co highlighted the gender-based microaggressions still faced by women in the 2018 workforce. They showed that 64% of women are still exposed to this form of discrimination, with non-white women experiencing it more than anyone else.[103] Captain (D) expressed that she did not experience this aggression directly toward her, but she observed times when men would not take other females as seriously and sometimes exhibited undermining behavior like "mansplaining."[104] Major (B) detailed experiences of microaggressions and mansplaining. At times in her career, she noticed hesitancy amongst male colleagues to take her answers as correct, and she felt it was because she was female. A male would give the same answer as her, and they were immediately credible and reassuring. She expressed dread over mansplaining and said: "I cannot tell you how many men mansplained to me what I was going to experience in my pregnancy."[105]

Often, such micro invalidations and aggressions are disguised as humor, but making fun of someone's accent, height, or ethnicity is not a joke. The intent might not be malicious, and it is mostly borne out of ignorance, but such comments tend to reinforce the differences and the non-conformity of any minority community from the majority demographic. Lieutenant Colonel (E), who provided unit-level intelligence support to a fighter squadron as a lieutenant, stated, "when I was supporting fighters, our unit had a very fighter bro culture. They had an environment of culturally acceptable sexual harassment, which included telling dirty jobs or depicting 'happy snaps' [pictures of scantily clad women in the briefings]. I was not personally sexually harassed, but it was

[102] Bianca Barratt. "The Microaggressions Still Prevalent in the Workplace." *Forbes Women,* 28 October 2018, https://www.forbes.com/sites/biancabarratt/2018/10/28/the-microaggressions-still-prevalent-in-the-workplace/#4ff05b579c3b. (accessed 7 March 2020).
[103] Ibid.
[104] Captain (D), Interview.
[105] Major (B), Interview.

an environment that made me feel uncomfortable, but as the only female in the unit, I went along with it."[106] As behavioral scientist. Dr. Pragya Agrawal explains,

> It is not just one man or two making locker room jokes. It is not just men sharing jokes about women on social media and WhatsApp groups, talking about their "time of the month," telling them that they "belong in the kitchen," or using derogatory language and sexual harassment disguised as "banter" and "compliments" because "boys will be boys" and they need to have their fun. These implicit prejudices are often disguised with "oh it is only a joke." It is easy to ignore such seemingly minor comments, and some have even questioned whether chastising and banning these interactions between colleagues are detrimental to positive and convivial workplace culture. But, these microaggressions never exist in isolation. They are indicative of the insidious underlying implicit unconscious biases existing in our society and have to be called out.[107]

When a suggestion is made, usually posed as a joke, that a person has been given an advantage to increase the diversity of an organization, it can certainly create imposter syndrome, making the targeted person believe that they are not there on merit, but because of their difference.[108] For example, Major (K) was" jokingly" told by her male colleague that she only won an award because she was female.[109] Psychologists and educators have shown that "stereotype threat" can cause an achievement gap. When a negative stereotype is associated with a certain group that a person is naturally assigned membership of because of their skin color, gender, or race, studies show it has an impact not only on a person's performance but also on their well-being.[110] Studies in the psychology of stigma have shown how such a "stereotype threat" can create feelings of anxiety, and have a serious impact on a person's mental health and well-being.[111] These instances of microaggressions are rooted in heuristics and bias.

Bias in the Workplace

The word "bias" has an extremely negative connotation. No one wants to think that they have biases or preferences, but in fact, all human beings have some forms of

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[106] Lieutenant Colonel (E), Interview.
[107] Bianca Barratt. "The Microaggressions Still Prevalent in the Workplace."
[108] Ibid.
[109] Major (K), Interview.
[110] Bianca Barratt. "The Microaggressions Still Prevalent in the Workplace."
[111] Ibid.

bias. Experiences shape humans, and through those experiences, we come to develop a set of beliefs about the conditions and circumstances of the world in which we live.

Daniel Kahneman, a psychology professor and Nobel Laureate, maintains that extensive research in psychology has determined that human thinking encompasses two systems.[112] System 1 operates automatically and quickly with little or no effort and no sense of voluntary control—automatic processes and intuition.[113] System 2 allocates attention to the effortful mental activities that demand it, including complex computations—subjective experiences, choice, reasoning, concentration, self-control.[114] Kahneman argues although humans like to think of ourselves as "rational" and "reasoned" beings—and the majority of the time we are, many times our judgment and choices are flawed due to biases, limitations, and errors that emerge and are transferred between our System 1 and System 2 processes.[115] Kahneman argues that humans need help to make good decisions and that there are informed and nonintrusive ways to provide that help.[116]

By understanding how our minds process information, we can begin to learn how to overcome common biases and cognitive errors to make better decisions and judgments without curtailing freedom. Gender bias, whether deliberate or unconscious, makes it harder for women to get hired and promoted and negatively impact their day-to-day work experiences. Bias hurts women and makes it difficult for organizations to level the playing field.

Sometimes bias comes when women must balance their job with their roles as mothers. Lieutenant Colonel (B) explained that she might have faced bias to a second degree when she took maternal leave while assigned to a headquarters staff position. She was doing well, but after she came back from maternal leave, she felt she received lower officer stratification against her male peers. To this day, she still has mixed feelings about it because she recognized that someone else had to take up the duties of her job, so it is

[112] Daniel Kahneman, *Thinking, Fast and Slow*, 1st edition (New York: Farrar, Straus and Giroux, 2013), 20-21.
[113] Ibid, 20.
[114] Ibid, 21.
[115] Ibid, 21.
[116] Ibid, 415.

clear cut—they were there, and she was not—but it made her more aware of the challenges women in the military go through as mothers.[117] Lieutenant Colonel (B) had kids later in life, and her experience made her wonder what it would be like for a female officer who was more junior than her. If the same thing happened to her when she was junior, it probably would influence her decision to stay in the Air Force, and she might have left sooner than she would otherwise.[118]

Major (A) always felt she had to prove herself more to be considered equal to her male peers. Awards and stratifications did not happen for her early in her career, and when she did not get promoted to Lieutenant Colonel, her superiors told her it was just luck and timing. When she looks back on it, she wonders why she spent so much time taking care of other people when she did not even try to fight for herself. She believed she was overlooked because she was female. She stated, "discrimination today is not like a tree in your front yard that you can clearly see. It is more like poison ivy. It has been there all along, but you just did not know it, and when you find out it is too late."[119] When she was on an Air Force major command staff, all the lead functions were general officers, but the A2 was an O-6 billet, and at the time, they had a female officer in that job. When they would have meetings, all the functional leads had nameplates on the table, except for the A2. She did not have a seat at the table…literally.[120]

Surprisingly, even though many FAIOs expressed that they had faced discrimination in the Air Force, only four out of the forty interviewees stated that they faced discrimination by other intelligence professionals, and many expressed that lack of discrimination was a key reason they continued to stay in the Air Force. Captain (E), stated, "lack of discrimination has encouraged me to stay. I am friends with a female active duty Army officer. She was twenty-eight weeks pregnant, and she was hiding it from her chain of command. She was even in a non-deployment billet! If I were in that kind of environment, I would not still be in the Air Force."[121]

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[117] Lieutenant Colonel (B), Interview.
[118] Ibid.
[119] Major (A), Interview.
[120] Major (A), Interview.
[121] Captain (E), Interview.

Second Generation Forms of Bias. Recent research has moved away from a focus on the deliberate exclusion of women and toward investigating "second-generation" forms of gender bias as the primary cause of women's persistent underrepresentation in leadership roles. More than twenty-five years ago, the social psychologist Faye Crosby stumbled on a surprising phenomenon: Most women are unaware of being victims of gender discrimination and deny it even when it is objectively true, even when they see that women in general experience it,[122] a point Lt Gen O'Brien expressed in an interview with *Defense One*:

> I actually collect studies about [women downplaying their own experiences on gender-based challenges that they face] …I hear some women say, "Oh, I've never seen it. I've never experienced it." Sometimes I think, "You just didn't know." It was happening, you just did not know…the increase in research in this field is helping us have a vocabulary to actually talk about the diversity studies that prove that the bias facing women in the workplace is real. Some women may think if they complain or talk about these things, that it will be a sign of weakness, that they cannot hack it in this man's world. And I think others think, "it's all in my head," because they did not have a vocabulary to talk about it.[123]

Women worked hard to demonstrate that they can perform well despite their gender. Research indicates that organizations tend to ignore or undervalue behind-the-scenes work (building a team, avoiding a crisis), which women are more likely to do while rewarding heroic work, which is most often done by men.[124] These practices were not designed to be discriminatory, but their cumulative effect disadvantages women.[125] A vicious cycle ensues: Men appear to be best suited to leadership roles, and this perception propels more of them to seek and attain such positions, thus reinforcing the notion that they are simply better leaders.

Women continue to face informal barriers, and military services have further progress to make toward integrating women effectively. The military continues to be a male-dominated environment. Studies show that people think the ideal leader, like the ideal man, is decisive, assertive, and independent. In contrast, women are expected to be

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[122] Herminia Ibarra, Robin J. Ely, and Deborah M. Kolb. "Women Rising: The Unseen Barriers."
[123] Katie Ro Williams. "Q&A with Senior Women in Military Intelligence." *Defense One.* 8 March 2020. https://www.defenseone.com/ideas/2020/03/senior-women-military-intelligence/163613/?oref=d-previouspost. (accessed 14 April 2020).
[124] Herminia Ibarra, Robin J. Ely, and Deborah M. Kolb. "Women Rising: The Unseen Barriers."
[125] Ibid.

nice, caretaking, and unselfish.[126] In particular, the traditional masculine-warrior military culture presents both overt and more subtle obstacles.[127] This culture sets expectations for behavior that limits both male and female service members, but they chart a particularly narrow path for women. Research shows that people perceive others in terms of two fundamental dimensions: warmth and competence. Those perceived as warm are more likable, whereas people perceived as competent are more respected. Men are often perceived as both likable and competent at the same time, but women are more typically perceived in either-or terms. A warm and likable woman struggles to be respected, whereas a competent and respected woman is often disliked. The dynamic was captured in some of the interviews conducted with female intelligence officers.

Second Lieutenant (A) explained that a fellow male and female officer counseled her on her outgoing personality. They told her about the pitfalls of being too friendly. They believed she was overly flirtatious with a male enlisted member. The female officer said she was like the lieutenant when she was younger, but a rumor started because her outgoing behavior was perceived in the wrong way, and so she had to change her approach.[128] In contrast, Captain (C) explained how she received feedback on her perceived aggression. "I am a type-A personality. A fellow female intelligence officer told me I was too bossy and driven, and that I had to dial it back if I wanted to be successful in the Air Force."[129] Captain (E) expressed a similar sentiment when her superiors gave her feedback that she was too direct and abrasive. They told her to tone it down and be a bit kinder, but now she thinks the pendulum maybe swing too far in the other direction. When she asks people to do something now, she must ask them many times. She doubts she would have received the same feedback if she were a man.[130]

The mismatch between conventionally feminine qualities and the qualities thought necessary for leadership puts female leaders in a double bind. Numerous studies

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[126] Martin Abel. "Do Workers Discriminate against Female Bosses?" Middlebury College. September 2019.
[127] Allison Abbe. "The Balancing Act for Female Officers." War Room. United States Army War. College. 5 March 2020. https://warroom.armywarcollege.edu/articles/balancing-act/ (accessed 13 April 2020).
[128] Second Lieutenant (A), Interview.
[129] Captain (C), Interview.
[130] Captain (E), Interview.

have shown that women who excel in traditionally male domains are viewed as competent but less likable than their male counterparts.[131] Behaviors that suggest self-confidence or assertiveness in men often appear arrogant or abrasive in women. Meanwhile, women in positions of authority who enact a conventionally feminine style may be liked but are not respected.[132] They are deemed too emotional or soft to make tough decisions and be strong leaders.

Some FAIOs thought they were undermined in their career, in ways that male intel officers were not. A few FAIOs explained the ways they were able to survive in a male-dominated culture. Major (C) detailed that when she supported a fighter squadron as a Lieutenant, she got along with the pilots, but as a female, she assumed a role to survive. She stated, "You can either be the bitch, slut, or the little sister…I assumed the role of the little sister, and the guys always felt like they had to take care of me, they looked out for me, and in that sense, I did not face sexual harassment." She expressed the fact she had to play that role at all to survive in that job was disheartening.[133] Lieutenant Colonel (A) took a different approach when she supported a fighter squadron level as a young officer. She stated, "you must have the mentality of being in a fighter squadron and commit yourself to not taking any shit…some dude rolls up out a *Playboy* and asks what do you think, and I say 'I am sure she looks better than your wife.'"[134] Some people told her she should not talk like that, and Lieutenant Colonel (A) expressed dismay that some FAIOs were very negative about their experience in flying squadrons, but she always felt as long as you are willing to play the game, FAIOs in that situation would end up fine.[135]

Other FAIOs discussed the different dynamics between the obligations of men and women when it comes to supporting their families. Major (F) said that having to do join spouse assignments, and being married to another military member can affect females' careers more adversely at times.[136] Lieutenant Colonel (C) agreed and said for

[131] Allison Abbe. "The Balancing Act for Female Officers.".
[132] Ibid.
[133] Major (C), Interview.
[134] Lieutenant Colonel (A), Interview.
[135] Ibid.
[136] Major (F), Interview.

some females, there is a feeling that you are never good enough. "There is no one at home to cook my meals so I can stay for ten hours a day at work. I have a 4-year-old and an active duty husband. I think for females, there is just a lot of self-doubt, and we just need to get rid of it and do the best job we can."[137]

Gender Norms & Identity. A variety of interviewees highlighted that several of their female mentors figured out how they could maintain their own identity and not have to display more masculine traits to be successful in the Air Force. Captain (E) stated that she currently has two female mentors, and one of them is her former squadron commander. She believed her squadron commander was part of a generation that figured out how to be more relatable to younger women. She thought they figured out how to embrace their femininity and still be successful. She felt that women of a previous generation took on more masculine traits and that it was learned behavior they adopted out of necessity to be successful. During an officer professional development session she attended, a female general officer revealed that when she was a young officer, she signed her correspondence by just the first initials of her first name and her last name so that she would be judged by her work first instead of her gender, but later, she figured out how to balance being a female officer in a male-dominated environment.[138] Lieutenant Colonel (A) stated she had a couple of female mentors, and observed they were different from FAIOs of the past. She thought that when she came into the Air Force, senior FAIOs were of difficult caliber. They had no kids. It was all about the job. They were trying to emulate guys to be successful, and she expressed that was the culture back then. Even for her, her tolerance level was higher for sexual harassment jokes when she was a young officer than it is now for young CGOs coming into the Air Force.[139]

What is fascinating, as explained in some of the anecdotes above, is that FAIOs in previous generations felt compelled to downplay their gender to succeed in their careers, but managing self-presentation to conform to gender role expectations is a drain on cognitive resources.[140] Continually monitoring and calibrating one's behavior is effortful, and it imposes additional demands on female officers in an already demanding

[137] Lieutenant Colonel (C), Interview.
[138] Captain (E), Interview.
[139] Lieutenant Colonel (A), Interview.
[140] Allison Abbe. "The Balancing Act for Female Officers."

profession. Navigating narrow or conflicting expectations contributes to role conflict, which has been associated with occupational burnout.[141] Controlling self-presentation may be one more source of occupational stress for female officers, and women may ultimately assess that the costs are simply not worth it.[142] This pressure may be one of many factors contributing to female officers' lower retention among female military officers across the services.[143] However, FAIOs interviewed believe that unlike past generations, today, they did not feel they had to make that choice and could succeed by just being themselves. Not having to make trade-offs or compromises to one's identity is a critical factor in retention.

Many interviewees revealed keen insights into the dynamics of being female and an intelligence officer and how those specific demographics affected their experiences and viewpoints. Major (B) explained that she would never know of all the opportunities she missed out on because she was female. She believed the fact that the ratio of women is higher in intelligence is helpful because women are not seen as an anomaly. Major (B) observed that in her experience, FAIOs seemed to get opportunities to be executive officers in greater numbers than their male counterpoints. She opined that maybe it is because of the stereotype of the job being more secretarial.[144] Major (F) said that at times she knew being female supported her success. When she was a lieutenant, she was the sole female officer in the intelligence support section of an operational support squadron. In the F-16 squadron that they were supporting, the pilots would typically not want to talk to them, but they would speak to her "because I was a girl…I was a young lieutenant, and I appeared willing to listen and let the instructor pilots teach me about the aircraft. I think with women, you cannot come off as a bitch, or you will not go far. But most women have an innate humility, and I think in certain settings that allowed us to gain trust and succeed."[145]

Some FAIOs expressed concern that being a female gave them an advantage. First Lieutenant (A) explained that in her first assignment, her flight commander, DO, and

[141] Allison Abbe. "The Balancing Act for Female Officers."
[142] Ibid.
[143] Ibid.
[144] Major(B), Interview.
[145] Major(F), Interview.

squadron commanders were all female. She felt like she had more opportunities as an FAIO because they had so many females in her unit, and was not sure if she would have thrived in the same way if she was male. She stated, "yes, you want opportunities, but you do not want it to seem like you only got them because you are a female."[146] Brigadier General (A) expressed the same sentiment as the young lieutenant, even at her higher level. She expressed concern that she got selected to be a general officer because she was a woman. Brigadier General (A) worried about being considered a "favorite" as a result of her gender. She highlighted that in the Air Force today, there is so much discussion on the importance of diversity and inclusion that there is a greater importance to identity females who are of general officer caliber. She stated she is a firm believer in Title IX and wants to put women in senior leadership roles, but for herself, she wonders, "why me?"[147]

For female officers across the Air Force, gender composition was a significant influence on their experiences. For example, participants in the 2018 Air Force RAND study commented that in male-dominated career fields, they often faced sexism and the existence of an "old boy's network," which made them feel like they had to work harder to prove themselves. They felt there were times they were not treated equally because they were female.[148] Participants brought up these issues 94 percent of the time in female officer focus groups.[149] One participant stated, "As the only female in the squadron, you must be tougher than the guys, and it sucks. And you pick up the ax and swing away, and you cannot show weakness, especially as an officer."[150]

Female officers also described having to walk a fine line often in how they are perceived that male officers do not. If they are too friendly or caring, they are not taken seriously, but if they are stern, they are considered a "bitch." For women in the military, scholars have noted female leaders are often seen as being less legitimate than men in military hierarchies.[151] As a result, they often must resort to using the power of their

[146] First Lieutenant (A), Interview.
[147] Brigadier General (A), Interview.
[148] Keller, et al. "Addressing Barrier to Female Officer Retention in the Air Force."
[149] Ibid.
[150] Ibid.
[151] Ibid.

position to get people to do things, but this only further minimizes how others view their legitimacy as a leader. Major (G) commented that her boss tended to treat her like his daughter, which she resented because it meant that he did not see her as a capable officer that could handle the demands of the job equally to men.[152] During interviews, FAIOs were asked if discrimination was a driving factor for their retention. Many indicated it made them more determined to stay in to help fix it for the next generation of women. Major(H) said her experience changed the way she mentored other females. She teaches them how to be more assertive and started a female mentorship forum. Major (H) did not believe she would have started the discussion group if she had not experienced discrimination. She realized it happens more often than initially thought, and it motivated her to mentor others.[153] First Lieutenant (B) expressed the same sentiment, [discrimination] was "not a factor that will determine whether I stay in or not. But I have a goal to make sure that what I experienced does not happen to other women."[154] Lieutenant Colonel (C) explained she wanted to prove to herself that she could be successful even if she faced discrimination. "You have airmen who look up to you. We must create the next generation of leaders. How are you going to do that if you do not stay in?"[155] Captain (G) eloquently expressed:

> At this point, I want to see more people like me in leadership positions. During a meeting with the COMACC, he "tongue in cheek" called the hallway outside the meeting "the hall of diversity"…it was all white males…He said he wanted that to change. I want to see more diversity in backgrounds, gender, ethnicity, and intellectual thought. I am one of those people; I am in it to win it. I am going to go until they kick me out. I believe intel females can be a model for other career fields. The fact we have not had a male Secretary of the Air Force (SECAF) during my time in the Air Force is weird but great. It is awesome we have had two female three-star generals in the A2 position. Seeing females in leadership positions is becoming normalized in the Air Force, and I want to keep going for as long as possible.[156]

[152] Major (G), Interview.
[153] Major (H), Interview.
[154] First Lieutenant (B), Interview.
[155] Lieutenant Colonel (C), Interview.
[156] Captain (G), Interview.

Although the Air Force has made attempts over the years to change its culture that condoned an environment of overt sexual harassment, implicit discrimination is still a factor in the Air Force for FAIOs. Based on the experiences of FAIOs, they acknowledge the progress the Air Force made over the years with regards to harassment but highlighted still-lingering effects of bias in the workplace. While an overwhelming majority of the FAIOs interviewed said they faced some form of discrimination in their career, surprisingly, only five of the interviewees said they faced discrimination from other intelligence professionals. Work environments that have a robust female presence like the intelligence career field can create a critical mass that guards against some of the factors that may lead to discrimination and provide career pathways for females to grow and thrive professionally.

Critical Mass

The concept of critical mass is an important factor in the intelligence officer career field for women. As shown in Figure 5, the percentage of FAIOs is significantly higher than the Air Force average, creating a concentration of FAIOs that shapes a working environment. Critical Mass theory in sociology is defined as the critical number of personnel needed to affect policy and make a change not as the token but as an influential body.[157] Critical mass theory is often credited to Rosabeth Moss Kanter. Kanter examined the status and experience of women in a large American corporation in the 1970s, concluding that, in groups with a large proportion of one race, sex, or ethnic type, members of the majority (which she termed "dominants") control the group and its culture while the members of the minority ("tokens") become symbolic representatives, embodying the stereotypes of their groups. This causes dominants to emphasize intergroup differences, and tokens to conform in an attempt to assimilate.[158] Kanter concluded that, with an increase in relative numbers, minority members "begin to become individuals differentiated from each other."[159]

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[157] Lisa Lamkin Broome, John M. Conley, and Kimberly D. Krawiec. "Does Critical Mass Matter? Views From the Boardroom.", *Seattle University Law Review*, 2011. https://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=3085&context=faculty_scholarship (accessed 2 April).
[158] Ibid.
[159] Ibid.

Moreover, "minority members are potential allies, can form coalitions, and can affect the culture of the group."[160] The quality of those women's working lives, Kanter noted astutely, depended on their representation. When they made up just 15 percent of the workforce, they faced stereotyping, harassment, isolation, disproportionate performance pressures, and other disadvantages.[161] Nevertheless, when they made up something like 35 percent of the workplace, they started shifting their culture in their favor by forming alliances and establishing a counterculture.[162] In this environment, women are no longer seen as outsiders and can influence the content and process of decision making discussions more substantially.[163] Having a workplace dynamic that allows women to express their viewpoints or perspective without the need to feel the burden of having to represent their gender is critical to building confidence and sustained expertise. No longer does any one woman represent the "woman's point of view," because the women express different views and often disagree with each other.[164] Women start being treated as individuals with different personalities, styles, and interests. Women in the room become a normal state of affairs.[165]

Captain (G) believed that the intelligence career field provided greater visibility for females, and in her experience, more female representation was not only inspiring but led to an easier work environment. During a deployment, working in the J2 (intelligence) office, she believed she was taken seriously from the beginning. When she transitioned to the J3 operations office that was more male-dominated, she felt an extra burden to earn her seat at the table.[166] Other FAIOs expressed the potential ways the intelligence career field accommodates the familial responsibilities of officers compared to other

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[160] Lisa Lamkin Broome, John M. Conley, and Kimberly D. Krawiec. "Does Critical Mass Matter? Views From the Boardroom.", *Seattle University Law Review*, 2011. https://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=3085&context=faculty_scholarship (accessed 2 April).
[161] Ibid.
[162] Ed Yong. "The Tipping Point When Minority Views Take Over.", *The Atlantic.,* 7 June 2018. https://www.theatlantic.com/science/archive/2018/06/the-tipping-point-when-minority-views-take-over/562307/ (accessed 2 April).
[163] Vicki W. Kramer, Sumru Erkut, & Allison M. Konrad. "Critical Mass on Corporate Boards: Why Three or More Women Enhance Governance." Wellesley Centers for Women. 2006. https://www.wcwonline.org/vmfiles/CriticalMassExecSummary.pdf. (accessed 2 April 2020).
[164] Ibid.
[165] Ibid.
[166] Captain (G), Interview.

communities. Captain (E) highlighted that she has friends that are in the maintenance and ammo career field, and if they were breastfeeding or having a daycare issue, it was a problem for them to get understanding from that community. She felt blessed that she has not faced those issues in Air Force intelligence. Her husband is an Army intelligence officer, and she believed there was still a level of machismo in that culture. For child care, she tended to carry more of the load because his unit is not as understanding of his parental responsibilities.[167]

Major (A) detailed how the representation of FAIOs in communities can affect how they are viewed. When she worked in a C-130 squadron, the preponderance of intelligence officers were females, so it was always "intel first," and squadron members were not focused on gender. Nevertheless, when assigned to Air Force Space Command (AFSPC), Major (A) felt like there was more to unpack with being an intelligence offer and being female because the career field was not well known in that community. She believed that in environments where intelligence personnel are more integrated, gender does not matter as much. In other communities, it was harder to establish intelligence representation in general, and she felt that put more burden on her to represent her gender and the career field well.[168] Colonel (A) adamantly believed that the single biggest factor in the intelligence career for women was critical mass. "There are so many of us, and it is impossible just to promote males. When you start with critical mass, you know you are going to have some absolutely amazing women. And I believe the military is a meritocracy and mass matters."[169]

Mentorship

General Ronald Fogelman, former Air Force Chief of Staff, viewed mentoring as a fundamental responsibility of all. "No matter whether you are at a base level, in an operating agency, or on a headquarters staff, we all bear the responsibility to develop our subordinates and to help groom the next generation of Air Force leaders.

[167] Captain (E), Interview.
[168] Major (A), Interview.
[169] Colonel (A), Interview.

Mentoring is a process that is good for all of us. It can open up communications within our service, break down barriers, and foster cultural change."[170] However, there may be a public perception associated with cross-gender mentoring that restricts the overall quality of a mentoring experience for women. Anxiety can develop regarding intimacy and physical attraction. Women fear that when they attempt to initiate a relationship, it may be misconstrued as a sexual approach. Relationships that do not involve romantic attachment may be perceived as such by others, thus leading to negative consequences for both mentor and protégé.[171] Major (D) explained that during a meeting of a group of general officers (who were all men), the topic of diversity and selection of aide de camps came up. The senior general officer at the table asked the general officers to raise their hands if they were willing to hire a female aide de camp. Most of the generals raised their hands, but one general officer remarked that he would never hire a female aide de camp because of the perception of a cross-gender relationship.[172] Major (F) detailed a similar dynamic. During her first assignment, when she was a young lieutenant, she said her male flight commander was trying to find a way to push her out of the office because she found out his wife thought they were having an affair. Her supervisor's wife would often call the office and say "since I know you're the only female in the office, I just wanted to call and make sure everything was ok."[173] Major (F) stated the wife would stalk her outside the office. It made her feel very conscious in other settings, and for a while, she was scared to be around other male officers.[174]

One approach women may take to avoid these difficulties is to try to find other female mentors. Aspiring female managers may have more opportunities, and may feel more comfortable in initiating mentoring relationships with female executives than with male executives. Unfortunately, due to the lack of females in mentoring positions, this may lead to an overload of requests from the larger group of women and may result in a shortage of available females to mentor. In her book *Lean In*, Sheryl Sandberg explains

[170] Darrell E. Adams. "Mentoring Women and Minority Officers in the US Military", Air Command and Staff College, Air University, March 1997.
[171] Ibid.
[172] Major (D), Interview.
[173] Major (F), Interview.
[174] Ibid.

that she has talked to many senior women who have been asked by someone they do not know to be their mentor. They explained that the request is flattering but awkward. Even Oprah Winfrey, who has inspired so many women in her career, admits that it makes her uncomfortable when someone asks her to be a mentor. She explains, "I mentor when I see something and say 'I want to see you grow.'"[175] The relationship between mentor and mentee must be organic for it to be fruitful for both members. A potential mentor-mentee relationship should be established between officers who know each other and have worked together in a professional setting. Mentors help women advance in organizations by building their self-confidence and providing career guidance and direction. A mentor may also train females about the "ins and outs" of the organizations, such as the unwritten rules of corporate politics.

Most importantly, a mentor is instrumental in helping women overcome gender-related obstacles and plays a vital role in providing growth opportunities and visibility within the organization. Mentors can also promote their female protégé's advancement by conferring legitimacy and altering co-worker's stereotypic perceptions. Interviewees expressed that they, in fact, had male and female mentors in their career who provided professional guidance.

Captain (A), who was prior enlisted, explained she had a few female mentors whom she could reach out to about anything, but most of her mentors in her career have been men.[176] Lieutenant Colonel (A) stated early on in her career, she did not have a female mentor but did have several male mentors who were very open with her about her career path trajectory. They led her to believe there were no limits to what she could accomplish. Her first female mentor was a supervisor who went on to become a general officer. She considered her a great confidante in her career. She expressed having a big network of fellow FAIO peers and senior leaders and could always pick up the phone and speak to any one of them.[177] Lieutenant Colonel (C) explained that when she was younger, she did not have a female mentor. For about the first ten years of her career, she had male officers who advocated for her. She believed the whole female mentorship did

[175] Sandberg, 65.
[176] Captain (A), Interview.
[177] Lieutenant Colonel (A), Interview.

not become a thing except for the last few years. Now there she has a couple of female general officers who look out for her, and she knows she can call at any time. She expressed that in the intelligence career field, many great senior leaders also care about a lot about family.[178]

FAIOs Concerns over Perceptions of Favoritism. A different consideration for a variety of FAIOs who served in key leadership positions was the perception of favoritism when mentoring females. Colonel(B) explained that in a senior leadership position of influence where often critical decisions about promotions, awards, and leadership opportunities arise, she had to be cognizant of how any perception of favoritism would come across.[179] Lieutenant Colonel (D) said you must be aware of your own biases and that it is a fine balance. As a squadron commander, she does a sanity check with her director of operations and senior enlisted leader by having them play devil's advocate when she does evaluations of her officers.[180] When Major (J) was a director of operations, she had a male CGO that said he was being excluded from various career opportunities because he was male. She stated she had a "come to Jesus moment" and had to consider whether his claims were valid.[181] Major (J) is now very mindful of the perception of favoritism. She talked to one of her mentors about it, and they told her that if anyone asked for her professional advice, she should make sure she was consistent and not make exceptions for different people.[182]

Lieutenant Colonel (B) had a fascinating perspective on favoritism. She explained she does consider the perception of favoritism, but did not let that stop her from mentoring females because she believed it is needed. As a squadron commander, members of her unit were scattered to different work centers and had supervisors that were not always a part of the squadron. She found out there were issues in some of the work centers related to the way that the females were treated. In response, she set up a bi-monthly lunch for women in the squadron, but she mentored men and women in her squadron equally, and to this day, she still gets requests from men and women from her

[178] Lieutenant Colonel (C), Interview.
[179] Colonel (B), Interview.
[180] Lieutenant Colonel (D), Interview.
[181] Major (J), Interview.
[182] Ibid.

previous squadron on letters of recommendation or career advice. She believed that her broader actions within the squadron proved that she could treat men and women equally, but she could not turn a blind eye to the issues that were impacting the females in her squadron. She astutely highlighted we still have a slew of "firsts" in the United States. The first female to lead the CIA. The first female NBA coach. "Until "firsts" are no longer a big deal, mentorship of females matters."[183]

Female Role Models

In the 2018 RAND study of Air Force female officer retention, 83 percent of focus groups specifically raised the importance of having female role models in senior leadership positions, with many in male-dominated career fields commenting that they had never had a female commander.[184] Aspiring female leaders need role models to identify a path for successful advancement. These role models can provide guidance on how females can navigate in military environments. They can hone their own personal leadership style and find out what works for them. Many FAIO interviewees remarked that they had a female role model in the career field and worked in many assignments where female leadership was the norm. Captain (B) remarked during her first assignment that her senior intelligence officer was a female weapons officer who inspired her to also attend the Air Force Weapons School. Additionally, her squadron commander at that assignment was the first female F-35 pilot who was also inspiring for her to see.[185] Lieutenant Colonel (E) explained she spent the first four years of her career not seeing a female in a leadership position or having a female role model. As she careened towards the end of her active duty service commitment, she contemplated leaving the Air Force, but in her next assignment, her squadron commander was an FAIO. At this critical crossroads in her career, Lieutenant Colonel (E) saw that there was a path for female officers in intelligence to succeed, and it thought it was exciting and propelled her to stay on active duty. [186]

A consistent theme that came up during interviews was the fact that FAIOs had role models who understood the demands of family life and could balance those demands

[183] Lieutenant (B), Interview.
[184] Keller, et al. "Addressing Barrier to Female Officer Retention in the Air Force."
[185] Captain (B), Interview.
[186] Lieutenant Colonel (E), Interview.

with their professional careers. Captain (E) stated that when she was in ROTC, she had a female instructor who provided her with support and guidance, and that continued into her active duty career. She expressed surprise to see senior FAIOs who were relatable and said the FAIOs who were most inspiring were leaders who found a way to balance work with family life because she has a family of her own.[187] Lieutenant Colonel (C) expressed the same sentiment when she explained many younger FAIOs have shared with her that she was an inspiration because they did not believe they could have a family and maintain a career in the Air Force. As a married woman with kids, she served as an example of the possibility that major career-family tradeoffs did not have to occur for FAIOs to be successful.[188]

The Air Force has strived through its diversity and inclusion initiatives to create a culture that allows women to succeed, but improving culture to be more gender-inclusive takes time. Much is written on the role of leaders in shaping organizational climate. Military literature has focused heavily on addressing toxic leadership and preventing harmful behaviors, but more attention to selecting and developing leaders who create positive, inclusive climates would be beneficial.[189] Building a more inclusive culture requires efforts by both male and female leaders to recognize how their own unit climates align with strategic talent management outcomes, like retention. Female intelligence officers are incredibly talented and capable Air Force officers. In a male-dominated culture, it is heartening to see them perform well and rise through the ranks. The Air Force needs to continue to cultivate their professional growth to meet the demands of a shifting strategic environment in the 21st century.

[187] Captain (E), Interview.
[188] Lieutenant Colonel (C), Interview.
[189] Allison Abbe. "The Balancing Act for Female Officers."

Chapter 5

Findings, Conclusion, and Recommendations for Further Study

> *The creativity and talent of the American warfighter is our greatest enduring strength, and one we do not take for granted.*
>
> — *James N. Mattis*
> *U.S. Secretary of Defense (2017-2019)*

Findings

The increasing demands on the Air Force and the importance that intelligence plays in providing decision quality assessments give an impetus to retain talented, educated, and innovative intelligence officers to advance the Air Force mission. Female officers in the intelligence career field are critical components of the Air Force's ISR enterprise, and the retention of their talent will be vital as the United States embarks on a new era of global competition. For all the officers interviewed for this project, there is a sense of pride and purpose associated with being an Air Force intelligence officer. The vast majority of FAIOs interviewed for this project were accessed into the career field by choice. Their academic backgrounds and interests aligned with the Air Force's need to attain smart, thoughtful, and intellectually curious officers who can assess the global landscape and requisite skills to gather, analyze, synthesize, and disseminate information to national decision-makers and warfighter alike. The intelligence career field allows FAIOs to contribute significantly to foreign policy, choose from a variety of geographic locations and assignments, refine their problem-solving skills, seek opportunities for leadership, and career-broadening while being able to maintain a reasonable work-life balance.

The critical mass of FAIOs in the career field creates an environment that is amenable to the needs of female officers who, in addition to military service, carry the added responsibilities of spouses and mothers. Mentorship provided FAIOs with a network of female and male officers who were invested in their professional growth and could guide them through the peaks and valleys of a career. Female role models were

important for young FAIOs as they charted the course for their career and could look to someone who had illuminated a path for them to follow to achieve their career goals and aspirations. The statistically significant higher representation of FAIOs compared to the Air Force average means that there is more opportunity to foster female leadership. Many interviewees ascribed to the idea that they never had to fight for a support system. Within the intelligence work environment, there was someone whom they could rely on to work through a professional or personal challenge.

Diversity and inclusion continue to be a steadfast goal of the United States Air Force, and in many ways, the intelligence career field for FAIOs is a natural diversity environment. The very nature of intelligence is to purposefully seek out people from different backgrounds and ideas to gain a holistic picture of the operational environment. Diversity of ideas and experiences are ingrained in the career field because of the very nature of having to accumulate data from multiple places and sources and integrate it into operations. As a result, it creates a career field that is more open-minded and gender-inclusive, even in a traditionally male-dominated environment. However, the Air Force environment does still present challenges for FAIOs. Only five out of forty interviewees said they faced discrimination by other intelligence professionals. Still, the vast majority of FAIOs said they have faced discrimination of some kind during the time of service in the Air Force; some overt, but many understated and implicit. Female officers are still forced to balance perceived gender roles and their development as leaders. A male colleague told Major (D) she was "almost too much of a leader."[190] Colonel (A) astutely observed, "The year 1976 was the last class through that did not have women in at the Academy. All those guys before that class ran the Air Force for a long time, and their mentees are the ones running the Air Force today. So it takes generations before things can start to change."[191] Lessening gender bias creates a beneficial environment for women paving the way for greater retention of talented FAIOs and high-quality female officers across the Air Force.

[190] Major (D), Interview.
[191] Colonel (A), Interview.

Conclusion

Many of the experiences of Air Force female intelligence officers have been reflected in the status of women in American society. The presence of a critical mass of female representation, female role models, a network of female peers, and mentorship provides a basis for female intelligence officers to succeed and thrive in the Air Force. The success these women have today is based on a foundation of many women who came before them. Those women played vital roles throughout U.S. history. Their dedication and abilities proved that women could more than adequately do this challenging, detailed, and critical work. They left behind a strong legacy, allowing thousands of women to follow in their footsteps. Female intelligence officers will carry on that legacy to bring their talents, skills, and abilities to advance the intelligence capabilities for the Air Force. However, the continued obstacles to further integration of women in the Air Force, broadly, are also shared by female intelligence officers. Women still must contend with how to navigate in a male-dominated environment that may be hostile to their presence or create impediments to their success.

Most female intelligence officers expressed their satisfaction with the intelligence career field. They voiced their appreciation that there was more female representation in the career field, and access to female role models and mentors contributed to their desire to stay in the Air Force. The FAIOs interviewed for this project demonstrate the very best of the Air Force. They serve as models of intellect, dedication, and service. The Air Force needs the retention of these talented officers as it faces a changing geopolitical landscape and strives to adapt to changes in the character of warfare brought on by technological advancements. As the Air Force aspires to increase female representation and retention in its officer ranks, they could look to the drivers highlighted above that lead to greater accession and retention of female intelligence officers to illuminate the path to that goal.

Recommendations for Further Study

1. Follow-on Research

It would be beneficial to conduct a follow-on study approximately eight to ten years from now; the career progression for women has changed as the U.S. moves into a new strategic environment.

2. Parallel Research for the Other Military Services

As this study only explored the female intelligence officers in the Air Force, it is recommended that a parallel study be done for other military services providing a valuable comparison of career progression for women in the other services and shared insight on the similarities or differences in perceptions by women in other services and their respective cultures. Of particular interest will be a comparison to the newly created Space Force.

3. Parallel Research for Military Male Officers

It would be beneficial to conduct a similar study such as this one using male intelligence officers to find out if they share the same perceptions as female intelligence officers in their pursuit of senior leadership positions. Uncovering some of their perceptions may also help support or dispute the perceptions women have concerning advancement.

4. Expansion to other Air Force Occupational Specialties

Additional studies should be conducted using a broader range of occupational specialties to compare it to the intelligence career field. The responses obtained would provide more information to better validate the perceptions of the career progression of female officers throughout the Air Force.

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