WOMEN IN A MAN'S AIR FORCE:

WHY ARE THERE SO FEW WOMEN GENERAL OFFICERS?

BY

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

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Abstract

Women make up seven percent of total general officers in the United States Air Force compared to 21 percent women in the remaining officer ranks of colonel and below. Why is the percentage of women general officers in the Air Force significantly lower than the percentage of women officers in the ranks of colonel and below? This thesis tests five hypotheses to better understand the disparity. Two structural hypotheses address rules-based barriers for promotion and retention and two cultural hypotheses address cultural norms that could provide barriers for promotion and retention. A fifth hypothesis, gendered organizations, asserts that women leave the Air Force before becoming eligible for general officer because they are subject to the negative effects of being women in a hypermasculine organization. While the first four hypotheses provide insight and background information to the research question, the gendered organization hypothesis offers a new way to look at the problem. Women officers must navigate a hypermasculine culture where they are required to exhibit enough feminine traits that they conform to expected gender norms, while also exhibiting enough masculine traits to be effective.

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Chapter 1

Introduction

As of November 2017, women made up seven percent of total general officers in the United States Air Force compared to 21 percent women in the remaining officer ranks of colonel and below.[1] This discrepancy is a continuation of a long-term trend. In 1948, the US Congress passed the Women's Armed Services Integration Act allowing women to serve as regular members of the armed services, including the newly formed United States Air Force. Given that the law was enacted seven decades ago, one would expect to see an increase in the number of women general Air Force officers. In fact, an increase did occur. In 1948, there were zero women generals, but after 70 years, the percentage of women flag officers has stagnated at around seven percent. Assuming it takes an Air Force officer approximately 24 years to become a general officer, it seems reasonable that the percentage of women Air Force second lieutenants in 1993 should be representative of the percentage of women Air Force general officers in 2018. This is simply not the case; 25 years ago, women in the Air Force lieutenant ranks hovered around 19 percent. Why is the percentage of women general officers in the Air Force significantly lower than the percentage of women officers in the ranks of colonel and below?

Numerous Air University research papers attempt to answer this very question or some version of it, and they are all authored by women officers. The intent of this thesis from a male perspective is not to undermine their hard work, nor to patronize; rather, it is to provide a different perspective and perhaps garner additional attention to the

[1] Defense Manpower Data Center, *DoD Personnel, Workforce Reports and Publications,* Department of Defense, accessed on 15 May 2018, https://www.dmdc.osd.mil/appj/dwp/dwp_reports.jsp.

subject of gender diversity in the USAF officer corps. As noted by Joshua Goldstein in his seminal work titled *War and Gender*, men are generally uninterested in gender studies as it pertains to war and the military, perhaps because they see themselves as outsiders to women's issues and thus feel like they have no authority to hypothesize about those issues. [2] In this case, the subject of Air Force women officers is not a women's issue, but an organizational issue, and it can significantly affect US national security interests.

Gender and racial diversity is linked with organizational performance, innovation, and creativity.[3] Increased diversity in organizations brings increased diversity of thought, resulting in an increase in number and quality of options provided to decision-makers. Moreover, performance and innovation are key components to the 2018 National Defense Strategy. In it, the US Secretary of Defense James Mattis makes it clear that his strategy relies on the performance, innovation, and creativity the Department of Defense human capital provides.[4]

The strategic relevance of this thesis is founded on the assumption that increased gender diversity in the USAF general officer corps will positively affect the organization's capacity for innovation. Furthermore, just a few token women generals are insufficient to enable significant change. Tokenism theories suggest that small numbers of minority demographics are subject to categorization, stereotyping, and

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[2] Goldstein, Joshua S. *War and Gender: How Gender Shapes the War System and Vice Versa.* (New York, NY: Cambridge University Press, 2001), 36.

[3] Sujin K. Horowitz, and Irwin B. Horowitz, "The effects of team diversity on team outcomes: A metanalytic review of team demography," *Journal of Management*, vol. 33 (New York, NY: SAGE Publications, 2007), 987-1015; Anit, Somech, and Anat Drach-Zahavy. "Translating team creativity into innovation implementation: The role of team composition and climate for innovation," *Journal of Management,* vol. 37 (New York, NY: SAGE Publications, 2011), 1-25.

[4] Department of Defense, *Summary of the 2018 National Defense Strategy*, (Washington D.C.: 2018.

marginalization by the majority demographic.[5] Recent efforts by women like Jay Newton-Small's book *Broad Influence* and Sheryl Sandberg's *Lean In* have renewed interest in critical mass theory. The theory purports that the optimal percentage of a minority demographic in an organization is 35 percent, and in positions of power and influence, the minority demographic reaches a critical mass between 20 and 30 percent.[6] At these percentages, minorities overcome the negative effects of tokenism and can affect positive organizational change.[7] In fact, studies link numbers of minorities in an organization's leadership directly to organizational innovation.[8] As it stands for the USAF, seven percent women general officers is far from the 20 to 30 percent that would constitute a critical mass.

The following chapters attempt to provide some explanation for the lack of women general officers relative to their lower-ranking colleagues by examining five hypotheses. The first four hypotheses are a summary of explanations compiled following a review of Air University student papers and candid discussions with fellow Air Force officers. They are generalizations intended to examine a range of more specific explanations. In their 2004 Naval Postgraduate School thesis, Adrienne Evertson and Amy Nesbitt divide barriers for career progression of Marine Corps and Air Force women officers into structural and cultural

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[5] Mariateresa Torchia, Andrea Calabro, Morten Huse, "Women Directors on Corporate Boards, From Tokenism to Critical Mass," *Journal of Business Ethics,* vol. 102, no. 2, (New York, NY: Springer Publishing, August 2011), 312.
[6] Janice D. Yoder, "Rethinking Tokenism: Looking Beyond Numbers," *Gender and Society,* vol. 5, no. 2 (Los Angeles, CA: SAGE Publications, June 1991), 178-192.; Jay Newton-Small, *Broad Influence: How Women are Changing the Way America Works,* (New York, NY: Time Books, 2016), 5.
[7] Rosabeth M. Kanter, "Some Effects of Proportions on Group Life," *American Journal of Sociology,* vol. 82, no. 5, (Chicago, IL: University of Chicago Press, 1977), 965-990.
[8] Torchia et al., "Women Directors in Corporate Boards," 312.

categories.[9] This framework provides a way to distinguish between rule-based hypotheses and those based upon cultural norms.

Under the structural category, this thesis examines two hypotheses. The first hypothesis is that the discrepancy between the percentage of women general officers in the USAF and the percentage of women USAF officers of the rank of colonel and below is a result of legislation or rules that limit accession and promotion. For example, although the Women's Armed Services Integration Act of 1948 accepted women into the military, it capped their total accession to two percent of total force strength and limited their promotion to the rank of lieutenant colonel. It did, however, allow a single woman, the director of Women in the Air Force (WAF), to occupy the rank of colonel.[10] The second structural hypothesis is that legislation or rules limit career opportunities for women officers, thus limiting opportunity for promotion. For example, women were prohibited from flying in combat aircraft until Secretary of Defense Les Aspin issued a 1993 policy instructing the DoD to "allow women to compete for assignments in combat aircraft."[11] Since the USAF is in the business of flying combat airplanes, it is logical that combat pilots would hold claim to the majority general officer positions. Prior to 1993 it was impossible for women officers to fly combat airplanes. Since 1993, the Air Force's first woman fighter pilot, Jeannie Leavitt, was promoted to the rank of brigadier general in 2016. [12] Perhaps the demographics of the general officer corps has yet to catch up to Secretary Aspin's policy implementation.

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[9] Adrienne F. Evertson, Amy M. Nesbitt, "The Glass Ceiling Effect and Its Impact on Mid-level Female Military Officer Career Progression in the United States Marine Corps and Air Force," (Monterey, CA: Naval Postgraduate School, 2004), 122.
[10] Senate. *The Women's Armed Services Integration Act of 1948, 80th Cong., 1st sess.,* Title III, sections 302,303.
[11] Les Aspin. "Women in Combat," C-Span (transcript), 28 April 1993, https://www.c-span.org/video/?40217-1/women-combat.
[12] United States Air Force, "Biographies," accessed on 15 May 2018, http://www.af.mil/About-Us/Biographies/Display/Article/742033/brigadier-general-jeannie-m-leavitt/.

It is easy to see how culture affects the structural issues identified above. Given cultural norms in 1948, it is understandable that such limitations existed. Fictional TV mother June Cleaver perhaps best personified the expected role of women in the 1950s and 60s and is hardly imaginable as a combat fighter pilot. The first cultural hypothesis lays the blame on societal norms that dissuade women from joining the military, in general, and steers those in the military toward career tracks more amiable to culturally accepted gender norms. This hypothesis also suggests that women officers are not attracted to promotable career fields such as fighter pilot and thus limit their own opportunity to promotion. In response to Secretary Aspin's 1993 policy, the 14th Chief of Staff of the Air Force, General Merrill McPeak, seemed to accept the new policy rather begrudgingly, stating, "I have a very traditional attitude about wives and mothers and daughters being ordered to kill people."[13] McPeak's "traditional attitude" seems to prevail as women officers, now free to choose any specialty, still tend toward career-limiting administrative and support roles.[14] The second cultural hypothesis is that women have traditionally performed the primary familial caregiver role and thus they choose to leave the Air Force in search of stability once they have children. They make a choice between career and family at approximately the mid-career point, choosing to leave the Air Force just before they become eligible for promotion to the senior officer ranks. This is a common hypothesis appearing in candid discussions and often includes the presumption that most women Air Force officers are married to other military members. They reach a point where these families must choose whose career to pursue, and the most common route is for the woman to separate.

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[13] General Merrill McPeak, Senate, *Gender Discrimination in the Military*, 100th Cong., 2d sess., 29 July 1992.
[14] Beth J. Asch, Trey Miller, Gabriel Weinberger, *Can We Explain Gender Differences in Officer Career Progression?*, (Santa Monica, CA: RAND Corporation, 2016), 29.

These four hypotheses cover the broader range of explanations under the headings of structural and cultural barriers, and they warrant the more in-depth study that follows. However, all seem to ignore a broader issue that the Air University student papers, RAND reports, and proponents of critical mass theory overlook. Critical mass theory is gender-neutral; it does not require a qualifier to be applicable because it is applicable to any minority group. Skeptics discredit critical mass theory because it may not adequately explain behavior between men and women in gendered organizations.[15] Such critics explain how tokenism and critical mass theory do not account for the negative effects of sexism or racism. Even if a minority reaches critical mass, they must continue to contend with the same marginalization professed by previous token status. If so, then perhaps women officers are disadvantaged for promotion simply because they are women in a man's Air Force.

Drawing from criticisms of critical mass theory, the fifth and final hypothesis examines the idea of a gendered organization. If one defines the USAF as a masculine organization, an organization where masculine traits are dominantly important, then women officers fall prey to the negative effects of being women in a masculine organization, limiting both their opportunity and desire to seek senior leadership roles. This hypothesis is a new way to look at the gender gap in the Air Force because it identifies desired traits inherent to the organization and explains why women are disadvantaged as a result. Furthermore, it implies that women themselves may not completely understand why they are choosing to leave. While the previous four hypotheses offer simple, popular explanations of why a woman officer may be inclined to attribute her resignation to family needs or prohibitive rules, the gendered

[15] Lynn Zimmer, "Tokenism and Women in the Workplace: The Limits of Gender-Neutral Theory," *Social Problems*, vol. 35, no. 1 (Berkeley, CA: University of California Press, February, 1988), 64.

organization hypothesis provides a more nuanced explanation that does not necessarily reveal itself through surveys or interviews.

The methodology for the gendered organization hypothesis is slightly different because it requires additional explanation. The first four hypotheses are tested through qualitative analysis of primary and secondary sources. Because the Air University student papers related to the topic are authored by women and they each lay claim to some or all of the hypotheses, they are used as primary sources. Congressional testimony provides context when applicable. Historical demographic data and legislative documents offer additional information pertaining to the topic. Secondary sources include applicable works such as Goldstein's *War and Gender* and Newton-Small's *Broad Influence* to further explain the pertinent ideas and theories. The resultant work is a narrative that explicates the attributes and limitations of each hypothesis.

The gendered organization hypothesis requires a bit more explanation and line of logic. First, gendered organizations are defined and examples of both masculine and feminine organizations are examined. Second, the USAF is examined through the lens of gender to identify the dominant characteristics of its organizational culture. Lastly, the gendered organization hypothesis is tested in the same manner as the previous structural and cultural hypotheses.

The following thesis is divided into six chapters. Chapter Two provides a brief examination of the demographic data. Chapter Three visits the structural hypotheses to test its validity using the above methodology. Chapter Four does the same for the two cultural hypotheses. Chapter Five lays the framework for the gendered organization hypothesis and tests the definition of the USAF as a masculine organization, and Chapter Six tests the gendered organization hypothesis. Lastly, Chapter Seven provides a summary of the findings, implications, and recommendations.

Chapter 2

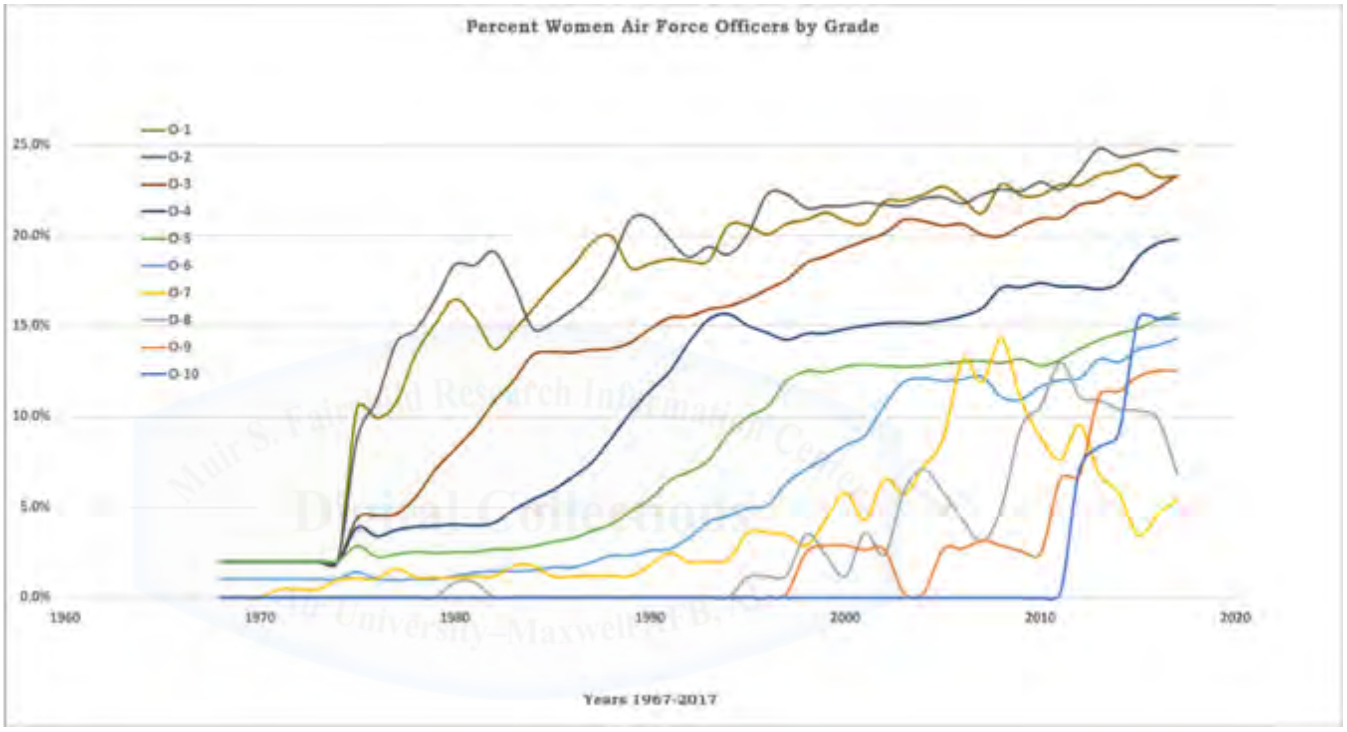
The Data

Finding data pertaining to women USAF officers is not as simple as one may expect. Public data accessible from the DoD Defense Manpower Data Center (DMDC) lists manpower data, including rank and gender, for each military branch since 2001. Prior to 2001, DMDC lists only manpower data by rank and omits gender. Military One Source offers detailed annual demographic reports available from 2003 to 2015 and includes trend data since 1990. On the website, the CNA Corporation lists its Population Representation in the Military Services report annually since 1997, containing detailed data and charts including gender information. In addition to these sources, the RAND Corporation's 2014 report, *Improving Demographic Diversity in the U.S. Air Force Officer Corps,* offers officer accession data by gender since 1975. It was not until 1976 that the annual Directorate for Information Operations (DIO) *Selected Manpower Statistic* report began listing women officers by rank; in the years prior, the report only included total percentage. In her 1997 AU student paper, Major Marie Rigotti sourced data including percentages of women by rank, 1985 to 1995, from the *Air Force Magazine* annual almanac issue, some of which are available in its online archives. None of these sources are exhaustive, and detailed information on women officers is available only from the last two decades.

As previously identified, the percentage of women officers was capped at two percent and the rank of lieutenant colonel beginning in 1948. This cap remained in place until 8 November 1967 when President Lyndon Johnson signed Public Law 90-130 into effect "to remove restrictions on the careers of female officers in the Army, Navy,

Air Force, and Marine Corps."[1] The implications of this change are discussed later, but for the purposes of data collection, 1968 is the most sensible starting point. Again, data prior to 1976 is limited, so from the period of 1968 to 1975, some interpolation is necessary.

Table 1: Percent Women Air Force Officers by Grade, 1967-2017



Source: Author's Original Work

The chart at Table 1 shows estimated women officers by rank from 1968 to 2017. A few assumptions support the chart. First, by 1968, the percentage of women officers per grade was no more than two percent in the ranks ranging from second lieutenant to lieutenant colonel. Second, in the fiscal year 1975 DIO report, one percent of Air Force colonels were women, but in 1967 there was only one woman colonel, the WAF

[1] House, *An act to amend titles 10, 32, and 37, United States Code, to remove restrictions on the careers of female officers in the Army, Navy, Air Force, and Marine Corps, and for other purposes*, Public Law 90-130, Cong., HR 5894, 8 November, 1967, accessed on 15 January 2018, https://www.gpo.gov/fdsys/pkg/STATUTE-81/pdf/STATUTE-81-Pg374.pdf.

Director, Jeanne Holm. Obviously, there was a period of adjustment from one colonel to one percent, but for ease of display on this chart, women are assumed to hold one percent of the USAF colonel ranks from 1967 to 1975. After 1975, sufficient data is available to complete the chart without interpolation. Finally, the chart legend lists Air Force officer grades to reduce clutter and the remainder of this thesis uses grade and rank interchangeably. For reference, Table 2 lists corresponding grade and rank.

Table 2: Air Force Officer Grade and Rank Structure

Grade		Rank
Company Grade Officers	O-1	Second Lieutenant
	O-2	First Lieutenant
	O-3	Captain
Field Grade Officers	O-4	Major
	O-5	Lieutenant
	O-6	Colonel
General Officers	O-7	Brigadier General
	O-8	Major General
	O-9	Lieutenant General
	O-10	General

Source: Author's Original Work

There are four areas of interest that stand out from the charted data listed at Table 3. The first three are periods of time, and the last is a general observation.

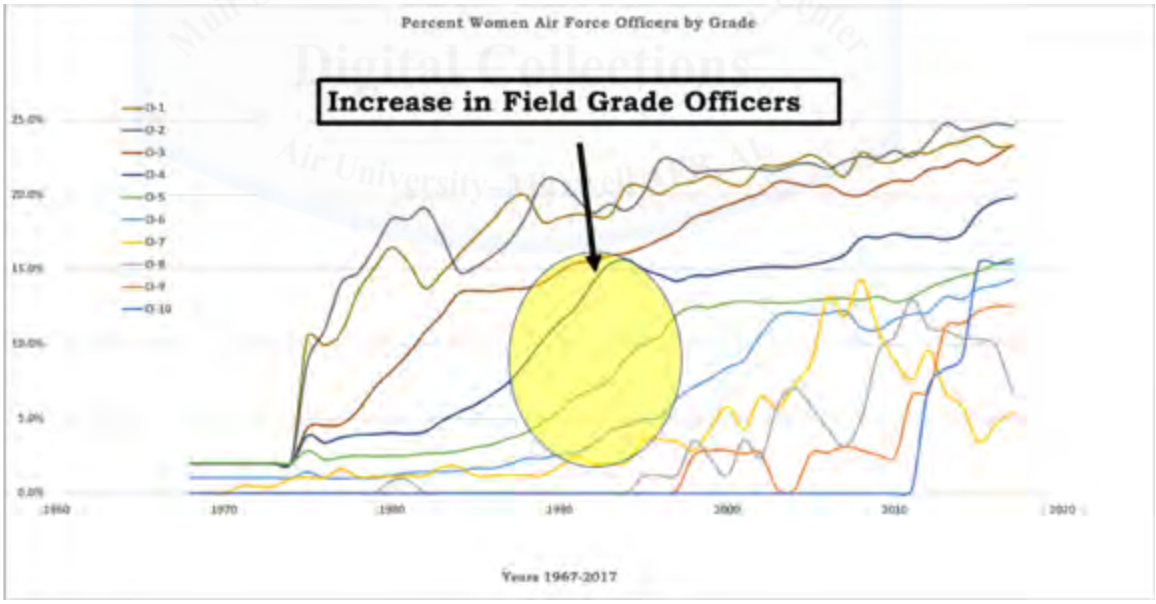
Table 3: List of Focus Areas

Focus Area	Observation
1: End of Cold War	Increase in % of O-4 to O-6
2: Y2K	Increase in % of generals
3: 2012 to Present	Increase in O-9 and O-10, but decrease in O-7 and O-8
4: Retention Gap	Apparent gaps at O-4 and O-5

Source: Author's Original Work

First, there is a trending increase in the percentage of O-4s, O-5s, and O-6s near the end of the Cold War that levels out in the mid 2000s (Table 4).

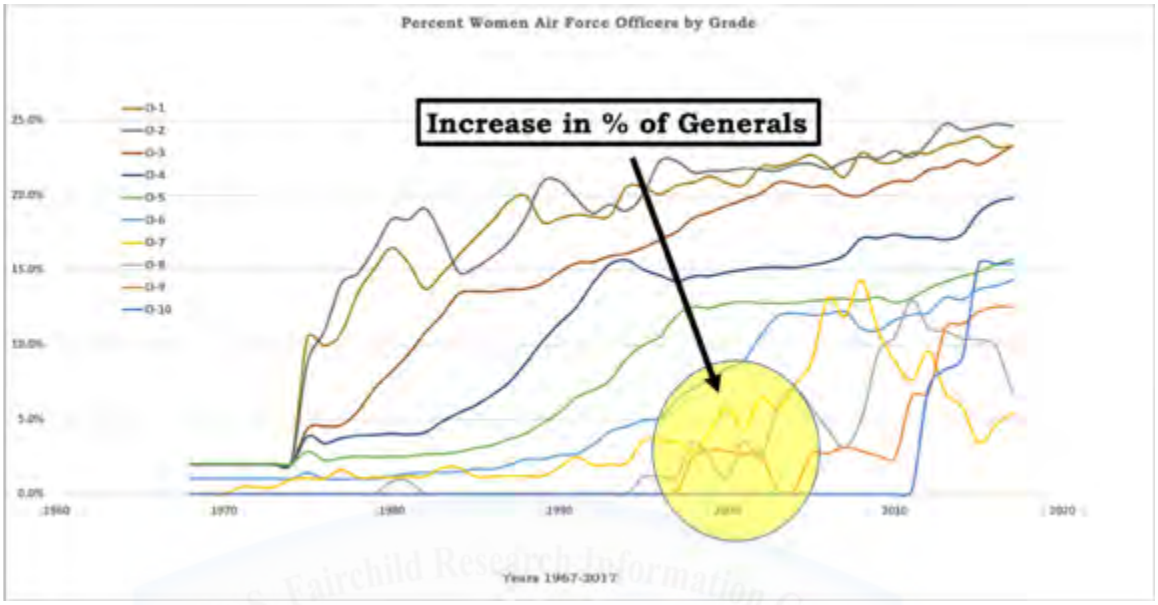
Table 4: Focus Area 1: End of Cold War



Source: Author's Original Work

Second, near the turn of the 21st century, an uptick in the percentage of women general officers appears.

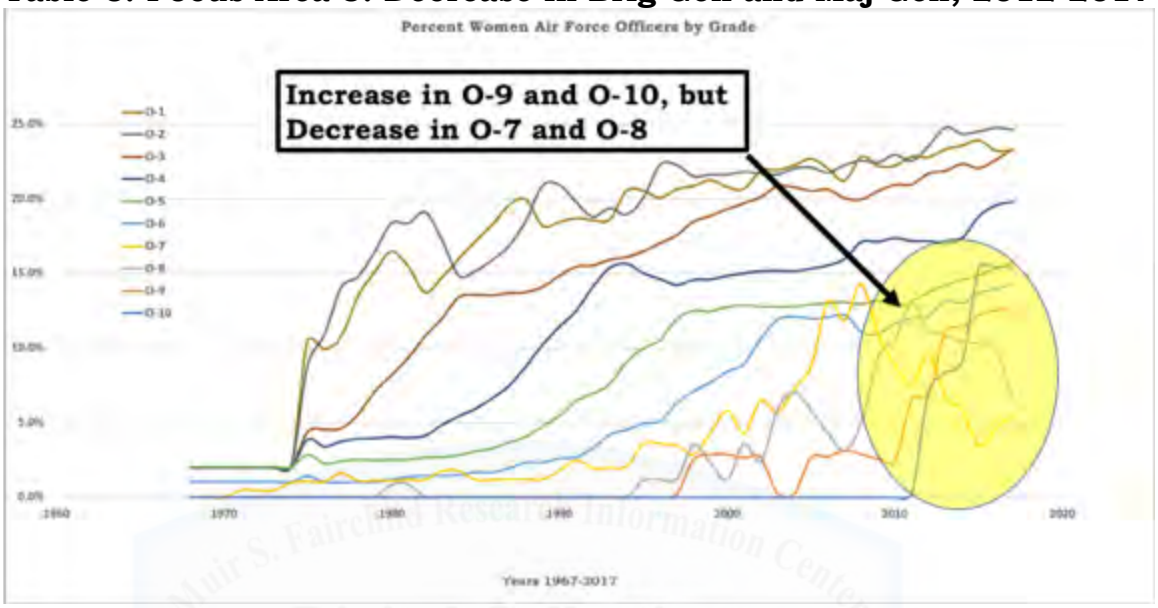
Table 5: Focus Area 2: Y2K



Source: Author's Original Work

Third, there is an interesting general officer trend around 2012 where three- and four-star generals show significant increases while one- and two-star generals decrease in percentage.

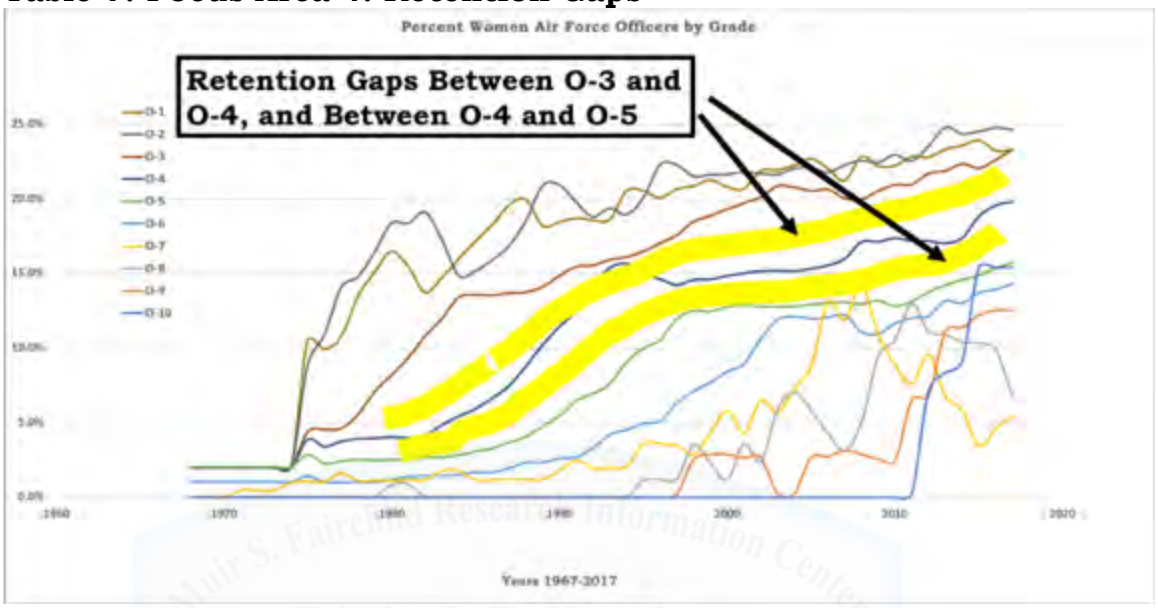
Table 6: Focus Area 3: Decrease in Brig Gen and Maj Gen, 2012-2017



Source: Author's Original Work

Lastly, the groupings of lines indicate gaps in promotion and retention as women leave the Air Force at a higher rate than men at both the captain and major ranks.

Table 7: Focus Area 4: Retention Gaps



Source: Author's Original Work

Chapter 3

Structural Hypotheses

Structural factors are rules-based barriers preventing women from becoming Air Force general officers. The first structural hypothesis posits the discrepancy between the percentage of women general officers in the USAF and the percentage of women USAF officers at ranks colonel and below is a result of legislation or rules that limit accession and promotion. The second structural hypothesis states legislation or rules limit career opportunities for women officers, including the opportunity for promotion. Although similar, they are distinct. The first hypothesis refers to limitations that prevent women from becoming Air Force officers or prevent those who are already officers from promotion. The second hypothesis refers to limitations that prevent women from pursuing specific career fields.

Structural Hypothesis 1: Women face structural barriers for entry and promotion in the Air Force.

Although women were indeed a critical part of the military during the Second World War, their participation was temporary and largely limited to medical fields and administrative duties.[1] In 1948, the Women's Armed Services Integration Act opened the door for women to serve as permanent, regular officers, but percentages were capped at two percent of the total force strength and promotions limited to lieutenant colonel with one woman O-6 acting as Director, Women in the Air Force (WAF).[2] This restriction remained until 1967 when, near the height of the Vietnam War, President Johnson signed Public Law 90-130 removing both rank and percentage caps.[3] Coincident with the law, the DoD took

[1] M.C, Devilbliss, *Women and Military Service: A History, Analysis, and overview of Key Issues,* (Maxwell AFB, AL: Air University Press, November 1990), 11.
[2] Jeanne Holm, *Women in the Military: An Unfinished Revolution,* (Novato, CA: Presidio Press, 1982), 248-249.
[3] House, Public Law 90-130

additional steps to relieve the manpower shortage caused by the war, including lowering enlistment standards, converting military support positions to civilian jobs, and increasing women accessions.[4] During this period, women were indeed limited structurally both by barriers to entry and promotion.

However, in 1974 Congress forced the military to increase the number of women in the military, mandating a 100-percent increase of women in the Air Force.[5] Thus, the Air Force experienced a large influx of women officers in 1974. Another milestone for women during this period was the DoD Appropriation Authorization Act of 1976, signed into law by President Gerald R. Ford, which removed restrictions for women to enter service academies, including the US Air Force Academy.[6] The first women graduates would not receive their commissions until 1980, and while those women were still marching on The Terrazzo, the military eliminated separate promotion systems. In addition, the Air Force widened career opportunities for women. However, there was reason for concern among senior-ranking women who began competing for promotion with their more experienced male counterparts.[7] In her 1990 research paper, *Women and Military Service: A History, Analysis, and overview of Key Issues*, Dr. M. C. Devilbliss labels this period revolutionary for women. Yet even following the removal of several structural limitations, women remained largely absent from the general officer corps, holding steady at less than one percent until the 1990s.

The first period of focus as depicted at Table 4 is near the end of the Cold War where women field grade officers (ranks major, lieutenant colonel, and colonel) began to see an increase in percentages. In terms of

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[4] Devilbiss, *Women and Military Service*, 10.
[5] Devilbiss, *Women and Military Service,,* 17,18; Holm, *Women in the Military,* 188.
[6] Office of the Whitehouse Press Secretary, President Ford Whitehouse Press Release, Ford Library Museum, accessed on 15 January, 2018, https://www.fordlibrarymuseum.gov/library/document/0248/whpr19751008-003.pdf.
[7] Devilbiss, *Women and Military Service,* 21.

structural limitations that affect accession and promotion, there were no significant alterations in legislation or policy. In fact, the policies were unchanged until after Operation Desert Storm. Until then, women airmen were equal to men on paper but were prohibited from combat positions. The only logical explanation for the increase in women field grade officers is that the changes made in the 1970s finally began to take hold. However, there was still little change in the general officer corps. The percentage of women general officers increased half a percentage point when a third brigadier general was added to the ranks in 1990. Around the end of the Cold War, although the 1970s changes appeared to have had a positive effect on the percentages of field grade officers, they seemed to have little influence on women generalship until the year 2000.

As depicted at the second focus area (Table 5), during the late 1990s to mid 2000s, the percentage of women general officers rose to around four percent, which included the first woman three-star, Lieutenant General Leslie F. Kenne, who became the commander of the Electronic Systems Center at Hanscom Air Force Base in 1999.[8] The majority of the AU student papers reviewed highlight Desert Storm as the cause of this increase. Lieutenant Colonel Kristal Alfonso praised the efforts of women airmen in Desert Storm, claiming the war "revealed just how critical and routine the role of women had become."[9] Lieutenant Colonel Lorna Kipphut maintains "that no event in America's history has brought home the changed demographics of the military so forcefully as did Desert Storm."[10] Undoubtedly, these women officers saw Desert

[8] Unites States Air Force, "Air Force Biographies," United States Air Force, accessed 15 January 2018, http://www.af.mil/About-Us/Biographies/Display/Article/106626/lieutenant-general-leslie-f-kenne/.
[9] Kristal L. M. Alfonso, "Femme Fatale: An Examination of the Role of Women in Combat and the Policy Implications for Future American Military Operations," *The Drew Papers*, (Maxwell AFB, AL: Air University Press, August 2009), 54.
[10] Lorna J. Kipphut, "Career Decisions, Walking the Tightrope Marriage and Motherhood Issues Facing Today's Female Senior Officers," Research Report no. 97-04, (Maxwell Air Force Base, AL: Air War College1 April 1996), 7.

Storm as proof that women had a rightful place in the combat Air Force. No significant alterations to laws or policies of accession and promotion might account for the increase in women general officers.

The third focus area (Table 6) is 2012 to the present, which highlights an interesting phenomenon for women generals. In 2008, there were 21 women brigadier generals, and 6 women flag officers in the next two ranks.[11] In 2012, there were only 14 women brigadier generals but 15 women generals in the next three ranks, indicating an increase in promotion for women one-stars. However, by 2017, only 8 women brigadier generals and 13 women generals filled the next three ranks, indicating an overall downward trend for the percentage of women generals. The total number of women generals in 2012 was 29, but by 2017 it was 21. Furthermore, in 2017, of the 36 congressional nominees for brigadier general, just three were women, and in 2018, of the 24 nominees for major general, none were women.[12] Since there are so few women generals, it is understandable that their representative lines on the chart at Table 1 are not as smooth as the lower ranks which contain thousands of women. While the number appears small, the proportional gap is significant. No legislative or policy changes that restrict women from accession or promotion can be attributed to this fourth area of interest.

Lastly, there is a retention gap that is especially apparent for women at the ranks of major and lieutenant colonel. The percentage of women majors is significantly lower than captains and below, and the percentage of women lieutenant colonels is significantly lower than majors. Simply put, women leave the Air Force, or do not get promoted, at a higher rate than men. If the rates were equal, then one would expect to see co-linear lines on the chart at Table 1. The first structural

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[11] There were no women four-star general officers until 2012.
[12] Senate, *Air Force Nominations*, 115th Cong., 1st sess., 9 March 2017, PN 94; Senate, *Air Force Nominations*, 115th Cong., 1st sess., 22 March 2018, PN 1551.

hypothesis does not explain this retention gap. That is, there does not appear to be any legislation or policies that limit women from accession or promotion.

In sum, while the first structural hypothesis highlights barriers that women faced prior to 1967, the policies and legislation that specifically limited their accession and promotion within the available career fields were changed or removed by 1976. Any woman who entered the Air Force in 1976 should have faced barriers neither to entry nor to promotion to the general ranks. In fact, the first Air Force woman four-star, General Janet Wolfenbarger, was among those first women cadets who, in 1976, passed beneath the bridge at the US Air Force Academy inscribed with the words "Bring Me Men."[13] As previously mentioned, it takes approximately 24 years to become a general officer. For a woman who began her career at the Air Force Academy, or Reserve Officer Training Course in 1976, the restrictions discussed above would have been absent for over 15 years by the time she was eligible for general officer. Thus, at the present, this hypothesis does not explain the research question. There does not appear to be any legislation or policy limiting accession or promotion that explains the difference in percentage between women and men Air Force general officers.

Structural Hypothesis 2: Legislation or polices limit career opportunities for women officers thus restricting opportunity for promotion.

This second structural hypothesis differs from the first because it refers to job opportunities for women in the Air Force. If women are limited by what careers they can pursue, then their opportunities for promotion are limited. Not all career fields in the Air Force are equally

[13] Meg Jones, "Air Force's first female four-star general assesses a changing military," *Journal Sentinel*, 23 March 2016, http://archive.jsonline.com/news/milwaukee/air-forces-first-female-four-star-general-assesses-a-changing-military-b99693336z1-373287791.html/.

promotable. The Air Force promotes officers in career fields that contribute directly to the core mission of the service, called "operators," who are mostly pilots, in higher numbers than officers in the support career fields. If women are structurally prohibited from serving in those core mission roles, then they would have a fewer opportunities for promotion than men. For example, in 2017 the Air Force promoted 439 active-duty Line of the Air Force colonels. Of those, 257 were operations officers, and 182 were support officers.[14]

Following the Vietnam War, the military began to open more career fields to women. Even though the combat restriction from the 1948 Integration Act remained, the Air Force allowed women to begin pilot training in 1976, and the first women Air Force pilots earned their wings in 1977.[15] These women were restricted to non-combat aircraft and over the course of the next 10 years, positions on all non-combat aircraft were made available to women including electronic warfare, reconnaissance, and command and control aircraft such as the E-3 AWACS.[16] Simultaneously, in 1977 the Secretary of the Air Force, Thomas C. Reed, opened four-man crew missile career fields to women, and by 1985, women were allowed to pursue positions in all intercontinental ballistic missile platforms.[17] During this period, the loosening of job restrictions appears to have had a positive impact on the percentage of women officers as indicated by the chart at Table 1.

Near the end of the Cold War (focus area 1 in Table 4), following the enactment of the National Defense Authorization Act for Fiscal Year 1989, the Air Force eliminated separate job listings for women and

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[14] Stephen Losey, "Air Force promotes 818 officers to major, lieutenant colonel, colonel," Air Force Times, 8 February 2017, accessed on 15 January 2018, https://www.airforcetimes.com/news/your-air-force/2017/02/08/air-force-promotes-818-officers-to-major-lieutenant-colonel-colonel/.
[15] Devilbiss, *Women and Military Service,* 21.
[16] Devilbiss, *Women and Military Service,* 21.
[17] Devilbiss, *Women and Military Service,* 22.

men.[18] Prior to the act, women were limited to specific billets and were not allowed to fill a man's billet. Although there does not appear to be any studies that show the effects of this law, the increase in women field grade officers near the end of the Cold War suggests it was beneficial for women. Furthermore, as identified earlier, the Air Force's experience during Operation Desert Storm seemed to have a positive influence on the role of women in the Air Force.

Leading up to the second focus area (Table 5), around the year 2000, Secretary of Defense Les Aspin issued his 1993 policy opening combat flying positions to women officers.[19] This change in policy opened up a world of opportunities for women because it allowed them to enter the most promotable career fields. Combat pilots have consistently held more than 50 percent of the general officer positions in the Air Force with fighter pilots leading the pack since Vietnam, and bomber pilots before that.[20] Furthermore, as noted in a RAND report, career success is cumulative.[21] The authors of the report identified characteristics that predicted promotion, and being a fighter pilot is an early indicator of future success.[22] But, since it takes 24 years to make a general, the results of Secretary Aspin's policy is only beginning to appear in the general officer corps. That said, there have only been two female combat pilot general officers, Brigadier General Jeannie Leavitt and Brigadier General Kristin Goodwin to date.

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[18] Senate, *National Defense Authorization Act for Fiscal Year 1989*, 1987-1988, 100th Cong. 1st sess., 1988, S.2355; United States General Accounting Office, *Women in the Military: Air Force Revises Job Availability but Entry Screening Needs Review*, United States General Accounting Office, August 1991, 1.
[19] Les Aspin, "Women in Combat," C-Span (transcript), 28 April 1993, https://www.c-span.org/video/?40217-1/women-combat.
[20] Jeffery Smith, *Tomorrow's Air Force*, (Bloomington, IN: Indiana University Press, 2014),150-152.
[21] Nelson Lim, Louis T. Mariano, Amy G. Cox, David Schulker, Lawrence M. Hanser, *Improving Demographic Diversity in the U.S. Air Force Officer Corps*, (Santa Monica, CA: RAND Corporation, 2014), 45.
[22] Nelson Lim, et al., *Improving Demographic Diversity in the U.S. Air Force Officer Corps*, 45.

The third area of interest (Table 6), 2012 to the present, saw some significant changes for women officers. but no legislation or policy changes that limited their opportunities for promotion can explain the decrease in women general officers during the period. In fact, by 1993, over 99 percent of Air Force career fields were open to women, and in 2015, Secretary of Defense Ash Carter opened all of them to women.[23]

The same cannot be said for the fourth focus area (Table 7) observation, as there is a clear retention gap for women between the ranks of captain and major and again between major and lieutenant colonel. As indicated in Table 1, the gap is a long-term trend that appears to have taken hold in the 1990s. That is, women were limited to career fields that were not as promotable as career fields available to men. While those limitations might explain the gap during the 1980s and perhaps the 1990s, they do not explain why the gap persists today. For example, in 2017, the Air Force promoted to lieutenant colonel those commissioned in 2002. The 1993 combat restriction, and certainly the earlier 1989 job listing policy should have no effect on these officers.

In sum, the second structural hypothesis, that legislation or policies limit career opportunities for women officers thus limiting opportunity for promotion, does have some merit because women were prohibited from entering the most promotable career fields until 1993. This makes 2017 the first year these women are eligible for promotion to brigadier general, but there are only two combat pilot women generals. That said, there have been significant numbers of women generals as evident by the increase in brigadier generals in 2008. In fact, in 2008 the percentage of women brigadier general officers was about equal to the 14 percent of woman second lieutenants 24 years earlier in 1984. Why

[23] Cheryl Pellerin, "Carter Opens All Military Occupations, Positions to Women," US Department of Defense, 3 December 2018, https://www.defense.gov/News/Article/Article/632536/carter-opens-all-military-occupations-positions-to-women/.

have the numbers of women general officers been in relative decline? The next chapter will attempt to provide answers by examining the cultural hypotheses.

Chapter 4

Cultural Hypotheses

The cultural hypotheses attempt to address the research question by insisting that cultural gender norms explain the lack of women Air Force generals. The first cultural hypothesis is that women are somehow deterred from joining the Air Force, and the women who do join the officer ranks are more likely to pursue career fields that are more acceptable to cultural gender norms. In short, women do not pursue career fields central to the Air Force mission; therefore, they have less opportunity for promotion. The second cultural hypothesis asserts cultural gender norms reinforce women's role as primary familial caregivers and that once they have children, they tend to leave the Air Force in search of family stability. In addition, some argue that Air Force women are likely married to other Air Force officers, and at a certain point, they must make a decision to support one career at the expense of the other in order to gain stability for the family.[1] The following discussion tests each cultural hypothesis with emphasis on the focal points identified at Table 3.

Cultural Hypothesis 1: Cultural norms dissuade women from joining the military in general and steer those in the military toward career tracks more amiable to culturally accepted gender norms.

Before moving on to the focal areas, two primary cultural gender norms must be identified. The first is that femininity is not typically associated with war; war and the armed services are culturally masculine roles. Goldstein supports this claim by examining the historical role of women in war and asserting that this is a cross-cultural gender norm.[2] Not only do most cultures leave the fighting to men, they further

[1] In discussion with the author's peers.
[2] Goldstein, *War and Gender*, 406.

reinforce this norm by "toughening up" their young men, establishing a normative link between war and manhood.[3] The second cultural norm is subordinate to the first. Because war is a masculine enterprise, the role of women in the armed services is traditionally limited to administrative and support occupations. A recent RAND study highlighted this phenomenon by identifying that the majority of Air Force women fill administrative, engineering, intelligence, and supply/procurement officer career fields, while men continue to dominate tactical career fields.[4] Since, as previously discussed, there are no structural barriers prohibiting women from pursuing those career fields central to the Air Force mission, then the first cultural hypothesis offers a reasonable explanation because culturally, women are less likely to join the military, and when they do, they are more likely to pursue less promotable career fields.

After 1974, in addition to a requirement to fill positions in an all-volunteer force, Major General Jeanne Holm credits the initial influx of women officers to a "metamorphosis from 'typewriter soldiers' to 'mainstream military'" indicating a shift in cultural norms.[5] However, she identifies a failure of recruiters to explain new career options available for women after 1967 and that women actually preferred traditional roles because they would be more accepted culturally and have better adaptability to subsequent civilian careers.[6] Since women Air Force officers were competing against their male counterparts, Holm noted they were subject to a biased and sexist promotion system. The 1978 promotion results indicate women were half as likely as men to be promoted to the rank of major.[7] By mentioning gender bias and sexism,

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[3] Goldstein, *War and Gender*, 406.
[4] Beth J. Ash, Trey Miller, Gabriel Weinberger, *Can We Explain Gender Differences in Officer Career Progression,* (Santa Monica, CA: RAND Corporation, 2016), 29-32.
[5] Holm, *Women in the Military*, 274.
[6] Holm, *Women in the Military*, 274.
[7] Holm, *Women in the Military*, 276.

she suggests there is something more troubling at play than the two aforementioned cultural norms.

As identified in Table 4, around the first focus area, there was a rise in the percentage of field grade officers following the end of the Cold War. They proved their worth in combat and paved the way for future opportunities in the combat Air Force during desert storm. Here, it appears, was the beginning, or perhaps a continuation, of the cultural shift from Holm's "typewriters to mainstream military." The first cultural hypothesis, however, does not explain the increase in the percentage of field grade officers following the Cold War as identified in the second focus area (Table 5) because the cultural norms were changing to accept more women officers.

If cultural norms were indeed changing to accept more women officers, then the increase in the percentage of women general officers around the year 2000, as identified in the third focus area (Table 6), represents a continuation of that change but does not explain the decrease in O-7s and O-8s over the past six years. Rather, one would expect to see an overall increase of women in those ranks. Perhaps the first cultural hypothesis helps explain this decrease. The first cultural norm that suggests women are less likely to join the military to begin with is not applicable because, as indicated by the steady increase of women lieutenants since the mid-1970s, women are indeed joining the Air Force in non-trivial numbers. It is important to note that for the last decade and a half, women have comprised only about one to two percent of total fighter pilots, and since fighter pilot is the most promotable career track to general officer, women are certainly disadvantaged.[8]

Lastly, the retention gap at the O-4 and O-5 grades (fourth focus area at Table 7) is not explained by the first cultural hypothesis. The

[8] United States Air Force, Interactive Demographic Analysis System, accessed on 15 May 2017, https://access.afpc.af.mil/.

percentage of lieutenants and captains continues along an increasing trend, suggesting that more women are seeking officer commissions in the Air Force. Historically, women line officers were promoted to field grade ranks at higher percentages than men in all promotion zones.[9] For example, in 2015, women were promoted to lieutenant colonel below the zone at 4.3 percent as compared to men at 4.12 percent.[10] Thus, it appears the gaps at the O-4 and O-5 grades are indeed retention gaps, not promotion gaps. This is important to note because in the 24-year to general officer construct, general officers must have been promoted below the zone to meet the timeline. Instead, it appears that being promoted below the zone is not a problem for women. Rather, the problem seems to be that women are not staying in.

In sum, it appears that the first cultural hypothesis might explain why there is a lower percentage of women officers in general, but it does not necessarily explain why there are fewer women general officers. Interestingly, the low percentage of women fighter pilots has not been a significant factor in the percentage of women general officers. The rise of women brigadier generals that began in the mid-2000s reached a peak of about 14 percent in 2008. 24 years earlier, women made up about 15 percent of second lieutenants, none of whom were fighter pilots. Moreover, there are currently no women fighter pilot three or four-star generals, yet they make up 15 and 12 percent of those ranks, respectively. Thus, it appears that while women may pursue support career fields, that has not necessarily been a hindrance to their appointment as general officers.

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[9] Office of Diversity Management and Equal Opportunity, "Officer Promotion," accessed on 15 May 2018, http://diversity.defense.gov/LinkClick.aspx?fileticket=suGljCE8FSQ=&portalid=51

[10] Office of Diversity Management and Equal Opportunity, "Officer Promotion".

Cultural Hypothesis 2: Women have traditionally performed the primary familial caregiver role and thus they choose to leave the Air Force in search of family stability.

It was noted above that women appear to leave the Air Force at higher percentages than men, especially at the ranks of captain and major as indicated by the retention gaps between O-3 to O-4 and O-4 to O-5, thereby lowering the pool of potential women candidates for promotion to general officer. The second cultural hypothesis seeks to explain these retention issues by claiming that women, as the primary familial caregivers in American culture, choose to leave the Air Force so they can better care for their children. There is no question that women in America are indeed the primary familial caregivers. In her book *Lean In*, Facebook COO Sheryl Sandberg purports that in recent decades, women have made more progress in the workforce than at home. While she acknowledges that men are starting to take on more household responsibilities, women are still far from parity.[11]

The same can be said for women in the Air Force. In fact, many of the AU student papers on gender topics highlight this issue. Lieutenant Colonel Laura DiSilverio concluded that women leave the Air Force primarily to spend more time with families, and Major Alisa Ricks linked this tendency directly to the lower percentage of women general officers.[12] These women were specifically writing about women to understand their motivations. However, in his SAASS thesis on why the Air Force is losing pilots, Major Brian Stahl surveyed Air Force fighter, bomber, and remotely piloted aircraft pilots in a gender-neutral survey

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[11] Sheryl Sandberg, *Lean In: Women, Work, and the Will to Lead*, (New York, NY: Alfred A. Knopf, 2013),106,107.

[12] Luara A. DiSilverio, "The Air Force, Women Officers, and the Need for Transformation." Fairchild Paper, (Maxwell AFB, AL: Air University Press, 203), 39; Ricks, Alisa C., "Women in Senior Leadership in the U.S. Air Force: Why so Few at the Top, and What Can Be Done to Shrink the Gap?" (Maxwell AFB, AL: Air Command and Staff College, 2007),
25.

and concluded that officers leave the military for family stability.[13] If one assumes his results are based upon accurate representations of the percentages of men and women in these career fields, his conclusions are overwhelmingly male. Thus, it appears that both men and women Air Force officers leave the military for same reasons. This is not a new concept. Over time, AU student papers on gender-neutral retention issues consistently cite family stability as the biggest contributing factor to officer retention. For example, in a 1999 student paper, Majors Patrick Malackowski and Keesey Miller link the post-Cold War high operations tempo directly to decreased family stability and officer separations.[14] Though women and men may leave for the same reasons, the fact remains that women officers leave at a higher rate, thus decreasing the pool of potential women general officers.

That said, around 1973, the Air Force made a lot of progress in attempting to make women's family life more compatible to military service. For example, prior to 1973, women service members could not claim spouses or children as dependents unless they could prove that they were indeed dependent upon the woman service member for over one-half of their support.[15] In 1973, the Supreme Court deemed the rule unconstitutional following a 1970 lawsuit filed by Air Force First Lieutenant Sharron Frontiero, who was forced to live off base out of pocket with her civilian husband.[16] Even then, women were still required to seek a waiver for involuntary separation following the birth or adoption of a child until the DoD changed the rule in 1975.[17] Major General Jeanne Holm is careful to note that even though the rules had changed, women continued to serve in a state of limbo as the military

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[13] Stahl, Brian T. "Blunting the Spear: Why Good People Get out." Drew Paper, No. 24, (Maxwell AFB, AL: Air University Press, 2014), 129.
[14] Patrick C. Malackowski and Keesey R. Miller, "Retention Problems and the USAF Approach," (Maxwell AFB, AL: Air Command and Staff College), 10,11.
[15] Holm, *Women in the Military*, 291
[16] Holm, *Women in the Military*, 291
[17] Holm, *Women in the Military*, 301

services frequently revisited the topic and even considered a return to the involuntary separation policy in 1981.[18] Based upon Holm's recollection, it seems plausible that women officers may have left the Air Force to serve as primary familial caregivers, but it would have been against their will.

The first focus area depicted at Table 4 identifies an increase in field grade officers following the end of the Cold War. As previously mentioned, the results of women's performance in Desert Storm were largely responsible for the lifting of many restrictions barring women from service. The war also alleviated negative concerns about women's ability to deploy and take care of their families. Not only did mothers and wives deploy, they did so with a better record than their male counterparts. A congressional investigation following the war found that the least likely cause of a woman's early return from their Gulf deployment was a deficient child care plan, and that women were less likely than men to be sent home for family hardship.[19] The second cultural hypothesis does not support these findings; in fact, it implies the opposite.

Moreover, the increase in field grade officer ranks following the end of the Cold War (second focus area at Table 5) and the experiences of Desert Storm suggest that more women were staying in because they had proved both their worthiness in combat and their ability to successfully manage family life. The same conclusion can be made for the third focus area, the increase in women general officers in the early 2000s. The women promoted to general officer during this period would have been majors and captains during Desert Storm. Thus, their promotions were a product of their own success during the war. For example, General

[18] Holm, *Women in the Military*, 303
[19] Linda Bird Franke, *Ground Zero: Gender Wars in the Military*, (New York, NY: Simon and Schuster, 1997), 147.

Lori Robinson was a captain at Headquarters Pacific Air Forces during Desert Storm and she was promoted to brigadier general in 2008.[20]

In a 2014 RAND study, *Improving Demographics in the US Air Force Officer Corps,* researchers noted that the difference between the retention of women and men is largest at the 20-year point.[21] Once vested in retirement, women officers are more likely to retire than stay in and vie for promotion. This may explain the third focus area (Table 6), the decrease in brigadier and major generals around 2012. By then it appears that the wave of promotions resultant from women's efforts during Desert Storm came to an end and there is a noticeable stagnation in the percentages of woman field grade officers; the lines at Table 1 appear to level off. The 2014 RAND report sheds some light on this because the data used is from 2001 to 2011, around the same period as the level off. If women were more likely than men to retire during this period, then the stagnation and subsequent decrease in general officers makes sense. The question is why, and without supporting data, the researchers attribute the trend to the second cultural hypothesis stating "women are more often the primary caretakers of their children than men are."[22] As evident in the discussion above, this does not appear to be the determining factor in retention, and the RAND researchers acknowledge that there also may be "other, unobserved factors."[23]

The last focus area listed at Table 7 is the apparent retention gaps at the grades O-4 and O-5. As previously mentioned, AU student papers lead one to believe that men and women leave the Air Force for the same reason, family stability. In fact, the 2014 RAND study supports this notion in part by noting that women and men who otherwise share

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[20] United States Air Force, "Biographies," accessed on 15 May 2018, http://www.af.mil/About-Us/Biographies/Display/Article/108119/general-lori-j-robinson/.
[21] Lim, et al, *Improving Demographic Diversity in the US Air Force Officer Corps*, 30.
[22] Lim, et al, *Improving Demographic Diversity in the US Air Force Officer Corps*, 32.
[23] Lim, et al, *Improving Demographic Diversity in the US Air Force Officer Corps*, 35.

similar demographics such as career field, marital status, and number of dependents leave at the same rates.[24] However, this only holds true for younger and older officers. Between their fifth and eleventh year of service, women leave at higher rates regardless of demographic characteristics. These year groups coincide with captains and majors, thus reinforcing the retention gaps at O-4 and O-5. As was the case above, the RAND researchers tend to attribute this to women being the primary familial caregivers. Thus, the counter-argument is the same as above. Women and men leave for the same reasons. If women are leaving at a higher rate than men, "other, unobserved factors" must be at play.[25]

Some purport these other factors are largely due to the assumption that most women military officers are married to other military officers (mil-to-mil). Thus, at some point, one of the spouses will sacrifice his or her career for family stability. Furthermore, most women in the United States are younger than their spouses, their spouses usually outrank them, and it makes more economic sense for the woman to separate.[26] If one assumes male officers generally outrank their military spouses, then the only testable statement in the argument is whether most women officers are indeed married mil-to-mil. Air Force Personnel Center data discounts this claim. Fewer than half of women officers are married to service members, including both active duty and National Guard and Air Force Reserve spouses.[27] By contrast, only about ten percent of men are married mil-to-mil. Therefore, while the claim is discounted by the "most" qualifier, there is still a 40 percent difference between women and

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[24] Lim, et al, *Improving Demographic Diversity in the US Air Force Officer Corps*, 32.
[25] Lim, et al, *Improving Demographic Diversity in the US Air Force Officer Corps*, 32.
[26] Kim Parker and Renee Stepler, As U.S. marriage rate hovers at 50%, education gap in marital status widens, Pew Research Center, accessed on 15 May 2018, http://www.pewresearch.org/fact-tank/2017/09/14/as-u-s-marriage-rate-hovers-at-50-education-gap-in-marital-status-widens/. Census data shows a historical trend for women to be roughly two years younger than men at first marriage.
[27] United States Air Force, Interactive Demographic Analysis System, accessed on 15 May 2017, https://access.afpc.af.mil/.

men who could potentially find themselves in a situation where one officer decides to separate for family stability. If indeed officer spouses in mil-to-mil families are deciding to leave, a higher percentage of women would be faced with this decision than men. However, there is no data available to confirm whether women tend to leave more than men in this situation.

In sum, the second cultural hypothesis does not fully explain why there is a lower percentage of women general officers. Those who make this claim seem to view women officers in a vacuum. Women officers leave the Air Force for family stability, but men leave for the same reason. Officer retention in general is closely related to family happiness. This hypothesis serves as an easy assumption to make because it is difficult to disprove. The RAND researchers knew that women are the primary family caretakers in America, and thus assumed, without evidence, that they leave to take care of their families only giving slight mention to the possibility of "other observed factors."[28]

[28] Lim, et al, *Improving Demographic Diversity in the US Air Force Officer Corps*, 32.

Chapter 5

Gendered Organizations

Gender and People

It is common for people to use the terms gender and sex interchangeably, suggesting that there is no difference between one's gender and biological sex. Sex is a physical, biological trait defined by the terms male or female, while gender is a socially constructed idea defined by the terms masculine or feminine.[1] Essentially, gender is a list of physical and personality traits defining what a society holds salient as masculine or feminine and those traits become social expectations for what it means to be a man or woman.[2] Men are expected to act masculine, and women are expected to act feminine. One need not look further than American pop culture to support this claim. Advertisements, television, movies, and novels all tend to magnify the stereotypical masculine man and feminine woman.

That said, gender is not a continuum of traits ranging on a scale from feminine to masculine. Rather, they are two independent categories of traits, and either sex can possess any combination of masculine and feminine traits.[3] People tend to confuse gender and sex because in general, men tend to possess more masculine traits, and women tend to have more feminine traits.[4] Using hyperbole, Alvesson and Billing name this idea the "cocktail view on gender. In the average male, there is

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[1] Laura Sjoberg, *Gender, War, and Conflict*. (Cambridge, UK: Polity Press, 2014), 5-8.
[2] Mats Alvesson, and Yvonne Due Billing, *Understanding Gender and Organizations*, (Thousand Oaks, CA: SAGE Publications, 1997), 22.
[3] S. L. Bem, "The measurement of psychological androgyny," *Journal of Consulting and Clinical Psychology*, vol. 42, (Washington DC: American Psychological Association, 1974),155–162.
[4] Oriane Sarrasin, Eric Mayor, and Klea Faniko, "Gender Traits and Cognitive Appraisal in Young Adults: The Mediating Role of Locus of Control," *Sex Roles*, vol. 70, (New York, NY: Spronger, 2014), 123.

typically a lot of gin and not much vermouth while the female prototype includes primarily the latter with just a few drops of the stronger stuff."[5]

Gender and Organizations

If gender is a socially constructed list of traits defining masculinity and femininity, then it is reasonable that one could anthropomorphize a non-human entity in the same way. Dana Britton lists three common ways feminist scholars describe gendered organizations. The first is that "ideal-typical" bureaucratic organizations are inherently gendered masculine.[6] In this case, gender is an integral part of organizational hierarchy where women typically reside at the lower levels.[7] Second, organizations can be gendered based upon the predominant sex.[8] An organization with a higher percentage of women than men would be considered feminine, and the opposite, masculine. This is the case even when one sex occupies senior leadership positions while the opposite makes up the lower echelons. For example, primary schools are considered feminine organizations, and while administrators are predominantly men, teachers are predominantly women and constitute the majority sex in primary schools. Third, the most common interpretation of gendered organization theory is that organizations and occupations are ideologically and symbolically conceived as gendered by its members and the prevailing culture.[9] Organizations are masculine or feminine because their members and the culture at large assigns them a gender.

This member-assigned gender interpretation is most useful for the purposes of this thesis because it suggests that one can identify the gender of an organization by its artifacts and valued traits. In addition,

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[5] Alvesson and Billing, *Understanding Gender and Organizations*, 85.
[6] Dana M. Britton, "The Epistemology of the Gendered Organization," *Gender and Society,* vol. 14, no. 3, (Los Angeles, CA: SAGE Publications, 1 June 2000), 419.
[7] Joan Acker, "Hierarchies, Jobs, Bodies: A Theory of Gendered Organizations," *Gender and Society,* vol. 4, no. 2, (Los Angeles, CA: SAGE Publications, 1990), 148-149.
[8] Britton, "The Epistemology of the Gendered Organization," 420.
[9] Britton, "The Epistemology of the Gendered Organization, "426.

it can explain Britton's first two descriptions of gendered organizations listed above. The masculine nature of bureaucratic organizations can be explained by the valued traits of its members. If members value rank and order, and these are masculine traits, then it makes sense that bureaucracies are conceived as masculine considering their hierarchical nature. In addition, it makes sense that masculine organizations would have more men than women in both leadership and lower echelon roles since the male sex is associated with masculinity.

Feminist scholars identify problems that are associated with an organization's gender as a social construct. Joan Acker asserts that a gendered organization is one in which "advantage and disadvantage, exploitation and control, action and emotion, meaning and identity are patterned through and in terms of a distinction between male and female, masculine and feminine."[10] Moreover, the gender of an organization implies that the traits and behaviors associated with its corresponding gender are generally accepted while those of the opposite gender are not.[11] In a feminine organization, masculine behavior can be questionable and threatening, and the same is true for femininity in a masculine organization.

How to Identify Gender Through Artifacts

Having discussed gender and gendered organizations, the next step is to identify gender traits and artifacts. Most scholars agree that masculine traits are predominantly instrumental while feminine traits are largely expressive.[12] Therefore, masculinity is associated with task-oriented traits while femininity is associated with traits related to human

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[10] Acker, "Hierarchies, jobs, bodies: A theory of gendered organizations," 146.
[11] Marie F. Jones, "Academic Libraries as Feminine and Feminist Models of Organization," PhD diss, (Johnson City, TN: East Tenessee State, May 2008), accessed on 15 May 2018, http://dc.etsu.edu/etd/1920, 202, 214.
[12] J.T. Spence, "Gender-related traits and gender ideology: Evidence for a multifactorial theory"' *Journal of Personality and Social Psychology*, 64(4) (Washington, DC: American Psychological Association, 1993), 624-635.

relationships described as “other-oriented” traits.[13] Table 8 lists examples of masculine and feminine traits. The list is not complete, there are plenty of gender traits not listed, but it serves to illustrate the difference between feminine and masculine gender traits. Artifacts are observable elements indicative of organizational culture, and they can be tangible, intangible, obvious, or subtle. In this case, artifacts can be helpful in determining which gender traits are valued in an organization. Some examples of artifacts that point to an organization’s gender include mission-related statements, policies, dress and appearance norms, uniforms, facilities, artwork, organizational structure, and even inside jokes. These artifacts can then be cross-examined with the traits listed at Table 8 in an attempt to identify an organization’s preferred gender traits.

[13] Bem, “The measurement of psychological androgyny,” 155–162.

Table 8: Examples Masculine and Feminine Traits

Masculine Traits	Feminine Traits
Dominance	Nurturance
Exclusiveness	Inclusiveness
Instrumental	Expressive
Self-centered	Compassion
Competitive	Collaborative
Assertive	Receptive
Task-oriented	Other-oriented
Rational	Intuitive
Independence	Interdependence
Mono-task	Multi-task
Active	Patient
Spatial	Temporal
Strong	Weak
Rebellious	Accepting
Hard	Soft
Tough-skinned	Sensitive
Non-emotional	Emotional

Source: Author's Original Work

Dress Code Example

Consider dress and appearance norms for example. Kirsten Dellinger's article on occupational and organizational dress and appearance norms suggests that an organization's formal or informal dress code is directly related to an organization's valued gender traits.[14] She examines two extreme examples of magazine companies: a men's pornographic magazine that typifies a masculine organization and a feminist magazine that typifies a feminine organization. The editor dress code at the men's magazine suggests that men and women should dress in such a way that conforms to socially accepted gender norms. Quoting one employee, Dellinger explains how masculine organizations value dominance and exclusiveness through the masculine organization's dress code: "They [male leadership] specifically said that men were to look a certain way and women something else…women felt like they were singled out…they had to look pretty."[15]

In contrast, the feminine organization encouraged expressiveness and inclusiveness: "In a context where women are not appraised by men for their looks, fashion and the expression of sexuality through appearance take on a different meaning."[16] At the feminist magazine, women editors were encouraged to wear clothing as an expression of themselves regardless of the gendered nature of the clothing; it was completely acceptable for women to abstain from wearing sexually expressive clothing, but it was equally acceptable for women to wear the same. In this case, Dellinger asserts that the inclusive dress code was an attempt to flatten the hierarchy of the organization by encouraging "disclosure of personal information" such as dress and appearance,

[14] Kirsten Dellinger, "Wearing Gender and Sexuality 'On Your Sleeve'," *Gender Issues,* vol. 20, no. 1, (New York, NY: Springer Publishing), 3-24.
[15] Dellinger, "Wearing Gender and Sexuality 'On Your Sleeve'," 18.
[16] Dellinger, "Wearing Gender and Sexuality 'On Your Sleeve',"17.

which would, in turn, lead to more serious discussions about topics like politics and sexual identity.[17]

How to Identify Gender through Occupation: Sex Typing

Furthermore, Dellinger identifies the importance of these artifacts not only in terms of gendered organizations but also gendered occupations, noting that where one works is just as important as what one does.[18] The tendency to assign gendered traits to specific occupations is referred to as "sex typing".[19] The term sex in this case is misleading because it is actually referring to the cultural assignment of gender traits rather than biological sex. Certain occupations tend to be associated with certain genders. Since organizations typically consist of one core mission-related occupation, sex typing is applicable to both the core occupations as well as the organization itself. For example, in a fire department, the core occupation is the firefighter, thus the organizational traits and artifacts that explain the gendered nature of a fire department originate from the firefighter occupational culture. Another way to look at it is to view the core occupational gender as a strong component of the organizational gender.

The idea of sex typing is important for two reasons. First, if the core occupation of an organization is gendered, then the organization is likely to value the same gender traits. The firefighter occupation is gendered masculine, thus fire departments value masculine traits. Second, the gendered nature of the organization's core occupation will likely represent the dominant biological sex of the organization's members. The firefighter occupation is gendered masculine; thus, firefighters are predominantly male. The idea of sex typing was visited earlier in this thesis by identifying the tendency for women to fill positions in the Air Force that correspond to sex-typed occupations such

[17] Dellinger, "Wearing Gender and Sexuality 'On Your Sleeve'," 16
[18] Dellinger, "Wearing Gender and Sexuality 'On Your Sleeve'," 23
[19] Alvesson and Billing, *Understanding Gender and Organizations*, 90

as administrative and support related jobs. However, in the context of gendered organizations, the core, mission-related occupation of the organization is of greater importance. Indeed, there are administrative and support related positions in fire departments, but they do not directly accomplish the core mission of a fire department, which is to fight fires.

Using the ideas presented above, Table 9 provides a framework for how to identify the gendered nature of an organization. First, the language of organizational statements such as slogans, and mission statements cue an observer to an organization's gender tendencies. Next, as exemplified by the dress norms example, artifacts point to an organization's valued gender traits. Finally, by identifying the core occupation of an organization, an observer can make inferences about the likely biological sex composition of an organization as well as its valued gender traits. Each of the above three identifiers can be cross-examined using the gendered traits chart listed at Table 8. By comparing the number of masculine traits and feminine traits, one can make a reasonable assumption about the gendered nature of an organization. For example, if an organization has more feminine traits than masculine, then the organization is likely feminine.

Table 9: Gendered Nature of Organization X

Organization X	Masculine Indicators	Feminine Indicators
Organizational Statements		
Organizational Structure		
Artifacts		
Core Occupation		
Gender		

Source: Author's Original Work

Feminine Organization: Planned Parenthood

An example of a feminine organization is Planned Parenthood. In fact, Alvesson and Billing further categorize women's health organizations as feminist organizations, created by women for women.[20] They explain that feminine organizations hold to feminine principles and values, and it is an organizational goal to build and sustain the feminine organizational structure listed at Table 9.[21] Easily accessible artifacts include information gleaned from the organization's website, which lists the organization's slogan, mission statement, vision, and goals listed on Table 10.[22] Themes are largely expressive and include caring, diversity, inclusion, community, family, relationships, and education.

[20] Alvesson and Billing, *Understanding Gender and Organizations*, 116.
[21] Alvesson and Billing, *Understanding Gender and Organizations*, 116.
[22] www.plannedparenthood.org

Table 10: Planned Parenthood Organizational Statements

Slogan	Care. No matter what.
Mission Statement	Planned Parenthood aims to provide trusted community health care, inform and educate the community, lead the reproductive health and rights movement, and advance global health.
Vision and Values	Planned Parenthood believes in the individual fundamental right of people throughout the world to manage their reproductive health, regardless of income, marital status, race, ethnicity, sexual orientation, age, national origin, or residence. Respect, inclusion and diversity in all aspects of our organization are essential to our well-being. We believe reproductive self-determination must be voluntary and we honor the right to privacy. We further believe that such self-determination enhances quality of life and helps build strong family relationships.
Goals	To provide comprehensive reproductive and complementary health care services in settings that preserve and protect the essential privacy and rights of each individual
	To advocate public policies that guarantee these rights and ensure access to such services
	To provide educational programs that enhance understanding of individual and societal implications of human sexuality
	To promote research and the advancement of technology in reproductive health care and encourage understanding of their inherent bioethical, behavioral, and social implications

Source: Adapted from Planned Parenthood, "Who We Are," Planned Parenthood, Accessed on 15 March 2018, https://www.plannedparenthood.org/about-us/who-we-are.

Rather than an organizational chart, the leadership section of the Planned Parenthood website lists names and biographies of senior leadership, and the annual report lists names of board persons. The national organization is led by a president, chair, nine executives and a few national spokespeople. There are 650 local offices distributed nationwide and include some global affiliates with an operating budget of nearly two-billion dollars.[23] With such a large number of distributed offices and the rather small leadership pool, the organizational structure is bottom-heavy, indicative of a horizontal organization with decentralized decision authority.

In addition, the pictures on the website are also indicative of the organization's values. Most of the pictures are of women of diverse ethnicity; some include families and children, and a few are of presumable gay couples. The people in the photographs are mostly wearing lab coats and casual clothing. Furthermore, the 2016-2017 annual report is a pink and purple themed document with many photographs of women and men at demonstrations dressed in pink with pink signs. The pictures clearly indicate that Planned Parenthood values diversity, women's rights, LGBTQ rights, advocacy, education, relationships, and family. Additionally, in a video message from the President, Cecile Richards states that Planned Parenthood "fight[s] for a world where every woman can live her best life."[24]

The Planned Parenthood website lists the core occupations as nurses, doctors and educators, all of which are sex-typed feminine.[25] Nursing is a historically feminine occupation. While doctors are typically

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[23] Planned Parenthood, "Annual Report," Planned Parenthood, Accessed on 15 May 2018, https://www.plannedparenthood.org/uploads/filer_public/d4/50/d450c016-a6a9-4455-bf7f-711067db5ff7/20171229_ar16-17_p01_lowres.pdf.
[24] Planned Parenthood, "Who We Are," Planned Parenthood, Accessed on 15 May 2018, https://www.plannedparenthood.org/about-us/our-leadership/cecile-richards
[25] Planned Parenthood, "Who We Are," Planned Parenthood, Accessed on 15 May 2018, https://www.plannedparenthood.org/about-us/who-we-are/mission

male, women's health doctors such as obstetricians and gynecologists are sex-typed feminine.[26] The educators at Planned Parenthood specialize in sex education, and sex educator is a feminine sex-typed occupation.[27] In sum, as viewed through the framework discussed above, Planned Parenthood is a feminine organization. Table 11 summarizes the findings.

Table 11: Planned Parenthood Gender

Planned Parenthood	Masculine Indicators	Feminine Indicators
Organizational Statements		Caring, Diversity, Community, Family, Relationships, Sex Education
Organizational Structure		Horizontal, decentralized
Artifacts		Diversity, Women's Rights, Advocacy, Sex Education, Relationships, Family
Core Occupation		Nursing/Women's Health Doctors, Sex Educators
Gender	Feminine	

Source: Author's Original Work

Masculine Organization: Massachusetts Institute of Technology

An example of a masculine organization is the Massachusetts Institute of Technology (MIT). In fact, most research universities are masculine.[28] Science, technology, engineering, and math (STEM) universities have a higher likelihood of being masculine because the

[26] Lyndra Vassar, "How medical specialties vary by gender," American Medical Association, 18 February 2015, https://wire.ama-assn.org/education/how-medical-specialties-vary-gender

[27] Rutgers Answer Blog, "Wanted: A Few (More) Good Men to Teach Sex Ed," Rutgers, 1 October 2010, http://answer.rutgers.edu/blog/2010/10/01/wanted-a-few-more-good-men-to-teach-sex-ed/.

[28] Shelley M. Park, "Why Shouldn't Women's Work Count?" *The Journal of Higher Education*. Vol 67 No 1, (Oxford, UK: Taylor and Francis Ltd., January – February, 1996),74; Margaret E. Crowder, "The University as a Gendered Organization: Effect on Management Type, Climate and Job Satisfaction," *Dissertations*, (Bowling Green, KY: Western Kentucky University Press, 2012), 43.

STEM fields are historically male-dominated.[29] Furthermore, universities are typically hierarchical organizations that tend to place high emphasis on research rather than teaching and service.[30] Academic research is directly related to the prestige of the professor as well as the university, and prestige is a masculine value. Like Planned Parenthood, artifacts are easily accessible from the MIT websites and include organizational charts, policies, organizational statements, reporting lists, and annual reports.

Beginning with organizational statements listed on Table 12, themes are mostly instrumental, and include terms such as knowledge, education, scholarship, study, discipline, self-reliance, innovation, creativity, and passion. Compared to Planned Parenthood's organizational statements, MIT's statements are indeed more masculine in tone. For example, MIT's motto is "Mens et Manus" (Latin for Mind and Hand) versus Planned Parenthood's slogan "Care. No matter what." MIT's motto is instrumental while Planned Parenthood's slogan is expressive in tone.

[29] Crowder, "The University as a Gendered Organization: Effect on Management Type, Climate and Job Satisfaction," 43
[30] Park, "Why Shouldn't Women's Work Count?" 74.

Table 12: MIT Organizational Statements

Motto	Mens et Manus (Mind and Hand)
Mission Statement	The mission of MIT is to advance knowledge and educate students in science, technology, and other areas of scholarship that will best serve the nation and the world in the 21st century.
Objectives	The Institute is committed to generating, disseminating, and preserving knowledge, and to working with others to bring this knowledge to bear on the world's great challenges. MIT is dedicated to providing its students with an education that combines rigorous academic study and the excitement of discovery with the support and intellectual stimulation of a diverse campus community. We seek to develop in each member of the MIT community the ability and passion to work wisely, creatively, and effectively for the betterment of humankind.
	Education: It is the purpose of the educational program to develop in each student that mastery of fundamentals, versatility of mind, motivation for learning, and intellectual discipline and self-reliance that is the best foundation for continuing professional achievement; to provide a liberal as well as professional education so that each student acquires a respect for moral values, a sense of the duties of citizenship, and the basic human understanding and knowledge required for leadership; and thereby to send forth men and women of the highest professional competence, with the breadth of learning and of character to deal constructively with the issues and opportunities of our time.
	Research and Scholarship: The Institute seeks through research and reflection to extend the boundaries of knowledge and the horizons of the human intellect. In so doing, it aims to create an atmosphere of intellectual excitement, a climate of inquiry and innovation in which each student develops a consuming interest in understanding for its own sake.

Source: Adapted From MIT, "MIT Policis and Procedures: A Guide for Faculty and Staff Members," MIT, accessed 29 April 2018, https://policies-procedures.mit.edu/the-institute/mission-and-objectives.

MIT's website also includes a description of the organizational structure of MIT. MIT's organizational chart illustrates a multidivisional structure, which is indicative of a hierarchical organization intended to manage complexity, reduce span of control, increase specialization and to preserve organizational secrets.[31] The organizational chart is accompanied by an extensive reporting list, indicating a formal,

[31] Charles Kadushin, *Understanding Social Networks: Theories, Concepts, and Findings*, (Oxford, NY: Oxfod University Press, 2012), 97.

authoritative communication process. In addition, the MIT policies and procedures webpage provides an extensive list of the same, indicating a rules-based, authoritative organization.[32]

One section of the policies and procedures is devoted to the tenure process. The tenure policy is of particular importance because it is the means for promotion in academic institutions. In her research, Shelley Park points to university tenure process as evidence of masculine values.[33] The tenure process, she asserts, is based upon a professor's research accomplishments and ability to win grants rather than teaching and service responsibilities. She claims that women are disadvantaged for tenure consideration because they tend to "take these responsibilities seriously" thus limiting their capacity for garnering prestige for the university. Furthermore, women are more likely than men to engage in extramural activities like committee and service work that are weighted less for tenure consideration.[34] This makes sense because women are more likely to value teaching and service as feminine values.

Like Planned Parenthood, MIT's websites offer clues about the university's gendered nature. While the images on the Planned Parenthood website were of mostly people, the images on MIT's websites consist primarily of things, and fewer people. For example, the homepage of MIT's Civil and Environmental Engineering website depicts a landscape and a city scape. Planned Parenthood appears to be focused on people, while MIT appears to be focused on more on its research products. This difference illustrates the primary focus of the organizations and highlights the instrumental nature of MIT and the expressive nature of Planned Parenthood. Additional artifacts include a webpage devoted to listing awards and honors, indicating that prestige is

[32] MIT, "MIT Policies and Procedures: A Guide for Faculty and Staff Members," MIT, accessed 29 April 2018, https://policies-procedures.mit.edu/the-institute.
[33] Park, "Why Shouldn't Women's Work Count?" 74.
[34] Park, "Why Shouldn't Women's Work Count?" 49-50.

highly valued where it boasts the accolades of the organization and its members[35] Themes from MIT's artifacts include education, hierarchy, competition, knowledge, expertise, meritocracy, problem-solving, technology, prestige, authority.

The core occupation of MIT is university professor and although primary and secondary education employ mostly women teachers, higher education is sex-typed male. In a study by Rutgers Institute for Women's Leadership, researchers noted that women are less likely than men to be full professors (about 24% are women), however the number of women associate and assistant professors are closer to parity.[36] The American Association of University Professors acknowledges this male-dominated tendency and suggests that "in pursuing academic careers women face continuing hurdles in the form of implicit bias against women and against caregiving, stereotypes about women's competence, and socially constructed expectations about women, men, and work."[37] Interestingly, the MIT faculty consists of 1,047 professors, 239 of whom are women (22.8%), resulting in a percentage of women professors similar to the current percentage of women Air Force officers.

In sum, as viewed through the framework discussed above, MIT is a masculine organization. Table 13 summarizes the findings. Note that "knowledge" is listed under masculine indicators. In this case, knowledge is used in a task-oriented context. That is, university professors gain and impart knowledge as a task.

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[35] MIT, "Awards," MIT, accessed 5 April 2018, http://web.mit.edu/ir/pop/awards/
[36] Rutgers, "Women's Leadership Fact Sheet," Rutgers Institute for Women's Leadership, accessed 29 April 2018, http://iwl.rutgers.edu/documents/njwomencount/Faculty%20Diversity-3.pdf.
[37] John W. Curtis, "Persistent Inequity: Gender and Academic Employment," American Association of University Professors, accessed 29 April 2018, https://www.aaup.org/NR/rdonlyres/08E023AB-E6D8-4DBD-99A0-24E5EB73A760/0/persistent_inequity.pdf.

Table 13: MIT Gender

MIT	Masculine Indicators	Feminine Indicators
Organizational Statements	Instrumental Knowledge (as a task), Scholarship, Study, Discipline, Self-reliance, Innovation	Creativity, Passion, Education (Teaching)
Organizational Structure	Hierarchical, Authoritative	
Artifacts	Hierarchy, Competition, Knowledge (as a task), Expertise, Meritocracy, Problem-solving, Technology, Prestige, Authority	Education (Teaching)
Core Occupation	University Professor	
Gender	Masculine	

Source: Author's Original Work

Hypermasculine and Hyperfeminine Organizations

Recall that gender is not a continuum from feminine to masculine. Gender is two sets of feminine and masculine traits. To be sure, MIT values feminine gender traits as well. For example, the MIT Physics Community list the feminine traits of collaboration and inclusion as imperative values.[38] However, masculine gender traits at Planned Parenthood are not as easy to identify. In fact, it seems that in the case of Planned Parenthood, the feminine traits are exaggerated. Some examples include the lack of men in senior leadership and boards, lack of men in the website photographs, and the use of traditionally female gendered colors pink and purple.[39]

When certain traits are numerous or exaggerated, scholars often use the hyper prefix to describe a characteristic. At the individual level of

[38] MIT, "MIT Values," MIT, accessed 29 April 2018, http://web.mit.edu/physics/about/values.html

[39] As listed in the Planned Parenthood 2016-2017 annual report, there are 11 men holding board or leadership seats and 74 women.

analysis, Murnen and Byrne define hyperfemininity as an exaggeration of the stereotypical female gender traits, and hypermasculinity the same for men.[40] At the organizational level, this thesis uses hypermasculine and hyperfeminine to identify organizations that exhibit numerous or exaggerated gender traits. Planned Parenthood is not just a feminine organization, but an example of a hyperfeminine organization.

Hypermasculine Organization: United States Air Force

The United States Air Force is a hypermasculine organization. The following discussion supports this claim using the same methodology as the Planned Parenthood and MIT examples, but with a bit more in-depth look at some of the artifacts. First, Table 14 lists some Air Force organizational statements including the Airman's Creed. The underlying themes of these statements are instrumental and masculine including terms like fight, win, mission first, power, duty, defend, and "I will not fail." For example, the USAF mission statement is to "fly, fight, and win in air, space and cyberspace."[41] When compared to the Planned Parenthood mission statement, "Care. No matter what," the instrumental nature of the Air Force mission statement it highly visible. The Air Force mission statement is instrumental and task-oriented versus the Planned Parenthood mission statement, which is expressive and other-oriented.

[40] Sarah K. Murnen and Donn Byrne, "Hyperfemininity: Measurement and Initial Validation of the Construct," *The Journal of Sex Research*, vol. 28, no. 3, (London, UK: Taylor and Francis, August 1991), 480. The authors use the term hyperfemininity and hypermasculinity in a pejorative sense implying that the feminine stereotype is a negative stereotype.

[41] United States Air Force, "About Us," USAF, Accessed on 5 April 2018, http://www.af.mil/About-Us/.

Table 14: USAF Organizational Statements

Motto	Aim High
Mission Statement	The mission of the United States Air Force is to *fly*, *fight*, and *win*...in *air*, *space*, and *cyberspace*.
Vision	The United States Air Force will be a trusted and reliable Joint partner with our sister Services known for integrity in all of our activities, including supporting the Joint mission first and foremost. We will provide compelling air, space, and cyber capabilities for use by the combatant commanders. We will excel as stewards of all Air Force resources in service to the American people, while providing precise and reliable Global Vigilance, Reach, and Power for the Nation.
Core Values	The Air Force Core Values are Integrity First, Service Before Self, and Excellence In All We Do. Integrity is a character trait. It is the willingness to do what is right even when no one is looking. It is the "moral compass"—the inner voice; the voice of self– control; the basis for the trust that is essential in today's military. Service Before Self tells us that professional duties take precedence over personal desires. Excellence In All We Do directs us to develop a sustained passion for the continuous improvement and innovation that will propel the Air Force into a long-term, upward vector of accomplishment and performance. Our core values define our standards of conduct. Our standards of conduct define how Airmen should behave when interacting with others and when confronting challenges in the environment in which we live and work.
The Airman's Creed	I AM AN AMERICAN AIRMAN. I AM A WARRIOR. I HAVE ANSWERED MY NATION'S CALL. I AM AN AMERICAN AIRMAN. MY MISSION IS TO FLY, FIGHT, AND WIN. I AM FAITHFUL TO A PROUD HERITAGE, A TRADITION OF HONOR, AND A LEGACY OF VALOR. I AM AN AMERICAN AIRMAN, GUARDIAN OF FREEDOM AND JUSTICE, MY NATION'S SWORD AND SHIELD, ITS SENTRY AND AVENGER. I DEFEND MY COUNTRY WITH MY LIFE. I AM AN AMERICAN AIRMAN: WINGMAN, LEADER, WARRIOR. I WILL NEVER LEAVE AN AIRMAN BEHIND, I WILL NEVER FALTER, AND I WILL NOT FAIL.

Source: Adapted From Air Force Instruction (AFI) 1-1, Air Force Standards, 7 August 2012, 4-5.

The Air Force is a hierarchical organization, and Air Force organizational charts support the claim. Air Force organizational charts reveal an organizational structure with vertical silos, indicating vertical

communication mechanisms, and vertical power arrangements, all of which are masculine organizational traits.

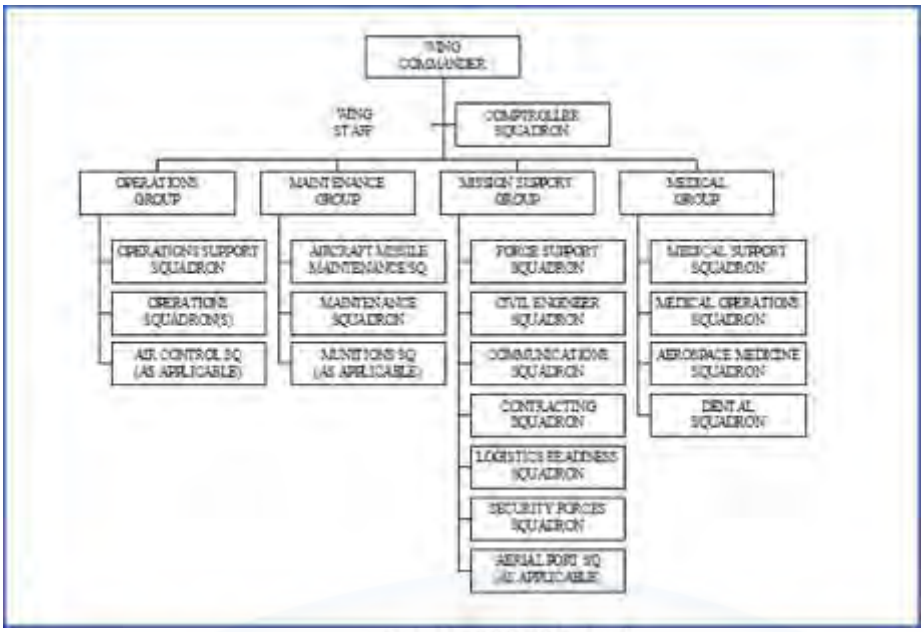

Figure 1: Air Force Standard Wing Structure

Source: Air Force Instruction 38-101, Air Force Organization, 16 March 2011, 26.

The artifacts that indicate the Air Force's gendered nature include policies, dress and appearance regulations, uniforms, facilities and architecture, artwork, and inside jokes. First, Air Force policies and instructions are highly directive and reinforce the hierarchical nature of the organization. Take, for example, Air Force Instruction (AFI) 1-1, *Air Force Standards*.[42] The instruction implements former Secretary of the Air Force Michael B. Donley's policy directive on Air Force culture. The document opens with the following statement:

> This instruction is directive in nature and failure to adhere to the standards set out in this instruction can form the basis for adverse action under the Uniform Code of Military Justice (UCMJ). An example would be a dereliction of duty offense under Article 92.

[42] Air Force Instruction 1-1, *Air Force Standards*, 1.

From the start, the instruction sets the tone for a highly directive culture that values strict adherence to rules. The document goes on to describe Air Force customs and courtesies and the rank structure. Themes include respect for authority, and the chain of command. A section of the instruction is also devoted to professional relationships and explicitly forbids fraternization between officers and enlisted members. In sum, the Air Force standards instruction is indicative of a rules-based, hierarchical masculine organization.

Another artifact that gives insight into the gendered nature of the Air Force is its dress and appearance policies. AFI 36-2903, *Dress and Personal Appearance of Air Force Personnel* governs the uniforms and grooming standards for Air Force servicemembers.[43] The regulation distinguishes genders by establishing sex-based uniform and grooming rules. Furthermore, the rules tend to reinforce gender stereotypes by focusing on feminine features for women's standards. For example, women are required to keep their hair greater than one-quarter inch in length at the termination point. Men, by contrast, are required to keep their hair tapered to less than one-quarter inch at the termination point. Another example is the requirement for women to wear skirts with the women's mess dress uniform, for which hosiery is required. The intent, it seems, is to keep women looking like women and men looking like men. Finally, the AFI lists two blouse types for women, tuck-in style which must "have a tapered fit," and an untucked blouse that has a "semi-form fitting princess line."[44] While the regulation requires women's blouse to have either a tapered fit, or a semi-form fit, the men's blue shirt "may be altered for a tapered fit," but is not required.[45] Here again, the regulation appears to be intended to force women to conform to the

[43] Air Force Instruction 36-2903, *Dress and Appearance of Air Force Personnel*, 18 July 2011.
[44] Air Force Instruction 36-2903, *Dress and Appearance of Air Force Personnel*, 57.
[45] Air Force Instruction 36-2903, *Dress and Appearance of Air Force Personnel*, 52.

socially accepted feminine gender appearance. Interestingly, the women's Air Force blue uniform resembles the uniform worn by Pan Am stewardesses in the 1960s. Figures 2 and 3 reveal the similarity.

Figure 2: Air Force Women's Semi-Form Fitting Blouse
Source: Air Force Instruction 36-2903, Dress and Appearance of Air Force Personnel, 18 July 2011, 68.

Figure 3: Pan Am Stewardess Uniforms Circa Late 1960s
Source: PamBee, "Nostalgic Pan Am Stewardess Photos (and More," PamBee, Accessed on 10 May 2018, http://www.pambee.com/2011/09/30/nostalgic-pan-am-stewardess-photos-and-more/.

This is important because US airlines sexualized women in the airline business in the mid-1960s, and the comparison between these two

images is striking.[46] Speaking of the airline industry, Jennifer Van Vleck states "her carefully cultivated glamour—the product of a strict regime of age and weight requirements, cosmetics, and comportment—reinforced the jet's equation with optimism, progress, and national greatness."[47] Air Force women's uniforms seem to do the same, further reinforcing established gender norms and the masculine nature of the organization.

Air Force facilities offer another set of artifacts indicative of a masculine organization in two ways. First, Air Force architecture is decidedly masculine. Joel Sanders points to the architecture of the United States Air Force Academy (Figure 4) as evidence of a "single-sex environment tacitly organized for the performance and display of masculine power."[48]

Figure 4: United States Air Force Academy
Source: Joel Sanders, ed., Stud: Architectures of Masculinity, (Princeton NJ: Princeton Architectural Press, 1996), 68.

[46] Jennifer Van Vleck, *Empire of the Air*, (Cambridge MA: Harvard University Press, 2013), 260.
[47] Jennifer Van Vleck, *Empire of the Air*, 261.
[48] Joel Sanders, ed., *Stud: Architectures of Masculinity*, (Princeton NJ: Princeton Architectural Press, 1996), 68.

Architectural scholars note that mid-century modern design is decidedly masculine.[49] Furthermore, the color, surface treatment, ornamentation, and even building materials of standard Air Force buildings reveal masculine tendencies.[50] Tans, browns, stucco, brick, and glass along with rectangular shapes are all architectural features common to most Air Force architecture. Gerard Rey A. Lico goes on to state that "a patriarchal framing of architectural spaces undeniably privileges masculinist power, in its representation of social order, hierarchical progression, polarities, and stereotypical gender roles."[51] Second, Air Force facilities are built for men. That is, in most Air Force buildings, women's restrooms and locker rooms are noticeably smaller than men's. Since women make up a significantly smaller portion of organization, it makes sense that women's restrooms would be built for smaller occupancy. In addition, "sometimes women's facilities are simply renamed men's facilities, complete with urinals, highlighting the lack of consideration given to women during planning or subsequent renovation efforts throughout the years."[52] However, the point is that Air Force facilities are built in the image of men for men, further highlighting the service's masculinity.

Along these lines, Air Force artwork also reveals masculine tendencies. The Pentagon houses a large collection of Air Force art, including portraits of each USAF Chief of Staff. The portraits of men back-dropped by steel blues and grays are neatly arranged in the Air Force hallway and are adorned by thick golden frames, indicating power,

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[49] Deborah Leslie and Suzanne Reimer, "Gender, modern design, and home consumption," *Environment and Planning D: Society and Space*, vol. 21, (Thousand Oaks, CA: SAGE Publications, 2001), 303.
[50] Gerard Rey A. Lico, "Architecture and Sexuality: The Politics of Gendered Space," *Humanities Diliman* vol. 2 no. 1, (Quezon City, Philippines: University of the Philippines, 2001), 30-44.
[51] Lico, "Architecture and Sexuality: The Politics of Gendered Space," 30.
[52] Col Kristi Lowenthal (School of Advanced Air and Space Studies, Maxwell AFB, AL), in discussion with the author, 15 May 2018.

prestige, and masculinity; see Figure 5.

Figure 5: Retired Chief of Staff General John P Jumper and his official portrait
Source: United States Air Force, "Portrait of General Jumper Unveiled," United States Air Force, Accessed on 5 April 2018, http://www.af.mil/News/Article-Display/Article/129377/portrait-of-general-jumper-unveiled/.

Aside from these portraits, most Air Force art depict weapons systems rather than people. A walk through any Air Force squadron reveals lithographs and prints of aircraft, historical and present. In addition to paintings, Air Force art includes aircraft nose-art and squadron patches. While the pinup girls that graced the noses of World War II aircraft are gone, their legacy remains. A Google image search of the keywords "USAF aircraft nose art" uncovers a trove of images depicting women as sexual objects. Furthermore, squadron patches reinforce this tendency. Take the 2d Fighter Squadron, American Beagles, for example. The official patch depicts a rather suave, masculine beagle puffing on a cigarette with a cocktail in hand. The squadron's authorized heritage patch is a likeness of the official one but with an apparently nude woman

inside the cocktail shown in Figure 6. In sum, Air Force art artifacts reveal masculine tendencies highlighting power, prestige, valuing technology over people, and the sexual objectification of women.

Figure 6: 2d Fighter Squadron Official and Heritage Patches
Source: United States Air Force, "Fact Sheets," United States Air Force, Accessed on 5 April 2018, http://www.tyndall.af.mil/About/Fact-Sheets/Display/Article/669134/2nd-fighter-training-squadron/.

Lastly, much can be revealed about the Air Force's gender by peering into the inside jokes and communication of its members. Three artifacts support the masculine gender of the Air Force. First, songs are a historical mainstay in Air Force fighter pilot culture. Although efforts in 2012 were made to change the culture to prevent misogyny, these artifacts remain.[53] That is, although most of the songbooks containing misogynistic songs have been purged from the squadrons, pilots continue to sing them. That is not to say that all Air Force folk songs are demeaning to women; many songs tell the story of the trials and tribulations of war and the perils of flying. However, many of the songs include pornographic references not suitable for reprint here. Second, language artifacts tell a similar story. For example, combat air force pilots substitute common words that could have a pornographic

[53] In 2012, the Air Force launched a service-wide health and wellness inspection to identify and eliminate misogynistic materials following a sexual harassment complaint filed by Technical Sergeant Jennifer Smith.

connotation. For example, instead of saying "I'm going to head over to the commissary," a pilot might say "I'm going to 'nugget' over to the commissary." By doing so, pilots convert a benign sentence to one with sexual connotation by replacing the word that could have a sexual connotation in another context. Lastly, pilots tend to refer to aircraft as female, indicating male mastery over a lesser sex. In one Air Force fighter squadron heritage room a plaque with a quote from Hemingway hangs from the wall highlighting this tendency; "A man has but one virginity to lose in fighters, and if it is a lovely plane he loses it to, there his heart will always be." Each of these artifacts serve to elevate the role of masculinity simultaneously while devaluing femininity in Air Force culture and are misogynist in nature.

The core occupation of the Air Force is the sex-typed male Air Force pilot. Although the Air Force's mission set includes the space and cyberspace domains, and pilots actually only make up 20 percent of total Air Force officers, pilots are the core group who execute the Air Force mission, "fly, fight, and win."[54] Of that 20 percent, only one percent are women.[55] This sex-typing is a trend beginning in the early days of military flight; after all, the Air Force's roots begin with the Army. Since soldiers were men, it makes sense that Army pilots were also men. However, men also dominated the civilian pilot occupation. Although there were a few women pilots during the fledgling years of US civil aviation, "the culture of aviation was highly masculinized defined by daredevil machismo and hard living."[56] This masculine aviation culture paired with military culture was a recipe for a veritable men's club of

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[54] United States Air Force, "Air Force Demographics," United States Air Force, accessed 24 April 2018, http://www.afpc.af.mil/About/Air-Force-Demographics/. As of 31 March 2018, there were 61,306 active duty officers and 12,471 pilots (20%).
[55] United States Air Force, "Air Force Demographics," United States Air Force, accessed 24 April 2018, http://www.afpc.af.mil/About/Air-Force-Demographics/. As of 31 March 2018, of 61,306 active duty officers there were 730 women pilots (1%). Women make up about 5.8% of total Air Force active duty pilots.
[56] Van Vleck, *Empire of the Air*, 26.

military aviators. Undoubtedly, the experiences of American pilots during the two World Wars shaped the culture for the future. Authors describing pilot culture during this period refer to pilot culture as a fraternity, or sports teams where women, booze, and airplanes occupied the minds of young male pilots.[57] Today, the culture is not much different: American flying squadrons are overwhelmingly young, male, and cocksure, and these men make up the dominant portion of the Air Force's core occupation.

In sum, as revealed by the previous discussion of Air Force artifacts, the United States Air Force is a masculine organization. Furthermore, the Air Force has numerous and exaggerated gender traits which qualify it as hypermasculine. As previously discussed, gendered organizations value the gender traits associated with the organization's corresponding gender. Table 15 summarizes these findings. As such, the Air Force tends to value masculine gender traits. The following chapter examines the problems with this tendency.

[57] Lee Kennett, *The First Air War,* (New York, NY: Simon and Schuster, 1991), 137. Stephen Bungay, The Most Dangerous Enemy, (London, UK: Aurum Press, 2000), 166.

Table 15: USAF Gender

USAF	Masculine Indicators	Feminine Indicators
Organizational Statements	Instrumental, Task Oriented, Directive, Discipline, Power, Duty, Fighting, Competition	
Organizational Structure	Hierarchical, Bureaucratic	
Artifacts	Reinforce Gender Norms, Masculine Facilities, Power, Prestige, Emphasize Tech over People, Sexual Objectification of Women, Misogyny,	
Core Occupation	Military Pilot	
Gender	Hypermasculine	

Source: Author's Original Work

Chapter 6

Gendered Organization Hypothesis

The gendered organization hypothesis explains the lack of women general officers in the Air Force because of the negative effects of feminine traits in a hypermasculine organization: women are subject to sexism and so they leave the Air Force at a higher rate than men. That said, many of the Air University student papers eliminated sexism as a determining factor. This is likely the result of an interpretation of sexism as an overt act, since the Air Force goes to great lengths to stem sexual harassment and sexual assault, both of which tend to be overt forms of sexism. However, the Merriam-Webster definition of sexism, "prejudice or discrimination based on sex," makes no such claim.[1] Some feminist scholars assert that sexism often takes a subtler form because sexist behavior in masculine organizations becomes normalized behavior and sometimes even customary behavior.[2] Therefore, sexism may in fact be a present and even visible phenomenon, but it is overlooked because it becomes a normalized and accepted practice. From this point of view, Air Force officers may be experiencing or committing sexism, but they are unable to identify it.

The level of analysis also matters. At an individual level, members of an organization may not be able to see sexism because they are blinded by personal relationships with their coworkers.[3] For example, in one Air Force squadron, a pilot noted that while he used sexist and misogynist language common to the culture, it did not represent his

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[1] Merriam Webster Dictionary, Accessed 24 April 2018, https://www.merriam-webster.com/dictionary/sexism.
[2] Nijole V. Benokraitis and Joe Feagin, *Modern Sexism: Blatant, Subtle, and Covert Discrimination*, (Upper Saddle River, NJ: Prentice Hall, 1986), 30.
[3] Alvesson and Due Billing, *Understanding Gender and Organizations*, 66.

personal feelings toward women.[4] In the same squadron, a woman officer said she did not think the men in the squadron shared the same level of sexism and misogyny as depicted in the songs they sang and the language they used.[5] This anecdote represents the tendency for members to overlook sexism at the individual level, but from an organizational vantage point, interpersonal relationships can be ignored and sexist patterns of behavior are easier to identify. Keeping the level of analysis and the potential for normalized sexism in mind, the following question helps guide the discussion. What is the possibility for normalized sexism at the organizational level, and could it play a factor in the phenomenon?

First, recall the four focus areas listed at Table 3. The first focus area (Table 4) is the noticeable increase in the percentage of field grade officers following the end of the Cold War. This focus area is interesting because it occurred around the same time as the Air Force debate about whether or not women should be allowed in combat aircraft. Still, Air Force culture is hypermasculine. As previously noted, the role that women played in Desert Storm was likely responsible for the increase in women field grade officers, but it is unclear what role normalized sexism might have played in during this focus area. However, it seems that women wanted a chance to prove that they could hold their own in such a hypermasculine culture. Major General Jeanne Holm supports this idea by quoting a young lieutenant in Desert Storm, "'I can fly that F-15 just as well as a man.'"[6] In another quote Holm identifies that during this period women officers felt that the Air Force "'was still a boy's club.'"[7] In her own words, Holm laments the masculine culture that kept women from flying in combat and thus out of senior leadership positions:

> It was never about proving that women can do anything a man can do, but about being judged as individuals by the same standards

[4] Air Force captain in discussion with author, 2008.
[5] Air Force major in discussion with author, 2008
[6] Holm, *Women in the Military*, 473.
[7] Holm, *Women in the Military*, 486.

> as men in any job for which they can qualify. It has always been about being allowed to pursue a career based on their individual qualifications rather than sex stereotypes and male norms unrelated to the job.

Following the end of the Cold War, it seems that women were attempting to change the prevailing gender norms and hypermasculine culture, even unconsciously, by their very participation. Thus, for focus area one, while gendered organization hypothesis does not answer the research question it does offer insight into how the gendered nature of the Air Force solicited a response from women in an attempt to alter the hypermasculine culture.

The second focus area (Table 5) is the increase in the percentage of women general officers around the year 2000. As mentioned in the second cultural hypothesis discussion, it seems that women were riding their own wave of success following Desert Storm and their efforts during the war paved the way for generalship at the beginning of the 21st century. The gendered organization hypothesis would lead one to believe that sexism and misogyny would keep women from becoming generals during this period, thus discrediting the hypothesis. However, rather than change the culture, women conformed to it and even reinforced it. Anecdotally, one woman officer recalled her experience in the early 2000s as having to make a choice between being "a bitch or a bro."[8]

Similarly, a retired male colonel who would have been near the peak of his career during this period suggested that he was unsure about how women wanted to be treated "as one of the guys, or like, I don't know, an officer."[9] If women see two choices, "bitch or bro," and men see two choices, "bro or officer," then it appears that in the hypermasculine Air Force, women officers are synonymous with the term "bitch." Being "one of the guys" implies inclusion into the fraternity of masculine

[8] Air Force major in discussion with author, 29 January 2018.
[9] Retired Air Force colonel in discussion with author, 17 April 2018.

officers along with the perceived benefits of such inclusion, such as promotion. If women are choosing between being "a bitch or a bro," and "bro" means acceptance, then it makes sense that women would choose "bro." In doing so, they must accept sexism and misogyny, thus normalizing sexism and reinforcing the hypermasculine culture. The increase in women generals beginning around the 2000 can be explained by the suggestion that women chose to conform to the Air Force's gender norms.

Moreover, if "bitch" and "bro" are antonyms, then women could have alienated themselves, perhaps explaining the third focus area (Table 6): the increase in women three- and four-star generals and the decrease in the percentage of one- and two-star women generals. Clearly, as previously mentioned, the increase in three- and four-star generals is a result of the promotion of one- and two-star generals, but since about 2012, the percentage of one- and two-star generals has declined, indicating a decrease in the promotion of woman colonels to brigadier general. If women find that they must conform to one of two categories ("bitch or bro"), then one will be alienated by the other.

Sheryl Sandberg points to a phenomenon that explains how such alienation might occur, labeled by feminist scholars in the 1970s, as the "queen bee" syndrome.[10] The term describes women leaders in masculine organizations who use their power to keep other women "worker bees" from being promoted either for purposes of self-preservation or because they have internalized the prevailing organizational gender norms. Sandberg explains that such behavior was not only a cause of gender discrimination, but it is also a consequence of gender discrimination, thus normalizing the sexist behavior that led to the discrimination in the first place. She goes on to explain how the phenomenon is still prevalent in masculine organizations today and

[10] Sandberg, *Lean In*, 163.

explains that "once a woman achieves success, particularly in a gender-based context, her capacity to see gender discrimination is reduced."[11] Many of the Air University student papers on the subject of women cite lack of women mentorship as one issue limiting the success of women officers. This lack of women officer mentors is indicative of Sandberg's remarks about "queen bees" and their inability to see gender discrimination. Thus, the gendered organization hypothesis explains the observations described in the third focus area (Table 6); the increase in three- and four-star generals and the decrease in one- and two-star generals is a result of senior women officers being blinded to gender discrimination in a hypermasculine organization.

The final focus area (Table 7) highlights the apparent retention gaps at the major and lieutenant colonel ranks. It appears this phenomenon is the biggest factor in the low percentage of woman general officers. The pool of eligible women who could become general officers is continually reduced, and the reductions are especially noticeable at these ranks. From the gendered organization lens, there are two reasons explaining the disparity. First, women officers may never intend to stay in the Air Force past the rank of captain. Second, women who stay in the military to the rank of major are subject to constant, normalized sexism and leave the Air Force under the guise of familial reasons.

The first assertion, women officers do not intend to stay past the rank of captain, is supported by Jennifer Silva's dissertation entitled *A New Generation of Women? How Female ROTC Cadets Negotiate the Tension between Masculine Military Culture and Traditional Femininity.*[12] The article is especially applicable to this thesis because Silva interviewed women Air Force Reserve Officer Training Corps (AFROTC)

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[11] Sandberg, *Lean In*, 163

[12] Jennifer Silva, "A New Generation of Women? How Female ROTC Cadets Negotiate the Tension between Masculine Military Culture and Traditional Femininity," Social Forces, Vol 87, No 2, (Oxford, UK: Oxford University Press, 2006), 937-960.

cadets who were later to become Air Force officers. Her findings revealed that 84 percent of the woman cadets she interviewed had no intention of making the Air Force a life career.[13] These women defined themselves as feminine and "knew this trait was explicitly incompatible with the military."[14] Silva's findings are consistent with the retention gap between the captain and major ranks. This makes sense because a typical ROTC or USAFA service commitment is five years, with four years being the amount of time it takes for Air Force officers to pin on the rank of captain. Women cadets viewed their careers in the Air Force as temporary because they see themselves as feminine outsiders in a hypermasculine organization.

Of course, some might object by pointing out that certainly some men have no intention of staying in the Air Force past their initial commitment thus muting the significance of the gendered organization hypothesis. However, note that the chart at Table 1 shows the number of women officers of total officers (including men) as a percentage. Thus, a decrease in the percentage of women officers in any rank indicates an increase in the percentage of male officers in the same rank. Take the year 2010 for example. Per Table 1, women captains represent 21% of total captains, meaning that male captains represent 79% of total captains. In the same year, women majors represent 17% of total majors, meaning that male majors represent 83% of total majors. In 2010, there is a 4% difference between the percentage of women captains and majors and a 4% increase for men in the same ranks. Thus, although some men may also intend to leave following their initial commitment, the percentage of women who do so is higher, indicating that women are more likely than men to leave the Air Force following their initial service commitment.

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[13] Jennifer Silva, "New Generation of Women?" *950.*
[14] Jennifer Silva, "New Generation of Women?" *950.*

This brings the discussion to the retention gap between women majors and lieutenant colonels. Air Force operators incur a ten-year active duty service commitment that begins the day after they graduate training. It takes the average officer about a year and a half to complete pilot training after they receive officer commissions. Thus, for rated officers including pilots, the average commitment is almost twelve years. Furthermore, it takes ten years for Air Force officers to pin on the rank of major. Thus, Air Force pilots can expect to reach the rank of major prior to the completion of their active duty service commitments. Therefore, if most women did not intend to make the Air Force a career as Silva suggests, and they choose to occupy the core mission-related jobs, they will likely make the rank of major. By then, they will have been subject to living and working in a hypermasculine organization for nearly twelve years.

The disparity between the retention rates of men and women paired with the idea that women see themselves as outsiders in the Air Force is evidence of normalized sexism. From an organizational culture viewpoint, women officers struggle with their roles because the hypermasculine culture segregates femininity from masculinity and normalizes what men and women are allowed to be. That is, women are expected to be feminine, and men are expected to be masculine. The aforementioned dress and appearance regulations are one way in which the Air Force enforces this norm. By requiring women's blouses to maintain a tapered appearance and prohibiting them from wearing men's military hair-styles, the Air Force reinforces the cultural expectation for women to be feminine. The Air Force wants women to be feminine, but at the same time, the Air Force values masculine traits, and when women exhibit masculine traits, they are marginalized. No one highlighted this better than the current Secretary of the Air Force, Heather Wilson. In Martha LaGuardia-Kotite's book, *Changing the Rules of Engagement*, she cites Secretary Wilson's experience as an Air Force

Academy cadet. During an interview for a cadet wing commander position Secretary Wilson was asked if she had "any objections to wearing skirts" by a male colonel interviewer.[15]

That said, women officers do seem to value feminine appearance. During informal discussions with women majors, they expressed a liking for feminine uniform items such as the untucked, fitted blouse, but most express their femininity off duty. Women officers talk about how they enjoy off-duty time because they can wear their hair in different styles or wear colored nail polish not allowed per Air Force dress and appearance regulations.[16] It seems that women, in general, want to conform to socially accepted gender appearance norms. In past conversations with some male officers, they are amazed at the difference in appearance between on and off-duty women officers. To hear things like "wow, she's really hot out of a bag" (a "bag" is Air Force slang for flight suit) is not uncommon.

In these cases, women seem to be seen more as an object of sexual desire and lose the professional respect they may have had while on duty. For those women who do not conform to established gender appearance norms, the result is not much better. Derogatory terms synonymous to ugly or gay are just as common as "hot." Men, by contrast, look pretty much the same out of their "bags." They cannot wear their hair differently, because they do not have much, and they too tend to conform to gender norms. In a hypermasculine organization that values adherence to established gender norms, this double standard is certainly detrimental to women officers and might influence their decision to leave the Air Force for an organization where they can feel free to express their own sexuality without fear of repercussion.

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[15] Martha LaGuardia-Kotite, *Changing the Rules of Engagement*, (Dulles, VA: Potomac Books, 2012), 122.
[16] Various Air Force women officers in discussion with author, 2018.

Such marginalization is not necessarily overt either, especially since women also marginalize one another. For example, research suggests that men and women positively correlate success and likeability to men but negatively correlate success and likeability to women.[17] To succeed in the Air Force, officers must continually compete with one another for promotion. However, successful, competitive men are perceived as likeable by their peers and superiors while successful, competitive women are not. Therefore, for women to succeed in the Air Force, they are likely to be disliked by other Air Force officers, including women. This phenomenon is reminiscent of Sandberg's discussion of the "queen bee." In this case, the "queen bee" is disliked by both men and women "worker bees."

In a candid discussion, one officer described an instance where General Lori Robinson walked in on a Blue Flag exercise meeting, interrupting the brief. She was checking in with the team in an example of "leadership by walking around." As she left, a male lieutenant colonel commented "I bet she doesn't even know what Blue Flag is."[18] In another example, several years ago, a woman captain pilot expressed a disliking for a woman squadron commander, stating "she's kind of a bitch."[19] To manage this paradox, women must balance between being feminine enough to conform to the Air Force's gender expectations and retain some likeability with their peers but masculine enough to be competitive for promotion, introducing an added layer of effort not required for men.

As previously mentioned, in 2012 following a complaint of sexual harassment in a fighter squadron, the Air Force conducted a service-wide health and welfare check to eliminate misogynist material and to influence Air Force culture. Some of the efforts have provided lasting effects. For example, squadrons removed historical paintings of sexist

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[17] Sandberg, *Lean In*, 40.
[18] Air Force major in discussion with author, 24 April 2018.
[19] Air Force captain in discussion with author, 2011.

nose-art on Air Force aircraft and removed misogynist material including pornography and songbooks. That said, many woman officers, especially those who would be eligible for general officer, would have been exposed to such material and misogynist behavior in the years leading up to 2012.

For these women, three choices summarize how they might have dealt with such an environment, none of which are good options. First, they may choose to leave the Air Force. If so, it would explain the retention gap between the ranks of major and lieutenant colonel. Second, they may choose to ignore sexist behavior by not participating in cultural activities like singing misogynist songs or engaging in heavy drinking. This leaves them at odds with the organization because they are failing to conform to normalized behavior, eventually leading to lack of opportunity for promotion, which again explains the retention gap and the resultant lack of women general officers. Third, they may choose to engage in such activities in an attempt to be one of the "bros."

This last course of action is problematic for women because they must engage in behavior that is inconsistent with their gender expectations. Emerald Archer describes this phenomenon as a double standard for military women.[20] For example, the use of profanity in Air Force pilot culture is a widely accepted practice. When men use profanity, it reinforces their aggressiveness and serves to elevate their masculine status, but when women use profanity, they are viewed as too aggressive thus reducing their status.

Another example is the instrumental leadership styles of Air Force pilots. To be an effective flight lead, pilots learn to communicate in a concise, directive manner. Such styles of communication are efficient when timely decisions are required like those that would be required in

[20] Emerald M. Archer, "The Power of Gendered Stereotypes in the US Marine Corps," *Armed Forces & Society*, vol. 39, no. 2, (Los Angeles, CA: SAGE Publications, 2013), 376.

combat. However, this type of communication is masculine in nature and therefore incompatible with feminine gender expectations, which favor more communal forms of communication. Women officers must somehow work to be masculine enough to communicate effectively but remain feminine enough to comply with their expected gender behavior.

In 2009, during an F-15C training sortie with a woman flight lead, a male pilot recalls an example of this paradox. The flight lead corrected her wingman following a communication error on his part. The pilot recalls being angry and humiliated by his flight lead's three words: "Two, check 'tids." "'Tids" refers the Joint Tactical Information Distribution System (JTIDS) on US fighter jets. The anger and humiliation were not results of the words themselves; the pilot had heard the words in flight many times before and had used them himself several times when correcting wingmen of his own. The male pilot was angry because the words came from a woman, in a tone that did not conform to established gender norms.[21]

Scholars note this phenomenon and suggest that in masculine organizations women should use language that makes "it clear that their recommendations and performances are carried out with the best interests of the group in mind."[22] As Sheryl Sandberg states, "women must come across as being nice, concerned about others, and 'appropriately female.'" [23] When women take a more instrumental approach, as in the case of the woman F-15C flight lead, both men and women react far more negatively. The problem with this advice is that in the military, the instrumental approach is exactly what is required by the mission. If women cannot communicate effectively in the

[21] Air Force captain in discussion with author, 2009.
[22] Jennifer W. Lucas and Amy R. Baxter, "Power, Influence, and Diversity in Organizations," *The ANNALS of the American Academy of Political and Social Science,* vol. 639, no. 49, (Los Angeles, CA: SAGE Publications, 2012), 56.
[23] Sandberg, *Lean In*, 47.

hypermasculine Air Force, then it is reasonable to assume that they will be passed over for promotion or leave the military.

In another example around 2015, two married lieutenant colonels, both pilots in the same aircraft, were up for promotion to colonel. The woman was the same squadron commander mentioned in an earlier anecdote; the one who was described as "kind of a bitch." Following the preceding discussion on the tendency for both men and women to dislike women leaders, it suffices to say that the same sentiment was shared by many of the male officers in the wing. Interestingly, the married couple shared many of the same leadership and communication methods. They both used instrumental language and charismatic leadership styles. That is, they both behaved like typical Air Force flying squadron commanders. Furthermore, the woman officer had attended more prestigious professional military education than the male. By all accounts, the woman should have been more likely to be promoted to colonel below the promotion zone. However, the male officer was promoted and the female officer was not promoted thus decreasing her chances of becoming a general officer.[24]

The two examples above illustrate that the acceptable range of behavior for women is very narrow. Morrison, et al., use a Venn diagram to describe the acceptable range of behavior for women in a masculine organization, see Figure 7.[25]

[24] Author's own observation, 2015.
[25] Ann M. Morrison, Randal P. White, Ellen Van Velsor, *Breaking the Glass Ceiling: Can Women Reach the Top of America's Largest Corporations?,* updated edition, (Beverly, MA: Addison-Wesley Publishing Company, 1994), 55.

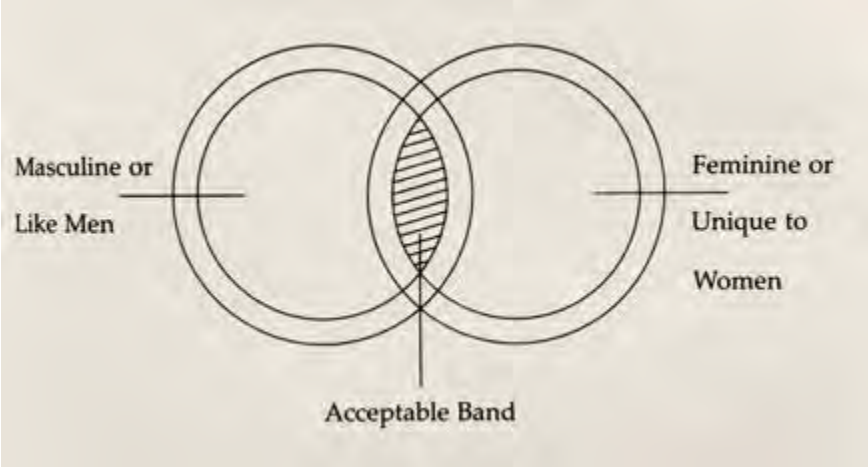

Figure 7: Range of Acceptable Behavior for Women in a Masculine Organization
Source: Morrison, et al., Breaking the Glass Ceiling, 55.

The authors describe maneuvering a masculine environment as a series of hoops where women's "mission was to do what *wasn't* expected of them, while doing enough of what *was* expected of them as women to gain acceptance" (italics in original).[26] Such maneuvering in a masculine landscape allows only a limited range of behavior that very few women would be able to emulate. Likewise, Gregory Blom and Brittany Davis describe a cultural "sweet spot" of masculine and feminine behaviors for a hypothetical Air Force squadron, see Figure 8.[27]

[26] Morrison, et al., *Breaking the Glass Ceiling*, 55.
[27] Gregory Blom and Brittany Davis, "An Imperfect Understanding," *Air and Space Power Journal,* vol. 30, no. 2, (Maxwell AFB, AL: Air University Press, Summer 2016), 87.

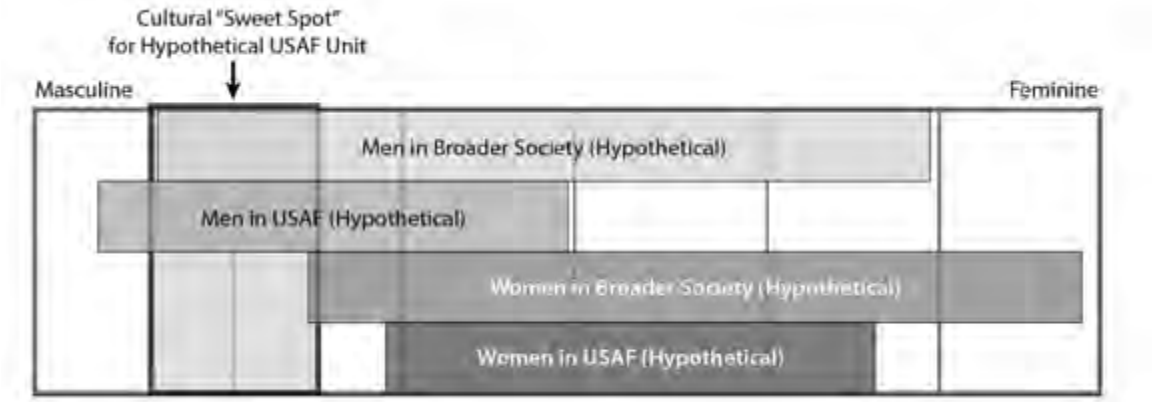

Figure 8: USAF Cultural "Sweet Spot"
Source: Gregory Blom and Brittany Davis, An Imperfect Understanding, 87.

In their example, Blom and Davis categorize men and women in the Air Force and society at large as having a range of masculine and feminine traits. Then, they overlay the cultural "sweet spots" that represent the traits most promoted in a unit. Although their example is hypothetical, one can see how women would be disadvantaged in a masculine organization. These simplified depictions explain why very few women officers would be able to thrive in a hypermasculine Air Force, thus explaining the retention gaps and lack of women general officers.

To make the organization more compatible to women, Blom and Davis recommend that senior Air Force leaders work to shift or expand the "sweet spot" to include more feminine traits.[28] In the absence of such a shift, women must work to conform to the traits valued by the organization while staying true to accepted gender expectations. Because of their biological sex, women are expected to maintain a level of feminism appropriate with an organization's cultural expectations while at the same time embodying enough masculine traits to be effective in the organization. If women fail to maintain this balance, they are less

[28] Blom and Davis, "An Imperfect Understanding," 87.

effective and thus marginalized. This requirement is normalized sexism at the organizational level. In a hypermasculine organization, a man does not have to limit his own masculinity while attempting to maintain a limited set of feminine characteristics that allow him to be successful in the organization. Men must merely conform to the accepted gender expectations that already correspond to masculine gender norms. Thus, in general, success in a masculine organization comes much easier for men than for women.

However, recall that gender is not necessarily synonymous with biological sex. Certainly, there are men who struggle to succeed in a hypermasculine organization especially if they exhibit any number of feminine traits. R. W. Connell explains that normative definitions of masculinity describe "what men ought to be" and that very few men actually meet the normative definition.[29] Those men who do are party to the "hegemonic masculinity," those who do not are likely complicit in the overall subordination of femininity because they realize social gains from the hegemonic party.[30]

This explains the staying power of sexist and misogynist artifacts in the Air Force. One male pilot mentioned that he did not agree with the overall demeaning culture toward women, but that he participated in the rituals anyway because he wanted to fit in stating they "were good for his career."[31] Another pilot mentioned that as recent as 2015, because he did not participate in masculine activities like heavy drinking, he was overlooked for upgrade training in his primary aircraft.[32] These two examples show that men too can be disadvantaged in a hypermasculine culture, and if some men are susceptible to the negative effects of a

[29] R. W. Connell, *Masculinities*, (Berkeley, CA: University of CA Press, 2005), 70.
[30] Connell, *Masculinities*, 77,79.
[31] Air Force major in discussion with author, 4 May 2018.
[32] Air Force major in discussion with author, 4 May 2018.

hypermasculine organization, it seems that women have even less chance.

In sum, the gendered organization hypothesis is a helpful lens for explaining the lack of women general officers in the Air Force. In a hypermasculine organization, femininity is devalued and subordinated to the masculine hegemony. To conform to the culture, women must navigate a very narrow corridor of gender traits. They cannot be too feminine, and they cannot be too masculine. Furthermore, the Air Force's hypermasculine culture has normalized sexist behavior, thus subjecting women to sexism without anyone being able to pinpoint the exact origin of the sexism. This might explain why Air University student papers tend to downplay sexism as a causal factor in the retention of women officers. For example, Major Alisa Ricks alludes to perceptions of sexism but asserts that proof of prejudice and discrimination "lies in the legal realm of filed lawsuits."[33] There is no legal framework for how to prove that women are required to navigate gender in a masculine organization while men are not required to do the same. While the previous discussion on the cultural hypotheses suggested that women leave for the same reasons as men, the fact remains that women leave at a higher rate than men, and the gendered organization hypothesis may explain why.

[33] Ricks, "Women in Senior Leadership in the US Air Force," 19.

Chapter 7

Conclusion

This thesis seeks to provide insight into why the percentage of woman general officers in the United States Air Force is much lower (7%) than the percentage of woman officers in the subordinate ranks (20%). After gathering data on the actual numbers of women officers by rank over the last several decades and plotting the results at Table 1, four focus areas of interest were identified to help guide the research (Table 3). Using these four focus areas, five hypotheses were tested in an attempt to answer the research question.

The following discussion lists each hypothesis in terms of its explanatory value related to the research question. The five hypotheses were divided into three groups. First, two structural hypotheses are founded in rules-based explanations. Second, two cultural hypotheses examine cultural norms that may limit opportunities for women. Finally, the gendered organization hypothesis examines negative outcomes of women in a masculine organization.

Structural Hypotheses

1. Women face structural barriers for entry and promotion in the Air Force.

   Does not support research question: This hypothesis does highlight structural barriers that women faced prior to 1976, but those barriers were removed by 1976. Since then, there have not been any significant structural barriers for women officers prohibiting them from becoming general officers.

2. Legislation or polices limit career opportunities for women officers thus limiting opportunity for promotion.

Partially supports research question: This hypothesis does have some merit because women were prohibited from entering the most promotable career fields until 1993, making 2017 the first year these women are eligible for promotion to brigadier general. However, it does not explain the recent decline in the percentage of women brigadier and major generals.

Cultural Hypotheses

1. Cultural norms dissuade women from joining the military in general and steers those in the military toward career tracks more amiable to culturally accepted gender norms.

   Does not support research question: While this hypothesis might explain why there is a lower percentage of woman officers in general, it does not explain why there are disproportionately fewer woman general officers.

2. Women have traditionally performed the primary familial caregiver role and thus they choose to leave the Air Force in search of family stability.

   Does not support research question: This hypothesis does not fully explain why there is a lower percentage of woman general officers because it fails to take into consideration that men and women both leave the military for family stability.

Gendered Organization Hypothesis

1. The Air Force is a hypermasculine organization, and women officers are subject sexism as a result thus limiting their opportunities and desire to remain in the Air Force.

   Supports research question: Women must navigate a very narrow corridor of acceptable gender traits which reinforce the established masculine hegemony that devalues femininity.

Focus Areas

To help guide future research efforts, the focus areas that seemed to best identify factors that may help explain why there are so few women

generals were focus areas three and four. To recall, focus area three (Table 6) was the increase in three- and four-star generals paired with a decrease in one- and two-star generals that occurred from around 2012 to the present. Focus area four (Table 7) was the apparent retention gaps between women captains and majors, and between women majors and lieutenant colonels. While focus areas one and two helped to provide background information and insight into subject, they did not appear to be directly related to the research question. That said, by looking at those earlier periods, one gathers a better understanding of the women's role in the Air Force and how their experiences might have shaped the officer corps today.

Implications of a New RAND Report

On 10 April 2018, the RAND cooperation released a report titled *Addressing Barriers to Female Officer Retention in the Air Force*.[1] The report highlights the same disparity between the percentage women Air Force general officers and the lower ranks. The researchers conducted several focus groups representing women officers across all career fields and geographical locations to identify barriers to retention and what actions the Air Force should take to remove them. The most limiting issue with this methodology is that the findings apply only to women officers. As previously discussed, men face many of the same problems, especially when it concerns family stability. As it turns out, Air Force officership is just not conducive to family stability regardless of the officer's biological sex. Thus, taking steps to provide family stability for Air Force officers in general should increase retention overall, not just for women. Similar future research efforts should be sure to include focus

[1] Kirsten M. Keller, Kimberly Curry Hall, Miriam Matthews, Leslie Adrienne Payne, Lisa Saum-Manning, Douglas Yeung, David Schulker, Stefan Zavislan, Nelson Lim, *Addressing Barriers to Female Officer Retention in the Air Force,* (Santa Monica, CA: RAND Corporation, 2018), *30.*

groups of men such that the researchers can parse out key issues exclusive to either men or women.

The report did, however, highlight some key issues directly relatable to this thesis. In nearly all of the focus groups, women raised the issue of sexism particularly in male-dominated career fields.[2] The term "male-dominated career fields" is an interesting choice of words since women Air Force officers on the whole only make up about 20 percent of total officers. Based on that alone, one could say that every Air Force career field is a male-dominated career field, or perhaps that the Air Force itself is a masculine organization. Nevertheless, the RAND study supports the gendered hypothesis theory as highlighted in the following excerpt:

> Female officers also described having to often walk a fine line in how they are perceived that male officers do not. If they are too nice or caring, they are not taken seriously, but if they are stern, they are considered a "bitch." Discussing this issue for women in the military, scholars have noted that women, particularly female leaders, are often seen as being less legitimate than men in military hierarchies.[3]

This passage highlights the fact that women must negotiate their gender roles in a masculine organization differently than men and implies the presence of normalized sexism preventing them from realizing their full potential as Air Force officers.

Recommendations

The fact that the retention of women officers is a continuously revisited issue highlights that there is a problem. Furthermore, the RAND report supports the claim that sexism is indeed a cultural issue and that normalized sexism is a prevalent feature of the culture. To combat the issue, the RAND report recommends a top-down induced

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[2] Kirsten M. Keller et al., *Addressing Barriers to Female Officer Retention in the Air Force, 30.*

[3] Kirsten M. Keller et al., *Addressing Barriers to Female Officer Retention in the Air Force, 31.*

culture shift to "significantly and comprehensively change leader behavior in this area."[4] The problem with this recommendation is that because the Air Force only promotes from within, the leaders at the top only have experience from inside the walls of a hypermasculine Air Force. Thus, any such effort for senior Air Force leaders to change the Air Force culture would be tainted by their own biases. The 2012 service-wide health and welfare check is case in point. If the efforts to remove misogynist materials were successful in changing a culture of sexism, the 2018 RAND report would not have highlighted sexism as a current issue. It seems that in 2012, the efforts of Air Force senior leaders did little more than provide lip-service to a deeply-rooted, gender-based problem.

Instead, this thesis recommends a course of action beyond the Air Force's internal control. The Air Force's civilian masters must mandate cultural change. It is not enough for Air Force senior leaders to affect change from within; it must originate from outside the military. Barry Posen asserts that the bureaucratic nature of militaries leaves them resistant to change, but that failure invites civilian intervention and that militaries respond to such pressure.[5] In this case, sexism is evidence of failure. Furthermore, civilian intervention must take a more hands-on approach. In contrast to Posen, Stephen Rosen retorts that change in the military is a long-term effort in which the structure of officer promotions plays an integral role.[6] That is, the military changes by promoting the officers that favor the proposed change.[7] Rosen suggests that because military officers decide who gets promoted, the impetus for change lies solely with the military. However, Air Force officer promotion

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[4] Kirsten M. Keller et al., *Addressing Barriers to Female Officer Retention in the Air Force, 46.*
[5] Barry R. Posen, *The Sources of Military Doctrine: France, Britain, and Germany Between the World Wars*, (Ithaca, NY: Cornell University Press, 1984), 57.
[6] Stephen Peter Rosen, *Winning the Next War: Innovation and the Modern Military*, (Ithaca, NY: Cornell University Press, 1991), 105.
[7] Stephen Peter Rosen, *Winning the Next War*, 105.

lists require Congressional approval; therefore, the power of promotion actually resides with Congress.

To critics, this idea is likely troubling as it is reminiscent of gender quotas suggesting that less qualified women could get promoted simply because they are women. Indeed, in 2015 the Secretary of the Air Force's Diversity and Inclusion plan sparked fears of such quotas.[8] However, upon receipt of the 2018 brigadier general promotion list, Congress could easily have handed it back and said "try again," forcing the Air Force to adopt new promotion and retention methods. Interestingly, the Air Force is already taking such measures in undermanned career fields. In his Congressional testimony, General David L. Goldfein, Chief of Staff of the Air Force, cited career incentive pay, or bonuses, as one effort to retain pilots and other undermanned career fields.[9] Since Congress approved bonuses to retain pilots, it seems reasonable that Congress could approve bonuses to retain women. If not, hopefully this thesis at least provides senior Air Force leaders with a different vantage point from which to view issues regarding gender. The gendered organization lens offers an alternate explanation to a problem that most agree should be addressed as but continues to persist in the United States Air Force.

[8] Stephen Losey, "Air Force Secretary's Diversity Plan Will Mean Quotas, Critics Say," *Air Force Times*, 9 March 2015, https://www.airforcetimes.com/education-transition/jobs/2015/03/09/air-force-secretary-s-diversity-plan-will-mean-quotas-critics-say/.

[9] Senate, *Hearing to Receive Testimony on the Posture of the Department of the Air Force in Review of the Defense Authorization Request*, 115th Cong., 41.

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