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**GENDER INTEGRATION IN THE USAF FIGHTER COMMUNITY:
25 YEARS OF PROGRESS AND PERSISTENT CHALLENGES**

by

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Biography

Lieutenant Colonel Thomas B. Wolfe graduated the United States Air Force Academy, graduating in 1998 and is a command pilot with over 2,300 flight hours, including over 300 combat hours in Iraq and Afghanistan. Following two operational assignments in the 78th Fighter Squadron at Shaw Air Force Base (AFB), South Carolina, and the 36th Fighter Squadron at Osan Air Base, Republic of Korea, he instructed advanced jet training in the Euro-North Atlantic Treaty Organization Joint Jet Pilot Training (ENJJPT) program at Sheppard AFB, Texas. Lt Col Wolfe served as an Aide de Camp to a Numbered Air Force Commander and on a sub-unified command staff, followed by attendance at Army Command and General Staff College in Fort Leavenworth, Kansas. Returning to operational flying after school, Lt Col Wolfe was assigned to the 421st Fighter Squadron's at Hill AFB, Utah. While in Utah, he commanded the 388th Operations Support Squadron and served as Deputy Group Commander for the 388th Operations Group and the 455th Expeditionary Operations Group at Bagram Airfield, Afghanistan.

Abstract

With the stroke of a pen on April 28, 1993, Secretary of Defense Les Aspin eliminated a policy barring females from flying in combat, opening the door for first United States Air Force (USAF) female fighter and bomber aircrew. On the eve of the twenty-fifth anniversary of that momentous decision, groundbreaking aviators like Brigadier General Jeannie Leavitt, F-15E Strike Eagle pilot, and Brigadier General (sel.) Kristen Goodwin, B-52 Stratofortress pilot, stand as exemplars for others to follow. Despite their achievement of General Officer rank and certain hardships in blazing the trail, in the fighter community very few females followed, and their population among the Combat Air Force (CAF) has been flat among fighter pilots and only incrementally rising among weapons systems operators. Currently, of the 2,400 fighter pilots in the CAF, only 42 females hold primary responsibility as fighter pilots, resulting in scarcity in front-line units. In fact, the CAF's most numerous fighter, the F-16C "Fighting Falcon" had only one female fighter pilot in the last six years at its second-largest operational wing, the 388th Fighter Wing. Shockingly, the AF's newest fifth-generation fighter, the F-35A "Lightning II", currently has zero females of 123 F-35 pilots, despite reaching its Initial Operating Capability (IOC) in August 2016.¹

Some might say the low percentages and stagnated rate of participation in fighter aircraft is not a problem, since the "door is open", and might also dismiss retention challenges as owed to females having left the Service to dedicate themselves fully to raising children. This paper challenges those assertions, and argues instead that "opening the door is not enough", and that subtle structural and cultural barriers limit advancement and stifle attainment of gender equality in the fighter community, which in turn yields an almost entirely male pool of General Officer candidates and General Officers. By understanding and appreciating the uniqueness of the

fighter communities being integrated, rather than simply viewing them as “male-dominated”, policy makers can better tailor appropriate solutions for inspiring, recruiting, training, and retaining talented females. Flying fighter aircraft imposes unique demands on female pilots, and as a consequence, unique challenges on their willingness to continue service to senior officer ranks, and should therefore receive just such a tailored approach. Only when a much increased cadre of combat ready and experienced female senior leaders is created will policies start to reflect a female “voice” and the AF begin to fully appreciate the diverse perspectives they bring.

As the Joint Force opens more and more combat fields to women, drawing lessons from the USAF’s first 25 years of gender integration in fighter aircraft, including progress and persistent challenges, can help inform leaders managing integration in their Services. Through interviews and social media polling, this paper finds that by-and-large the fighter culture of today treats female fighter pilots equally, with no differences between the sexes in terms of flying and fighting skill at the outset. As careers progress, however males outpace females in technical flying competence, with many who rise to senior ranks having attended the Fighter Weapons School (WIC), compared to zero females who have graduated from F-15C, F-22, and F-16 WIC, and only two who have graduated from F-15E WIC.² Since the AF highly values technical competence in their commanders, women are once again underrepresented in “Tier 1” command positions, and as the career snowball continues to roll downhill for men, women face an uphill climb. Recommendations include focusing on embedding fighter pilots earlier along accessions paths, at the AF Academy and in Phase II of pilot training, and assigning mentorship to females who graduate fighter training, essentially making them High Potential Officers (HPOs) until such time as the percentage of females in fighters increases at a favorable rate.

“Fighter Pilot is an attitude. It is cockiness. It is aggressiveness. It is self-confidence. It is a streak of rebelliousness, and it is competitiveness. But there’s something else – there is a spark. There is the desire to be good. To do well; in the eyes of your peers, and in your own mind.”

Robin Olds, Brigadier General (ret.), United States Air Force³

Introduction

It’s Day 1 of RED FLAG; mass brief, flight brief, step, start, and taxi are uneventful until a relay from MiG-1 comes from Widow Ops to the Blue Mission Commander, VIPER 21:

“overcast skies from Student Gap to Stonewall, FL240 to FL420, imbedded thunderstorms...recommend LOW WAR”. With an average of 300 days of sun in Las Vegas, this is not VIPER 21’s lucky day...a LOW WAR necessitates limiting assets for the fight to come, the denser air hampers weapon standoff ranges, and silhouetting allows easier visual acquisition by adversaries, in turn increasing mission risk. Prioritizing assets required for mission success means strikers must self-escort while prosecuting targets without dedicated Offensive Counter-Air and Electronic Attack platforms, thereby decreasing effectiveness as compared to what a more diverse force could bring to the fight. At the start of the vulnerability period, VIPER 21 can only hope the Red Mission Commander made similar concessions, but with min force in hand, it’s time to go to work: “Guns Up, Let’s Do This!”⁴

When necessary a cloud-covered ceiling can be broken, to avoid an impending collision, or if an aircraft emergency necessitates, but few, if any, will find themselves at such a high elevation. Metaphorically, such is the case of female fighter aircrew, stuck in a LOW WAR imposed by subtle “glass-ceiling-like” barriers to genuine integration, retention, and career progression after a quarter century of being allowed to fly fighter aircraft. Note that in the scenario above, VIPER 21 could have been a male or female since the F-16 Fighting Falcon nary

cares if it is flying upside down or right side up, with zero attention paid to the gender of the stick actuator.

Quoting General Olds in a treatise on gender equality will surprise many of his followers, who may not have imagined him as a progressive figure, and upset others who maintain his mustache-wearing machismo promoted male chauvinism.⁵ Looking closely at his description of a fighter pilot, however, it is irrespective of gender, race, color, creed, religion, sexual orientation, etc. General Olds knew what “it” took more than most, as a triple-ace and originator of the famous “Wolfpack” in Vietnam where he crafted innovative tactics and led from the front in combat.⁶ The example of General Olds gives a glimpse into fighter culture, which reveres iconoclasts like Colonel (ret.) John Boyd, and puts a premium on merit, credibility, reputation and mission success. Despite small size, this community breeds warrior-leaders well represented at the highest levels of the USAF. Thus, when a titanic change is made to such an impactful group, like the incorporation of women, an assessment of progress and challenges is owed to ensure the culture adjusted quickly and to guide future improvements.⁷

Thesis

After *Star Wars: The Return of the Jedi (TRTJ)* dominated the box office in 1983, how many little girls who enjoyed the movie grew up playing with action figures of Vivienne Chandler’s character, an X-Wing fighter pilot named “Dorovio Bold”?⁸ The answer is none.⁹ Vivienne’s role ended up on the cutting room floor prior to release, along with scenes featuring female A-Wing pilots, leaving a “princess” to “usher in a new era of strong female leads in science fiction”.¹⁰ Fast-forward a generation to *Star Wars: A New Hope* and *Rogue One*, films that both passed the Bechdel test (“when at least two female characters converse about something other than a man”), reversing the first trilogy’s failing score and debuting female X-

Wing ‘Driver’ “Jessica Pava” and female Y-Wing pilots.¹¹ Known for pushing societal norms with progressivism, Hollywood strangely failed to do so in *TRTJ*, missing a great opportunity to promote gender equality: American women in the 1980’s were barred from direct combat.¹² In a similar vein to changes in the *Star Wars* franchise, removal of the combat restriction in 1993 allowed a new generation to emerge, bringing with it ass-kicking females on the “tip of the spear”.¹³ Twenty-five years have passed since the Clinton Administration swung the door open to female combat aviation, and yet, if the AF received a report card on gender integration in fighters today, it would receive a failing grade. Female combat aircrew are poorly represented in the Combat Air Force (CAF), despite offering opportunities to serve in exciting and highly-respected career fields. The transition from “Representation to Inclusion” in the fighter community failed because its culture evolved slowly and involuntarily, the AF “opened the door” to women but insufficiently accommodated them and underappreciated their diversity, and the AF valued “excellence” over inclusiveness.¹⁴ If nothing is done, the AF will perpetually fail, at least until the era of manned fighter aviation comes to a close.

Reframing the Problem

The Air Force Barrier Analysis Working Group’s Women’s Initiatives Team sponsored research to “identify solutions into the inability to attract and retain women and minorities in the rated career fields”, having established that “women and minorities enter the rated career fields at lower rate than white men” and “those that do select these career fields leave the Air Force at a higher rate”. They asked, “What policies, practices and procedures can be changed that impede the entry into and retention in rated career fields by women and minorities?” In providing a CAF perspective, this paper narrows analysis to the *retention of women* in the fighter community: fighter pilots (Air Force Specialty Code (AFSC) 11F) and Weapons Systems Operators (WSO)

(AFSC 12F). Moreover, though observations and recommendations by-and-large apply to both the 11F and 12F career fields, some will be 11F-specific in light of improving integration numbers for 12Fs vs. stagnation among 11Fs, the ongoing fighter pilot manning crisis, and the author's experience. This work builds on the research of two AF Fellows who studied female aviators in the Mobility Air Force (MAF) in 2015 to address subtle barriers resulting from joint spouse assignment policies and the inequity of Aviation Career Incentive Pay (ACIP).¹⁵ For background on the role of bias in barrier analysis, Maj V. Walker gives a thorough summary, essentially explaining that once initial "smoking guns" of institutional bias are eliminated, "second generation" biases must then be addressed, which are characterized by long-held processes and beliefs that "[do] not require the intent to exclude, but nevertheless "put non-dominant groups at a disadvantage" and limit their full potential."¹⁶ What follows is just such a second generation analysis, but instead of tackling the problem at face value, this paper employs a CAF-specific research design to reframe it, looking past the 'symptoms' and engaging stakeholders to identify the root cause of women's flight from the fighter community.

Research Design

VIPER 21 returns from Nevada Test and Training Range, hands the jet back to the fighter maintenance professionals, and breathes a sigh of relief, having met the mission objectives: "killed and survived" (i.e., put bombs-on-target-on-time and came home alive). The respite is short lived however, since the make-or-break factor of any Mission Commander's performance rests in drawing the correct lessons learned and offering experience-based fixes in the debrief. In 2005, the USAF Weapons School (WIC) mandated use of the Debrief Focus Point (DFP) methodology for CAF mission analysis in an effort to more rapidly identify the correct root causes of failures and provide and "instructional fix".¹⁷ Social science outcomes

may lack the precision and repeatability of fixes gleaned from an effective fighter debrief, but the model's common use in the CAF makes it a relevant framework for quickly distilling the 25-year period under study.

Prior to determining instructional fixes, great instructors listen to their students and other members of the flight to understand identified problems from their point of view. This technique informed the qualitative research design employed here: 157 members of the "Chick Fighter Pilot Association", a group of female fighter pilots and WSOs, were offered survey questions via social media, as were a number of non-member Company Grade Officers (CGOs), to understand their experiences and thoughts on retention.¹⁸ As in the MAF studies, but to a greater degree due to increased scarcity, female fighter CAF aviators represent a low *n*, weakening validity of quantitative analysis. Female 11F's represent a mere 1.87% of the force (42 pilots), which declined from a peak of 2.09% (58 pilots) in 2010.¹⁹ Nonetheless, based on survey responses, brief quantitative analysis was conducted to supplement qualitative findings (Appendix III & VIII). Continued presence in fighter aviation could be considered a victory, especially in comparison to other militaries, like Australia, who opened the door to female fighter pilots in 1987 and has yet to field its first one.²⁰ This study considers low representation a problem, given that women comprise 46.8 percent of the U.S. workforce and 20.6% of AF officers, and further it defines inclusion as it relates to diversity is defined as "involvement, respect, and connection--where the richness of ideas, backgrounds, and perspectives are harnessed".²¹

Findings

“Our job is only to hold up the mirror – to tell and show the public what has happened”

Walter Cronkite, Journalist²²

The CFPA’s survey responses, in typical fighter fashion, scoffed concern for political correctness and shot straight, yielding honest insights and no-nonsense assessments of personal experiences. These findings serve as indicators as to whether a DFP exists by allowing observation of actual outcomes in comparison to the objective: “100% Normalization of Gender Integration and Unimpeded Equal Opportunity in the CAF”.²³ The survey questions covered three broad topics: culture, recruiting, career timing and retention.

Question #1 (actually four questions on one topic) allowed examination of attitudes toward female aggressiveness and work-life balance, and of fighter culture in the past and present to determine if progress in gender integration took place over time.

The first part is adapted from Sheryl Sandberg, a corporate women’s equality advocate, who concluded that aggressive men are encouraged as “leaders”, whereas women are discouraged as “bossy”.²⁴ Since thinking like a fighter pilot applies equally to 11F and 12F, and aggressiveness in the air and on the ground is valued in the fighter community, mixed findings in the survey indicated a positive trend toward acceptance of integration with some lingering chauvinistic attitudes. Most reported having “never been told I’m too aggressive” in the CAF, even if they viewed themselves as “VERY aggressive”. Differences emerged, however, between the actual reaction to male and female aggressiveness, responding that “I have been told I come off ‘bitchy’ and “too direct/blunt”, with a few reporting a double-standard where their aggressive behavior was seen as being “off-putting”. One saw a “notable difference in people's reactions between when I am aggressive about something and when a male peer of the same rank and

experience is aggressive”, and others had to “make a conscious shift in how I conduct myself to avoid this stigma”. Thus, despite valuing aggressiveness in the CAF, women’s treatment mirrors Sandberg’s observations.

The second part, asking “how do you do it all”, also comes from Sandberg, who stated that men “never get asked this question”, since it is assumed men’s lives are squared away. No doubt a debatable assumption, since men struggle for balance as well, but informative since some mothers encountered a perceived double standard when deployed. For example, “I have been asked multiple times on deployment if I have kids, sometimes from virtual strangers...when I say that I don’t...the response is, well that’s good...Like I would be failing as a mother if I deployed and left kids at home.” Also, the question of “how do you do it” showed over concern from commanders for their female subordinates, “As a brand new Lt Col working at the Wing, my boss, Wg/CV, said that he'd never put me in a leadership position because he was concerned about my family” and “we left [Base X] where we flew combat missions to [Area of Responsibility] in the same squadron, sometimes flew training sorties together, etc.--no big deal...our last assignment was [Base X] and the OG said we weren't allowed to be airborne together!!” These comments point to the critical role of agency and leadership in fostering a healthy climate and in crafting workable solutions for mil-to-mil families.

The third and fourth parts of Question 1 asked about equal treatment and mutual respect, with responses from female year groups ranging from the mid-90’s, 2000’s and today. The answers clearly demonstrate progress over time toward inclusion, with some significant outliers across each time period. The first group through, as it seems to commonly be the case for “trailblazers” in other demographics (e.g. race, sexual orientation), experienced the most open discrimination and hostility, but sexism endured into later generations as well. One respondent

said, “I had [an] instructor tell me he wouldn’t be my advisor because he didn’t believe that women should fly fighters”, and another said “at pilot training, many peers made me feel initially like the only reason I got an ENJJPT slot was because I was a woman...that was the trend throughout my career, until they felt I had proven myself to be deserving of being there or of their respect”. The middle years (2000’s) fared no better, as evidenced by this example:

“I found out after I left [Base X] that I had been lied to about the real meaning of my callsign. It was MATSU - (real meaning) **Men Are Talking Shut Up**...before that, I would have said I felt respected/accepted there...they lied to me for over 2 years...I was the butt of all their jokes...it was a huge betrayal to me.”²⁵

With few exceptions, the CAF today is a better place to be a female aviator, given the positive responses from the CFPA and non-member CGOs. Female aviators feel equally respected and their presence in units appears appreciated, even if plagued by low numbers, an ever present “microscope”, and not in every situation being treated as “one of the boys”. Typical responses from this generation indicated acceptance, saying “I have always felt as respected as the male aircrew I have worked with...it’s pretty egalitarian, and I’ve always felt that professional judgement was based on the strength of my flying and officership”. Another said, “I get asked all the time, “How is it being a female fighter pilot...” and I always respond with, “It is no different than being a male fighter pilot”...In my short career I have always felt the same respect as my fellow punks or CGOs...I think that is attributed to my work ethic and talent.” Though male chauvinism seems on the retreat today, some indicated it only takes one “bad apple” to drive a talented aviator away, and that existing reporting mechanisms may not be utilized: “[Chauvinism’s] more of a factor than most of us girls care to admit...it’s been my experience that when we are asked, it’s easier to just give the standard AF answer...but, when with some girls...they will share stories that are embarrassing for the AF to say the least”.

Question #2 attempted to uncover sources of inspiration to pursue fighter aviation, with specific interest in the level at which inspiration occurred within the military, which might be within the ability of AF Personnel Command (AFPC) to control through assignment policy. Responses indicated having a cadre of instructors with fighter experience aided selection for the fighter track, but also indicated inspiration and drive to fly fighters comes from many sources outside of the AF's direct control, such as retirees and heroes like the Women's Airforce Service Pilots. Having female fighter expertise in pre-track-select phases of training, like commissioning sources and Specialized Undergraduate Pilot Training (SUPT) and Joint Specialized Undergraduate Pilot Training (JSUPT) got high marks: "Of 40 instructors, I was the only woman...I think that having at least one strong female instructor is helpful...I still have a dozen female students that keep in touch with me, I was able to answer the questions about fighters, address or provide advice on unique issues for the bosses, and provide that role-model I didn't have." Conversely, sometimes inspiration is not needed: "Nobody inspired me to go fighters...I was doing well in T-37s and all the good pilots went fighters and it sounded fun". Sierra Hotel!

Question #3 Focused on how the desire to have children impacted women's careers, the degree to which fighter careers allowed for childrearing, and to identify sources of undue pressure and stress which might negatively affect retention. It also probed understanding and suitability of recent career intermissions as retention tools.

The first part explored whether female fighter pilots felt pressure to delay or forgo childbirth to reach senior leadership positions within the AF. It identified an uneven playing field, and high frustration with what amounts to a Hobson's choice: pursuing career by delaying childbirth, potentially limiting number of children and increasing health risks to mother and child due to increased age, or forgo career in favor of childbirth. Respondents said, "Yes, I definitely

felt pressure to delay children...until I decided I just DGAF anymore, and wasn't going to let the AF dictate my family planning” and “Yes...we would've started earlier if I wasn't in the Viper”.²⁶ Several raised concerns for timing, saying “[AFPC Fighter Assignments] said that women usually waited until after their pilot training commitment was up to start a family...even my commander...told me it wasn't good for my career to ask for a non-flying job to have kids”. Her commander was correct. Non-flying jobs early in aviators careers can limit potential, but women often have little choice but to “opt-out” to have children, and even then, timing does not always work: “I didn't get pregnant until the end of my non-flying job so I was 7 months pregnant when it was time to PCS...made me decide to take a training command job...that was the end of my fighter days”. The physical demands of fighter aviation played a role as well, “because I do fly a high G aircraft with the potential to eject, as I am ‘trying’ to get pregnant, I could already be pregnant and although I am not a doctor, I would imagine a 9G break turn is not healthy for a baby”. Career-mindedness was only one factor for delaying children. Other factors included having “trained for years to do my job and wasn't ready to stop”, “hard to give up being an IP”, fear of “letting my squadron members down by knowingly going DNIF”, responsibility to “fulfil my duty as a fighter pilot” and “irritat[ing] my CAF commander by my lengthy DNIF and cost of potentially sending me to multiple TXs (requalification training, generally 2-3 months in length)”.

The second part concerned likelihood of pursuing the Career Intermission Program (CIP), a sabbatical, to start or continue a family. As currently imagined, the program does not resolve concerns for career timing, with respondents voicing concerns for “derailing my career”. While some said they would consider it, another rejected the 1:2 payback as “not at all a good deal”. In

the next section, modifications to the CIP will be offered, along with other recommendations to level the playing field.

Debrief Focus Point and Contributing Factor Discussion

Research and survey findings illuminated a gulf between the objective of gender integration and today's reality, characterized by low representation, lingering chauvinism, and barriers to career progression specific to female fighter aircrew. Thus, the DFP in Figure 1 was created to frame the problem and uncover the root cause of why the AF failed to transition from representation to inclusion in the CAF:

Figure 1.



In Contributing Factor #1, four key execution errors contributed to a fighter culture that evolved slowly and involuntarily. Mirroring desegregation, the repeal of Don't Ask Don't Tell, and the recent ability of women to serve in "direct ground combat" roles in the sister Services, Air Force leadership expressed "discomfort" regarding women flying fighters in 1993.²⁷ General Merrill McPeak, AF Chief of Staff, said "Personally, I'm not eager to increase exposure of our women to additional risk," though he later explained that he understood his personal

feelings as rooted in cultural bias and not military effectiveness.²⁸ Findings indicated chauvinistic behavior trailed off slowly over twenty years, dramatically so within the past five years, with female 11F/12Fs largely reporting expectations and experiences of equal treatment and mutual respect. This could be attributed to several things like generational changes in society, the fact that most male pilots from the non-integrated generation are now retired, or such prejudicial feelings simply went “underground”. Also, roughly five years ago, following a high visibility sex scandal in Shaw AFB’s 20th Fighter Wing, AF Chief of Staff General Mark Welsh ordered a “health and welfare inspection”, in an attempt to end any remaining vestiges of sophomoric behavior that allegedly contributed to a sexually-charged atmosphere.²⁹ While impossible to prove the causal mechanism, eliminating a hostile work environment represents a positive recent step toward inclusion.

Cultural change came about slowly due to not having necessarily “rolled out the red carpet” to women after the law changed, along with enduring preference for homogeneous conformity within the community. Specifically, women surveyed noted the nearly decade-long delay in creating a female flight boot, the terrible design and non-availability of the female flight suit, and challenges with bodily functions in flight decades after integration. They alleged that Aircrew Flight Equipment (AFE) lacks know-how to order gender-specific gear, resulting in frequent use of non-serviceable or non-combat worthy gear: one female earned the callsign “Disco” for being compelled to wear a reflective silver dry suit (“poopie suit”) in Korea...(it literally looked like a disco ball and was not suitable for tactical aviation). Two reported having worn non-sealing poopie suits for over a decade, which would have filled with water after ejection, possibly leading to drowning or hypothermia. The lack of practical accommodations like these put lives at risk and created unnecessary distractions.

Beyond “conformity checks” in the bar on Friday nights (i.e. squadron t-shirts, coins, etc.), fighter culture accepted females so long as they were “one of the guys”, without really valuing the benefits of gender diversity espoused by senior AF leaders today (e.g. empathetic thinking). One respondent noted that “being in the minority, it’s a survival skill to stay under the radar and just make it though”, and another who “played along with all the fighter pilot games, sang all the songs, took an active part in all the “traditions”” later questioned “what if it had bothered me?” For those who did not want to conform, reporting sexism or male chauvinism through traditional channels like the chain of command or the Inspector General (IG), was “just not worth it” since “[reporting] attaches your name to negativity” and despite being “begged by male pilots to go to the IG, I didn’t think it would help”. Fostering an environment where women can speak up and their perspectives are appreciated is paramount, since their low numbers mean that even in 2017 they are still “trailblazing” in many fighter wings.

In Contributing Factor #2, five career-related execution errors nearly guaranteed low retention by forcing women to conform the career paths of men, instead of accommodating by crafting an avenue for women to remain competitive and maximize their opportunities to fly before and after childbirth. Aforementioned findings indicated frequent pressure on women to delay or forgo children, which is indeed necessary to compete against men under the existing promotion system, which follows strict timelines and now defunct academic requirements. Men continue to gain flight qualifications, deploy, earn stratifications and praise for making an ‘impact’ while women are forced to “take a knee” while pregnant, or otherwise “opt out” by taking lower tier training command or ill-timed non-flying assignments to have children, guaranteeing career death. In real terms, the CAF highly values the technical skill of flying in its leaders (i.e. graduation from WIC), but remarkably few women follow the ‘technocrat’ career

path, with zero graduates of the F-15, F-22, and F-16 WIC Divisions, and only two female graduates of the F-15E WIC by pilots/WSOs. An alternate path and incentives will be discussed in Recommendations, Appendix IX.

In Contributing Factor #3, five execution errors pointed to the root cause of failure as transition to inclusion. Despite its rhetoric valuing Diversity and Inclusion in its “combat arm”, the AF values documented excellence over diversity. Unless dramatic changes are made to ensure equal promotion opportunity, poor retention could drive externally imposed and highly undesirable accession quotas or adjustments to the standards, to encourage merely ‘qualified’ candidates.³⁰ A member of the CFPA stated emphatically, “We DO NOT want Female Fighter Pilot quotas to play a factor! That puts us all at risk in flight”. The AF Core Value of Excellence underlies AF flight training and promotion system, and is important in maintaining perceptions of meritocracy central to an all volunteer force, but it exists in tension with diversity, expressed today as “talent” by AF top leadership and President of the United States.³¹ At the core of this political dispute is this question: “what is the purpose of the military”? Those in the military likely respond along the lines of “defense of the nation” or “mission accomplishment”, since they have skin in the game. But given the military’s history of leadership in the desegregation and other equality measures, progressives see utility of the military as an instrument of societal change, and may be more willing to put military lives at risk to ensure progress toward an ideal. The tragic loss of LT Hultgreen (USN) caused much debate and lingers in fighter culture as an example of what happens when progressives push too hard when lives are on the line.³² Therein lies the fear of forthcoming quotas, but kick starting gender integration in the fighter CAF does not require quotas. Conversely, by reducing the predictability and rigidity of the promotion

system, the AF can stave off quotas and at the same time encourage retention of the existing pool of female aviators as candidates for senior leadership.

Despite an important change made by the CSAF in March 2017 to adjust “pole year”, which is the year a colonel is most likely to be selected for General Officer from 24 years to a more flexible range of 23-26, women lose the “career game” as a mid-level captain due to the rigidity and predictability of the AF promotion system which relies on a *documented* record of excellent performance. This is not to say that female fighter aircrew lack excellence, but if they self-select out of the most competitive leadership track early by having children, they also lose the opportunity for WIC, and there are few opportunities to recover. The pole year change will allow more time for outstanding men and women to complete the requisite commands and other jobs required to graduate wing command prior to 26 years of service. Decisions to remain in the AF, however, are being made by officers more often on release of their major’s promotion board result, which indicates if they were selected for Intermediate Developmental Education (IDE) or not.³³ They can predict the consequences of selection: they have a 100% opportunity to attend IDE as a major, and majors who meet their Lieutenant Colonel board as IDE graduates have a 100% chance of being selected for promotion, with increased likelihood for Below-The-Zone (BTZ) promotion and its automatic Senior Developmental Education (SDE) ‘select’ status, which carries with it a 100% chance to be promoted to Colonel, and increased likelihood of BTZ. Multiple BTZ promotions were nearly required to meet the 24 year pole year, with 85% of General Officers being BTZ at least once, but are less important for a 27 year pole, although in the past BTZ promotion has also been tied to first tier SDE schools and fellowships, top tier staff jobs, and increased opportunity for wing command, possibly limiting the utility of three more years. More importantly, backing up to the new major select, this is an officer’s “first look” by

the Developmental Team for High Potential Officer (HPO) selection. This is where women lose the fight, because it's also a common time for women to pursue a family, and their performance reports might reflect a decline due to increased family responsibilities. In Appendix VIII, it is evident that mid-career females miss the HPO train. They can still have successful careers, and continue to fly fighters, but will have decreased opportunity for professional development and command.

Conclusion and Implications

Lt Col (ret.) Dan Hampton, author and highly decorated fighter pilot, once said in regard to diversity, "As for women in fighters...if someone was selected the same way I was, went through the same nasty process, and came out good enough to get into fighters (with no exceptions or quotas) then I don't care who it is; what color they are, if they sit to pee or how they pray. What I care about is them doing their job and not getting me killed".³⁴ He is right. In the air, the jets and the pilots are not concerned with diversity, just winning. His thinking represents what some believe to be an evolving societal and military norm, which says, "we want you here, we respect the differences you bring to the fight, and we'll make reasonable accommodations such that we can all serve together". That's inclusiveness, and it is a win-win for the fighter CAF. After 25 years, women who fly fighters still represent "canaries in the coalmine" in fighter squadrons across the globe. By addressing the root cause of why they leave fighters, instead of merely sending more canaries into a potentially toxic environment, the AF will benefit from the diversity they bring.³⁵ Moreover, the Army, Navy, and Marines should learn from our progress and challenges, accommodating where they can and taking practical steps to eliminate subtle barriers to ensure women in combat arms reach their full potential.

Appendix I – Personnel Statistics

[Source: Interactive Data Analysis System: <http://www.afpc.af.mil/Air-Force-Demographics>]

[Current as of 5 February 2017)

USAF Demographics:

- 60,425 Officers
 - o 19.4% Women
 - o 56% of Female Officers are Line of the AF
 - o 85% of Male Officers are Line of the AF
- Aircrew
 - o 12,681 Pilots (O-1 to O-5)
 - o 3,285 Navigators (O-1 to O-5)
 - o 1,364 ABM (O-1 to O-5)
 - o 699 Female pilots = 5.5%
 - o 290 Female navigators = 8.8%
 - o 222 Female ABM = 16.3%
- 11F (Fighter Pilot) Duty AFSC
 - o Total: 2237
 - o Female: 42 (1.87%)
- 12F (Weapons System Officer) Duty AFSC
 - o Total: 395
 - o Female: 27 (6.8%)

FY	Female 11F	Total 11F	%	Female 12F	Total 12F	%
2000	34	3676	0.92%	9	745	1.21%
2001	43	3491	1.23%	9	683	1.32%
2002	47	3191	1.47%	16	663	2.41%
2003	61	3198	1.91%	13	623	2.09%
2004	66	3360	1.96%	16	576	2.78%
2005	65	3353	1.94%	22	580	3.79%
2006	59	3255	1.81%	22	567	3.88%
2007	57	3148	1.81%	20	538	3.72%
2008	46	2929	1.57%	28	531	5.27%
2009	52	2795	1.86%	30	484	6.20%
2010	58	2769	2.09%	33	480	6.88%
2011	53	2641	2.01%	28	449	6.24%
2012	49	2488	1.97%	29	422	6.87%
2013	46	2486	1.85%	26	443	5.87%
2014	37	2459	1.50%	20	422	4.74%
2015	35	2319	1.51%	25	401	6.23%
2016	37	2234	1.66%	29	407	7.13%

Appendix II – Airframe Type

[Source: Headquarters United States Air Force Directorate of Personnel]
[Current as of 25 April 17]

RATING	MVS	AIRCRAFT	Gender
PLT	Fighter	A-10	Female
PLT	Fighter	A-10	Female
PLT	Fighter	A-10	Female
PLT	Fighter	A-10	Female
PLT	Fighter	A-10	Female
PLT	Fighter	A-10	Female
PLT	Fighter	A-10	Female
PLT	Fighter	A-10	Female
PLT	Fighter	A-10	Female
PLT	Fighter	F-15	Female
PLT	Fighter	F-15	Female
PLT	Fighter	F-15E	Female
PLT	Fighter	F-15E	Female
PLT	Fighter	F-15E	Female
PLT	Fighter	F-15E	Female
PLT	Fighter	F-15E	Female
PLT	Fighter	F-15E	Female
PLT	Fighter	F-15E	Female
PLT	Fighter	F-15E	Female
PLT	Fighter	F-15E	Female
PLT	Fighter	F-15E	Female
PLT	Fighter	F-15E	Female
PLT	Fighter	F-15E	Female
PLT	Fighter	F-16	Female
PLT	Fighter	F-16	Female
PLT	Fighter	F-16	Female
PLT	Fighter	F-16	Female
PLT	Fighter	F-16	Female
PLT	Fighter	F-16	Female
PLT	Fighter	F-16	Female
PLT	Fighter	F-16	Female
PLT	Fighter	F-16	Female
PLT	Fighter	F-16	Female
PLT	Fighter	F-16	Female
PLT	Fighter	F-16	Female
PLT	Fighter	F-16	Female
PLT	Fighter	F-16	Female
PLT	Fighter	F-16	Female
PLT	Fighter	F-16	Female
PLT	Fighter	F-16	Female
PLT	Fighter	F-16	Female
PLT	Fighter	F-22	Female
PLT	Fighter	F-22	Female

Appendix III – Female Representation in Fighter CAF

[Source: Headquarters United States Air Force Directorate of Personnel]
[Current as of 25 April 17]

A-10	Total	%
9	354	2.54%
F-16		
18	982	1.83%
F-15C		
2	230	0.87%
F-35		
0	123	0.00%
F-15E		
11	442	2.49%
F-22		
2	228	0.88%

Appendix IV – Example Flying Debrief Focus Point

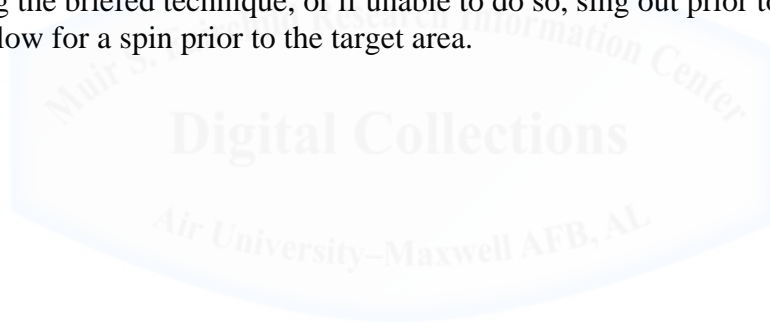
Debrief Focus Point: “Why did VIPER 22 (VIPER 21’s wingman) go through dry, necessitating reattack and extended threat exposure for the strike package?”

Contributing Factor (CF): Due to LOW WAR necessitating a displaced position, electronic countermeasure aircraft could not effectively suppress SA-2 located enroute to the Initial Point.

CF (*Root Cause*): VIPER 22 failed to accomplish pre-release checks before employing ordinance.

Execution Error (EE): While threat reacting, VIPER 22 introduced an inertial navigation system error and failed to correct prior to bomb release point.

Instructional Fix (IF): Accomplish pre-release checks prior at the briefed range using the briefed technique, or if unable to do so, sing out prior to the first run attack to allow for a spin prior to the target area.



Appendix V – Survey Questions

Question #1 – Culture:

- 1.) Have you ever been told you're "too aggressive" at work?
- 2.) If you have kids, do you routinely get asked, "How do you do it all (career and kids)?"
- 3.) Do you feel equal and as respected as the male pilots[/WSOs]?
- 4.) Has there been progress on gender integration in your career?

Question #2 – Recruiting:

- 1.) Who in the military inspired you to either attend Euro-North Atlantic Treaty Organization Joint Jet Pilot Training (ENJJPT), or from Specialized Undergraduate Pilot Training (SUPT) to select a T-38?
- 2.) Did your Phase II (T-37/T-6) Instructor Pilots play a key role?

Question #3 – Career Timing:

- 1.) Do you feel pressure to delay or forgo children to reach senior leadership levels in the Air Force?
- 2.) Are you likely to consider the three year sabbaticals as an opportunity to have children?

Question #4 – Retention:

- 1.) Any thoughts on how to retain females in fighters appreciated.
- 2.) For those who transitioned to the Guard/Reserve, or left flying fighters entirely, were there female specific reasons?

Appendix VI – Survey Responses

Note: Responses edited to ensure anonymity and to protect Personally Identifiable Information (PII).

Question #1 – Culture:

1.) Have you ever been told you're "too aggressive" at work?

- I have not been told that I am too aggressive, but I have seen another WSO told she was too bossy. In my opinion, she was doing her job as an instructor.
- I have never been told I am too aggressive, however, I have been told I come off "bitchy" (apologies for the language, but it is a very specific descriptor), which too me is one in the same. If a man makes an assertive decision then he is a go-getter and aggressive. If a women makes the same decision then she is bitchy and people are turned off by her behavior. I have had to make a conscious shift in how I conduct myself to avoid this stigma.
- "Being one of, or more often the case, the only female in a large group of men, you are automatically under the microscope. That is bad enough, so as a survival skill, we tend to avoid drawing any additional attention. It's a survival skill, of sorts, to stay under the radar and just make it through. It just not worth it to be the girl who raises the flag with the Chain of Command or Inspector General. There is an undeniable stigma and an attachment of negativity that will follow you, regardless of PCS. The fighter world is very small.
- Even when I was begged by male pilots to go to IG, I refused to burn any bridges. And honestly, I didn't think it would help" "I was respected by my peers, but my commander said I was not tactical enough for the instructor upgrade. When I brought to him a list of extremely tactical and noteworthy accomplishments, he resorted to saying I was not aggressive enough. During the same time, he made phone calls and left voicemails of a highly sexual and suggestive nature, clearly after a night of heavy drinking."
- No, I've never been told I was too aggressive but I definitely think there's an art in balancing my role as a fighter pilot/bro and maintaining my identity as a woman. I think for the most part I am equally respected, but I also feel a pressure to perform to a higher standard. It might be self-induced pressure, but I have felt at times that my community is waiting for me or expecting me to fail, to confirm their predispositions about female fighter pilots. That's not to say every male thinks that way, but I can definitely still recognize it among some. It's really just a motivator, though, to not suck and prove any of the non-believers wrong.
- I've never been told I was too aggressive. As a WSO I did a lot of my training at Pensacola when it was joint Navy, Marine, Air Force training and they appreciated (and demanded) aggressiveness. However, I had many people through my training (at all levels) think they had to be extra tough on me because I had to be better than good to be considered good. I had a Navy Training Squadron CC call me in his office and make me stand at attention while he forcefully told me how tough training was and that I wouldn't

get any special treatment because I was female and that there was no room for crying in flying (I had never cried or asked/expected special treatment). Then he proceeded to say "are you gonna cry now? I don't think you can make it", etc. I was so angry...I couldn't believe it. That was in '95 and they hadn't had any females make it that far in training. I was definitely under the microscope but I used it as incentive to be even better.

- When I got to my first operational unit, I had the respect of my peers that I showed up with and I then earned it from all but one or two of the squadron. Some of my good friends there told me later that the squadron wasn't happy when they heard a female was coming but that it turned out to be easy to accept me...I was "one of the guys". It wasn't without its challenges though...my flight CC called me in his office while I was going through MQ upgrade and angrily told me he wouldn't change my crewed pilot for the upgrade and I had to deal with it...I hadn't asked to change he just assumed that I'd cry about it because my crewed pilot was the one person who was vocal about not wanting to fly with a woman. That made for a fun upgrade but I just focused on being good at what I did. I also became the pet project of the weapons officer who would use down time on deployment to quiz all the new folks...except I was the only one he would allow to answer all the obscure questions he threw out ...he later told me he was extra hard on me because I had to be better than good to be considered good and was trying to make me tough....yeah, I didn't need that kind of help! This was in '97. As I proved myself, this kind of stuff went away and I felt respected. Overall, I didn't have any big problems. I sometimes wonder if it was in part because I played along with all the fighter pilot games, sang all the songs, took an active part in all the "traditions"...none of it bothered me and I had fun. But, what if it had bothered me? Would I have gotten as far as I did? Also, I didn't get married until I was 32 and didn't have my son until on a non-flying tour when I was 36. I went to WSO training at Pensacola after that and never went back to fly in the CAF. Fast forward to 2012...now I'm in the middle of my Squadron Command at [Base X]. I'm a geo-bachelor with a young [child], the senior squadron CC in the group and well respected. The new group commander that came in and told me I was his number one and then didn't put that on my OPR...when I talked to him about it he said that he couldn't consider that I was a single mom and had to work harder than everyone else. I was floored. I had never brought up that I was, essentially, a single mom nor had I ever asked for any exceptions. I was surprised that attitudes like his were still around. Luckily, they were few and far between.
- Yes. "kind of a bitch...but in a good way" was the exact quote from my squadron commander as a Captain IP in 2006. I think I also was told to "receive more, transmit less" on multiple occasions. Don't know if I should chalk that up to being female...or just that I legitimately talk too much!
- There has definitely been progress but until the "old hats" that were here before women were [are gone], there will still be those occasional road blocks.
- Not aggressive, but too direct/blunt... I put a bunch of dick pics on my dollars for my dollar rides at ENJJPT, which led to an uproar among the US IPs (the European IPs thought it was awesome). They knew they couldn't say shit officially because of what was on the male student's dollars.

- I'm an F-15E WSO, for demographic info. My civilian friends and family often tell me that I'm "too aggressive", and I consider myself to be a VERY aggressive and assertive woman. However, nobody in the CAF has ever told me that I was too aggressive. However, I did have a boss (B-52 guy in a non-flying assignment) who told me that I wasn't assertive enough, which struck me as very odd (like he basically didn't know me and just gave me the same feedback that he gives every female subordinate).
- I have never been outright told I am too aggressive at work. That said, there is a notable difference in people's reactions between when I am aggressive about something and when a male peer of the same rank and experience is aggressive. Sometimes that difference is positive in that people sit up and take notice, but usually the difference is that I am not taken as seriously when I present a point about why we should do something a certain way or that I am being off-putting by asserting myself. Of course I assert myself anyway. That said, however, most of this "ew, she's being pushy" reaction comes from "younger" guys. I'm very much still proving myself in the squadron, but even so, the people who seem most to value what I have to say are the ones who've been here a while, senior-ish captains and majors. Their viewpoint comes from the idea that I'm CMR aircrew, therefore I probably have some idea what I'm talking about, doesn't matter if I'm female or not. Which I suppose dovetails into the whole do I feel as respected as male aircrew question, and I think the answer to that one is, by and large, yes, I do feel respected and valued by my coworkers. As long as I can do the job and be credible and effective, they don't seem to care that I'm female.
- I have not been told that I'm too aggressive because it simply isn't my personality. I have been told that I should never draw attention to the fact that I'm a woman. Again, not something that I have done on my own accord (PA is always going to knock on our door and often our SQ/CC strongly encourages participation) but people find it their place to give advice. This doesn't really bother me but it is interesting.
- Never accused of being too aggressive. In RTU I was told I wasn't aggressive enough when it came to flying formation. WTF? An IP said I needed to pull 5 Gs when going from close/route to LAB formation. Hahaha! Other girls I knew at the time (mid-90s) were told they weren't aggressive enough in the jet. I think that was a little bit of a bias. Personality-wise, I don't think anyone has accused me of being too aggressive.

2.) If you have kids, do you routinely get asked, "How do you do it all (career and kids)?"

- I have been asked multiple times on deployment if I have kids, sometimes from virtual strangers, when I say that I don't. The response is, well that's good. Like I would be failing as a mother if I deployed and left kids at home. I doubt men get the same response.
- Young women I mentor ask me about how I balance kids and work, but nobody else has ever commented on my work-life balance.
- I ALWAYS got asked about "how do you do it." That or, the more common comment, "I don't know how you do it--I could never balance." As a brand new Lt Col working at the Wing, my boss, Wg/CV, said that he'd never put me in a leadership position because he

was concerned about my family (we were at [Base X], husband was also Vipers and two kids).

- I don't have any because it must be impossible!
- It was actually very stressful to deal with hostile wives of the squadron males. A large majority of them were insecure/threatened about a woman spending time with their husbands. They were extremely passive aggressive, often telling blatant lies and spreading character damaging rumors amongst the other wives. I believe it's safe to guess they would spread those rumors to their husbands. I can't help but wonder how much of the lies, slander, and character defamation made it to leadership and how that may have affected my reputation or career. There was one wife who shared with me that the commander's wife briefed the wives club that I was one they had to worry about. Mind you, I am very careful to have never had anything close to an intimate encounter with a married, engaged, or partnered man.

3.) Do you feel equal and as respected as the male pilots[WSOs]?

- I do now. That being said, when I was a Lt, I had an instructor (F-111 background) that I wouldn't make it in fighters because I didn't have a sense of humor. This was after I shut him down for hitting on me. I had another instructor tell me he wouldn't be my advisor because he didn't believe that women should fly fighters. That was 19 years ago and there were no female instructors in the squadron.
- As a Captain I was told by a peer that I got a job because I was a woman. Further, I felt that I had to prove myself a bit more. There are so few women, that it's easy for biases to happen because of one individual or notice made when you make a mistake.
- "I was adamant about "being a girl" in off time, to hold my personal identity. I felt I already had to adjust my gender personality while at work. So on my off time, I allowed myself to be as "girly" as I possibly could. I have actually had coworkers tell me they didn't like that I "looked like a girl" during my off time. At every single assignment I had, there was always one dude who had the male chauvinistic personality...at least one person at each place...why do I have to put up with a career field where I have to learn how to deal with the consequences of that one guy's thoughts/words/actions? I realized I don't...so I moved on"^[L]_[SEP]
- "Equally respected? At times, no. For example, I was sent back to the centrifuge for perceived lack of aggressiveness for fear of G-Induced Loss of Consciousness, despite never having a problem with G's. This was proven when I returned with no G issues."
- As a senior Captain and later, I haven't had any issues.
- By most, but definitely not all.
- I haven't had any real issues being a woman in our career field. I have met some women who feel they have to work harder for respect but I work hard because it's who I am and expect respect for the work I do. It's unrelated to my sex.
- In my opinion it is ignorant to think you could treat men and women the same. We are not the same; physically, mentally, emotionally. These are the things that make up our humanity and determine the way we relate to one another. Everyone is just looking for equality.

- At pilot training, many peers made me feel initially like the only reason I got an ENJJPT slot was because I was a woman. That was the trend throughout my career, until they felt I had proven myself to be deserving of being there or of their respect.
- I found out after I left [Base X] that I had been lied to about the real meaning of my callsign. It was MATSU - (real meaning) Men Are Talking Shut Up. The real meaning of my callsign was a story known around the fighter community, not just F-16s. Before that I would have said I felt respected/accepted there... If they had been honest in the beginning, I wouldn't have cared. People get shitty callsigns all the time. But they lied to me for over 2 years. New guys would always come ask me what my callsign meant, and I'd tell them the story I was told. All the while, they knew what it really meant, and unbeknownst to me, I was the butt of all their jokes. I found out the truth from a maintainer from a different squadron when I was deployed. It might not sound like a big deal to you, but it was a huge betrayal to me.
- I definitely have an experience with a certain individual who influenced my decision and not in a positive way. Of all of my encounters in the active duty, I have only met one true hard core chauvinist, and yes, he was a major factor in my decision to get out. I also believe it's more of a factor than most of us girls care to admit. It's been my experience that when we are asked, it's easier to just give the standard AF answer. But, when with some girls (especially the fighter ones) they will share stories that are embarrassing for the AF to say the least. But it's a very personal thing to decide to share what experiences we may have encountered regardless if the event is as minor as a comment or much more serious and all levels in between.
- I have always felt as respected as the male aircrew I have worked with. It's pretty egalitarian, and I've always felt that professional judgement was based on the strength of my flying and officership. Social relations with my male coworkers, however, has always been strained because I was not "one of the guys."
- Yes, I feel like I was fully equal/respected. I felt like I was under the microscope a little more than the dudes, but I think that's true of any minority.
- I get asked all the time, "How is it being a female fighter pilot..." and I always respond with, "It is no different than being a male fighter pilot." In my short career I have always felt the same respect as my fellow punks or CGOs. I think that is attributed to my work ethic and talent. Because I have shown up to the SQ every day and worked just as hard (if not harder) as all my male counter parts, I believe I have demanded the same level of respect both in the jet and around the SQ. There was definitely a level of needing to "prove myself," but once everyone saw I was there to be a hard working team member, I never had any issues. I will say however, on the personal side of things, being a female fighter pilot has almost destroyed me due to the rumors and lies of spouses. I will leave the personal side at that, but professionally, I have always been respected in my SQ.

4.) Has there been progress on gender integration in your career?

- Overall, I have had very positive experiences in my squadrons. I was mentored for WIC but made a family decision to not apply. After 4 opposite cycle deployments in 2.5 years, I did not want to be gone another 6 months. Not to say I would have been accepted, but I had support from the squadron. All but 1 commander let married aircrew choose if they wanted to be in the same squadron or sister squadrons for deployment timing.

- Throughout my CAF assignments I have not been stationed in a squadron with another woman. In my interactions with all of the fighter communities I have met around 10 pilots and a handful of WSOs.
- "I came in having researched that women had already been doing this for 10 years. I expected that the trailblazing was done and I could go to work without gender being an issue. I was frustrated to learn of the lack of diversity. I was often the only one in my squadron and at times, my base. I did not want to be a female fighter pilot to get the attention of being a trailblazer. I actually do not like such hyperfocused attention on everything I did. I was very disappointed to learn there weren't more women when I expected there to be. Being a "trailblazer" was extra stress I wasn't prepared for. I dealt with^[L]_[SEP]it, but when it came time for a decision, had the culture been more normal instead of hostile, I would have stayed in. I wanted a community where I could just focus on my job. When it comes to equality in the fighter pilot world, the fact is the scale is shifted. At least it was 10 years ago when I decided to leave. I honestly felt that as a girl, if your performance was average, you were treated as below average; if you were above average, you were treated as average. It was a constant struggle that felt uneven, and it was exhausting always trying to prove yourself. I do believe though that quite a bit of the gender bias is a result of cultural bias."
- I was in the [XX]th for B-Course while [Callsign] was the Sq/CC and [Callsign] was still active duty (guessing you know those two women) and that was the most interaction I have had with other female fighter pilots.
- I think the Strike Eagle community has been really great at integrating female aircrew, although most of us are WSOs. Of the five women in my squadron, only one is a pilot, which seems like a pretty flat trend.
- As far as progress of gender integration, it was all dependent upon the commander. I flew Vipers my whole career and at the end, I actually felt like it went backwards due to the OG. We left [Base X] where we flew combat missions to [Area of Responsibility] in the same squadron, sometimes flew training sorties together, etc.--no big deal. Our last assignment was [Base X] and the OG said we weren't allowed to be airborne together!! I've had leadership who didn't blink an eye at female/joint spouse issues and then we had the ones who made up stupid rules.
- Hard to say. On the culture front, how you are received changes as you go from wingman to IP. Young wingman are not very threatening. So its possible that things just stayed the same, but I became more threatening as I became more experienced. Or its possible that joining a reserve squadron that isn't as exposed to culture changes (they are a bit sheltered) later in my career made it appear that gender integration regressed, when it was really a function of reserves vs. active duty. Very hard to judge that as someone experiencing it real time.

Question #2 – Recruiting:

1.) Who in the military inspired you to either attend Euro-North Atlantic Treaty Organization Joint Jet Pilot Training (ENJJPT), or from Specialized Undergraduate Pilot Training (SUPT) to select a T-38?

- My dad was a fighter pilot, so I wanted to fly fighters for a long time.

- The Navy actually has a personnel regulation that says the instructor cadre looks like the students. My commander used that to get another female instructor in the squadron as I was leaving. Of 40 instructors, I was the only woman. I think that having at least one strong female instructor is helpful. I still have a dozen female students that keep in touch with me, I was able to answer the questions about fighters, address or provide advice on unique issues for the bosses, and provide that role-model I didn't have.
- "My story may be unique in that I actually did not have anyone who "inspired" me to attend ENJJPT or to even be a fighter pilot. I had the interest in being a fighter pilot, but was told repeatedly by peers in ROTC that "girls weren't allowed to be pilots". I had actually took their word at face value as a young woman and plugged along performing at the level that was in my nature... one of excellence. The people who ended up encouraging me to apply for a pilot slot, as well as ENJJPT, were my ROTC detachment leadership. I depended on their words of how they assessed I would do in that world. I really wish there would have been a woman to have looked up to and had the opportunity to discuss that future with. The first time I saw a female fighter pilot was briefly during my casual tour. Although, I didn't really get a chance to speak to her. The next time, was at my first fighter assignment, where I was the second female in the squadron. She was an amazing mentor. She left soon afterwards leaving me as the only one on base for several months."
- Fighters opened for women my freshman year of college, so I didn't know any women in fighters. I did admire the WASPs. In flight school, there were two Strike Eagle instructors that I respected a great deal that provided mentorship before selection. I think that it's more important that we have a fighter instructor before selections more so than there is a woman.
- I stumbled into JSUNT without really having a clue. My IPs/IWSOs from fighter backgrounds definitely inspired me to request fighters.
- Nobody inspired me to go fighters. I was doing well in T-37s and all the good pilots went fighters and it sounded fun. I actually had a T-37 IP (C-130 guy) tell me I shouldn't go fighters because it wasn't the right place for women.
- I had a JROTC and ROTC instructors who encouraged me to think about flying. So I did. And I didn't run in to a female IP until T-38s. I mentioned [Callsign] in my last email and she certainly was an encouragement to me. I think I would have gone fighters without her presence but I'm thankful she was there to be an example that I respected.
- I wanted to fly fighters since I was a kid (way before women could). Once it opened up to women I set the goal of flying fighters...didn't have anyone that inspired me.
- I wanted to be an astronaut. I had thought I would fly, go to TPS, and then apply for the astronaut corps (my major was math). It was actually a friend in ROTC that suggested I apply for ENJJPT, because I would be able to go supersonic in the T-38. Ha! After assignment night, I got word from my Dutch flight commander that he had to fight hard for me to get a viper, simply because the US leadership was concerned about my gender, not my performance.
- Like many WSOs, I have the unique perspective of having been through at least part of UPT before I went to Pensacola. There are many things I could say about my UPT experience, but what I will say here is that I went into UPT wanting to be a fighter pilot,

and when the FAIP who was assigned as my instructor found out, instead of trying to help me be better, he turned it into a haze. The general environment at UPT--at least in my squadron--wasn't very welcoming of females. It seemed we were among the first washouts in a class, and while I never expect to be catered to, mentorship is an extremely important aspect of leadership in general, and that was severely lacking on all counts. While I recognize the limitations of the training environment, I did experience good, solid mentorship at Undergraduate Combat Systems Officer Training (UCT), and that made a key difference in my choice of going fighters instead of, say, flying in an AC-130.

- The recruitment issue likely lies with awareness. I still meet many people who do not know that women can be fighter pilots. Also, we need more fighter pilots at the UPT level advocating for our career field; men and women. I sort of stumbled into flying and made my decision about flying fighters during UPT. A big reason I knew I could hack it was my FLT/CC during T38s...[Callsign], a female F-15E driver. Mentoring is necessary and having at least one female mentor can be helpful and encouraging.
- I attended SUPT at [JSUPT base]. I wanted to go to ENJJPT, but a paperwork snafu in ROTC prevented the opportunity. My inspiration to select T-38s in hopes of becoming a fighter pilot was 100% from my father. He flew F-4s for 10 years and then went on to become the Chief Test Pilot at [Defense Contractor] for 33 years, so aviation was prominent in my family. His passion for working hard to become the best inspired me, and in my opinion, being the best was becoming a fighter pilot.
- I have wanted to be a fighter pilot since I was maybe 7 or 8 years old. I was at the EAA Oshkosh Air Show when I saw a NASA T-38 pull up to park and shut down. When the pilot took off their helmet, I realized it was a girl. It was then that I realized women could be fighter pilots, and that it was exactly what I wanted to do. I was lucky to grow up around civilian aviation so I was able to talk to a lot of pilots and aviation enthusiasts; some military, but mostly civilian. My real military influence came from my childhood best friend's father, who was an F-16 pilot in the Wisconsin ANG. He lived up the street from me and always encouraged me to pursue flying. I also met a female Academy Liaison Officer in high school that encouraged me to go to the Air Force Academy.
- What made me want to fly fighters was growing up near a fighter base, having parents who worked on F-4s, and having worked on and flown planes myself. I couldn't get over the sheer jealousy every time I marshaled someone out to go fly a sortie, so I figured out a way to do it myself. Yes, I washed out of UPT, but I have zero regrets about where I am because I absolutely love my job. The queep, however...

2.) Did your Phase II (T-37/T-6) Instructor Pilots play a key role?

- My T-6 flight was comprised almost entirely of FAIPs, so any fighter CAF experience was definitely lacking in inspiration. However, I will say they were unquestionably fair throughout the entire 6 month program. They encouraged (and hazed) everyone the same and gave solid advice on what track they saw fitting best for the student pilots skills, personality, lifestyle, etc.
- Yes, UPT experience was very good. Instructors were very supportive and encouraging.

- Honestly, by the time I made it to pilot training, I didn't need any more encouragement to fly fighters. So although I had a lot of helpful instructors throughout, I already had my sights set on it, and I was going to do anything to get there.

Question #3 – Career Timing:

1.) Do you feel pressure to delay or forgo children to reach senior leadership levels in the Air Force?

- My leadership did not pressure me, but it was also difficult to request an assignment that would be conducive to kids. I also had trained for years to do my job and wasn't ready to stop.
- Not necessarily to reach leadership levels...more just to not have a crazy life. I really don't know how anyone does it.
- I do not have kids. It was a decision my husband and I made because we were both active duty. That being said, when I spoke with the porch about it when we were trying to make a decision, I was told that I would not be considered for staff unless I was already pregnant. That took away the option of having a child on a non-flying tour to have more predictable days and not impact the squadron.
- There was significant pressure to apply to weapons school. When I didn't apply it put me off track for a while. The AF needs to recognize that there are better gauges for leadership than WIC.
- I waited to have my first kid until I had, and requested, a non-flying job. When I asked the fighter porch at AFPC about what would happen if I wanted to have kids (this was after my first ops assignment at [Base X]) the guy said that women usually waited until after their pilot training commitment was up to start a family. Even my commander at [Base X] told me it wasn't good for my career to ask for a non-flying job to have kids. At that point [husband, male fighter pilot] and I both knew I'd be separating at the end of my commitment to start a family. We didn't think we could both be AD flyers and be home enough to raise children.
- Certainly children are a big topic of conversation. I'm not married but I am currently dating another viper pilot. Things will get complicated if we get married and want to start a family. I feel a responsibility to fulfill my duty as a fighter pilot so I will likely look for a time to step away from flying to have kids. Taking 3 years off sounds nice but it would completely disrupt your progression through upgrades and rank which may sideline you for command and further leadership opportunities. To drop three years behind your peers would be challenging as well and there would be another time of proving your "worth" to the Air Force.
- Being the single girl, I found it impacted my ability to be in a stable enough relationship to marry or have children. I refused to date within my base, much less my squadron, leaving me in one long distance relationship after another. It is also difficult to find a guy who has a career flexible enough to follow me around. It's unsettling that it's assumed you're going to end up with another pilot so that you can make joint spouse work for you. This highly reduces the dating pool... and again... more so when you try and keep it professional by dating outside your unit."

- I didn't get pregnant until the end of my non-flying job so I was 7 months pregnant when it was time to PCS...that coupled with the fact that my then husband couldn't get back to the Strike Eagle made me decide to take a training command job. That was the end of my fighter days. Even going to a training command showing up 7 months pregnant was hard for me...I never wanted to be pregnant in any flying assignment. It worked out fine, but it was tough.
- I think one of the best retention methods is mentors. I never had that when I was young (and never had any female mentors). Also, having female fighter pilot/WSOs in flight training, ROTC, and the Academy is important for recruiting and it could also help with retention down the road because these young females would see what is possible. The sabbatical option may help some. Changing the "pole-year" restrictions could also help.
- Yes, I definitely felt pressure to delay children...until I decided I just DGAF anymore, and wasn't going to let the AF dictate my family planning (I was an O-4, so felt okay about making that decision, and was pretty "protected" in my job). I think a big part of waiting was because I just didn't know/see women higher-ranking than me having kids. Once I met some (through CFPA) and had conversations/mentorship opportunities about what that would look like, I felt comfortable making that leap. Unfortunately I am the primary earner in my family, so an unpaid 3-yr sabbatical isn't a viable financial option.
- At one point, I did want to reach senior leadership levels, and yes, the idea of taking time out of the jet in order to have kids was a big factor in my calculations. I've since realized that even if I went to WIC and school, there's next to no way I'd be a full bird colonel (much less a general) before I retire since I only have roughly ten years before that happens and I just put on captain. I don't currently want kids, but even so, the idea of taking a year out of the jet and away from the service I prefer to render my country would give me pause. Beyond leadership opportunities, though, having kids is a huge strain added to an already stressful lifestyle that will truly make it a tough decision to make should I decide that's what I want. The 3 year sabbatical is an option, but a relatively new one, so I personally would need to see some measure of success in that effort before I committed to it myself.
- Yes on delaying the "family" decision. We chose the USAFA/AOC program for school/staff because it was a guaranteed 3 years together and no flying. That's when we started a family. We would've started earlier if I wasn't in the viper. We waited for a non-flying job because I personally didn't feel it was appropriate to be pregnant in a viper assignment. I don't think I would've taken the 3 year sabbatical, but I don't know for sure. Hard to say. If we hadn't gotten the 3 year school/staff together, I would've gotten out for sure.
- I have not been in a position to have children yet, mainly because of my relationship status: I got divorced about 2 years ago, married mil-mil for 4 years, only ever stationed together for 4 months. However, I have been plagued by this question for a long time for a multitude of reasons, but the answer is ultimately, yes. When I do decide to have kids, there are two routes which I see available. The first being, I tell no one, continue to fly and when I find out I am pregnant I go DNIF and hopefully find a useful position in the SQ in some other capacity. This option presents a lot of problems however. First being, I would feel like I am letting my SQ members down by knowingly going DNIF and hurting their numbers in regards to bodies who can fly. Secondly, because I do fly a high G aircraft with the potential to eject, as I am "trying" to get pregnant, I could already be

pregnant and although I am not a doctor, I would imagine a 9G break turn is not healthy for a baby. The second option is that I go to my leadership and request a non-flying position, as to not knowingly throw a wrench into the flying numbers, etc. Again this solution has a host of issues as well. First, it is my opinion that the decision to have a child is between you and your spouse. I have no desire to discuss the fact that my husband and I are trying to get pregnant with my commander. What happens if we struggle to conceive or have a miscarriage? Although I am confident I would have unbelievable support, I am not sure it is something I want to share with anyone besides my spouse. Emotional aspects aside, then there is also the issue of a suitable position for me to hold while I am attempting to get pregnant and during the pregnancy. It would be extraordinarily hard to give up being an IP to become say an exec. And lastly there is the issue of perception. When I do decide I want to have kids, I want to have 2-3 close in age; well that doesn't really work for my career. If I get pregnant I will have to go to a TX, because I will be out of the jet for minimum of a year. So it becomes a challenge to now figure out a "schedule" to have kids and work the timing of getting back in the jet. Again, I have no basis for how this would work, but aside from taking a staff job on the hill, I can only imagine that I would start to irritate my CAF commander by my lengthy DNIF and cost of potentially sending me to multiple TXs.

- I'm not sure I want to pursue senior leadership in the AF, so that is not what affects my decision to delay having children. With that being said, I'm not sure I want to stay in the Air Force, because I want a normal family life. I think the 3 year sabbatical is a huge step forward and something I will still consider. However, I don't know if I want to be uprooting my children ever 2-3 years, as is standard in the Viper community. All of this is also dependent on who I marry. Personally, I find myself in an interesting situation when it comes to dating (I am currently single, and have dated military and non-military in the past). Being with someone mil-mil comes with a lot of difficulties, and I think that goes without saying. If I ended up marrying someone in the military, I don't know if I'd want to subject my family to the potential of being separated across the country or maybe even the world. Also, deployments... I would like to see my spouse. I have so many friends who are married mil-mil that hardly ever see each other because they're on opposite TDY and/or deployment schedules. Once I make that transition in life to having my family as a priority, I don't think I'll want to deal with all the BS that the Air Force puts families through. I don't know about all the magic or lack thereof that happens at higher levels to determine things such as PCSs, bases, deployments, TDYs, joint spouse, etc., but I can say that I've had too many friends and colleagues and their families get burned by the AF, to the point that I'm not confident the Air Force would give my family and marriage a fighting chance either. On the other hand, if I married a civilian, I'd most likely be asking them to put their life and their career on the backburner so that they could move with me every couple years, which I'm not entirely comfortable doing either. I've seen a lot of civilian women give up their careers to be with their military men, and I honor their commitment to their family over their careers. However, I've seen many women that struggle with that because they still want to work but it's damn near impossible to find a suitable job for their level of education and their line of work, in the couple years that they'll live in that location. Now flip-flop that scenario. A civilian man giving up his career to follow a military woman. It's possible, and has been done but it's also still less culturally accepted than the former scenario. I actually don't know any

female fighter pilots that have married a civilian, at least none that are still in the Air Force.

2.) Are you likely to consider the three year sabbaticals as an opportunity to have children?

- I would not have taken a sabbatical; the pay cut is a significant issue as is the pay-back. I would be more likely to accept a program that lets me stay in place for an extra year to make up the time lost in the cock-pit to get back on the same track as my peers.
- I made the decision not to have kids while I was flying so it put a lot of pressure on me to have a child during my non-flying tour which happened to be as a commander at the Academy so that wasn't easy. I honestly don't think I would have taken advantage of a 3 year sabbatical to have children because I would have seen it as derailing my career. Some may take advantage of it but they would have to come back in as a different year group...even then, if they command aspirations I don't think they'd take it.
- I doubt I would have opted for the sabbatical.
- Yes, I have considered the 3-yr sabbatical, aka career intermission program. However, in doing more research it is not at all a good deal. For every year I take off it is either double or 1.5 times return in service (I can't remember which one). It is not a 1:1, as it should be. If I take a year off to start a family, I should only get another year tacked onto the end of my commitment. But that isn't the case. Which is ultimately why I will not take the sabbatical.
- "Had I been married while I was in, I would absolutely consider a 3-yr sabbaticals as an opportunity to have children after I discover that I was pregnant. I strongly believe this would be a positive incentive to stay in the AF for those planning families."
- I'm 39. Its probably a little late for this old lady.
- I think the 3 year sabbatical is a huge step forward and something I will still consider.

Question #4 – Retention:

1.) Any thoughts on how to retain females in fighters appreciated.

- I think that retention of women would be helped by the same things that would help retain men. Actions need to match words.
 - o The AF can't say they care about women pilots then cancel the female flight suit contract (it is now back on but backorders can take a year). AFE doesn't know the NSN number, each time we need to order flight suits, we provide the NSN.
 - o I been at a base where they closed the women's clinic and the answer was I could see my flight doc. I won't even go into the multitude of ways that is not right.
 - o Why can't I get female desert flight boots? Why can I not get a survival vest that fits? Why can I not get female winter gear for deployment? While some items are unisex, many should not be but it isn't a priority.
 - o The AF says women are important and a priority, but is comes across as only platitudes.
- We DO NOT want Female Fighter Pilot quotas to play a factor! That puts us all at risk in flight.

- Any equipment accommodations that I've seen in the Air Force have been an utter waste of time and money. The female flight suit for example is ridiculous. I don't think anyone wears them. The fit is awful. Also- why we have female flight caps is a mystery to me. Last time I checked men and women's heads are the exact same shape. The things we do need that are different - piddle packs, smaller boot sizes, smaller poopie suit sizes, smaller masks, remain very difficult to procure. The EXTENDER battery operated piddle pack thing was pretty awesome. I got to test it. But I never was in a unit that actually had any available.
- Why did you have to wear the 'disco ball' poopie suit? "Oh yeah...because the other ones didn't fit. And that "disco" suit had to be special ordered and was custom fit to my dimensions...don't know how much you remember, but it took months to come in. Then when I PCS'd to Shaw, the life support shop there threw it away without telling me, saying it "didn't meet regulation standards." Then they issued me a (mens) "small" and guess what...it didn't fit. So I flew with a poopie suit that didn't fit for the next 12 years.
- I was given a poopie suit that did not seal on the neck or the arms, and though they were trying to find one that fit me they told me to just wear it until then ... it came in two months before I left the Viper, and, we all knew that if I landed in the water because there is no seal it would likely drown me.
- As far as urinating devices, I tested about 30 different ones before I basically hand made my own flight suit modification and used a commercial travel John that I purchased myself. It is what most of us girls ended up doing. That or dehydration or depends, which do not soak it up as fast as it comes out. Also an unknown fact, this was our biggest topic at our very first 'CFPA meeting. I believe it was two or three years later that they actually got the approved one that is now designed and created properly so that we do not have to unstrap ourselves from our parachute and save our ejection seat in the air.
- As opposed to thinking about the numbers coming in, I would encourage you to think about solving the cultural things that are driving us away. That is what needs to be fixed vs. simply adding more women. The longer we keep women in the AF, only then can you perpetuate a culture of normalcy.
- There has to be a path to senior leadership that doesn't include WIC as WIC isn't a leadership school.
- At the same time, there have only been 2 F-15E female WIC graduates. None in the other platforms. There are most definitely women who are capable.
- That being said, for the most part I have had great commanders who provided opportunities. Given the opportunity, women will excel but when we decide as young captains who will go to WIC and who will be senior leaders, the AF closes the door.
- The year extension sounds like an interesting option. Certainly better than three years away! I can't say for certain that I would go that way but it is always situationally dependent I suppose.
- You asked about logistics...mostly little issues. It is hard to come by female flight suits and I've had to fight at each base to get them ordered instead of normal ones. They are a bit more expensive and the NSNs aren't included on e-mall where our UDMs go to place an order.
- Also, it's quite a pain to pee in the jet. And only possible with the female flight suit (longer zipper). My squadron wasn't able to order any tan female flight suits but the

supply store on base randomly had one that was two sizes too big and too short. I took it and wore it each sortie but I couldn't consider it serviceable for wear during the day so I had to change before each flight.

- I think part of the issue is weapons school. Almost all CAF senior leadership has been to weapons school. Women (as few of us as there are) are underrepresented at weapons school. Women have been flying F-16s on active duty for 23 years but not a single woman F-16 pilot has been selected for weapons school. I know there have been qualified applicants but if you aren't the OG's "boy" and don't get sent off base #1, you aren't getting selected. I'm pretty sure it is true for the F-15C, F-22 and F-35 as well. Weapons school is the key that unlocks senior leadership positions in the CAF (ask Jeannie Leavitt) and it is the last vestige of the true old boys network.
- We are trying to do too much with too few people. Those of us that care about the job/Air Force will do whatever it takes to get the mission accomplished. At the time, I didn't feel like my job would be compatible with raising children. I didn't want to half-ass either one. I don't know if I'd feel the same now. I know things are much better now for women and families in general.
- Progress on gender-integration? I have seen a few more women in high-ranking positions, but at the input-end of the pipeline, no, I have not.
- It REALLY helps to see higher-ranking women making it happen. I can't overstate how important it is to see people who look like me doing what I want to do. The more women start to occupy higher leadership positions, I think it will motivate others to stay.
- Requal after kids has been a pretty big issue, but I think there are measures in place to help women get [requalified] faster for less down-time after pregnancy.
- Weapons School. We have to get more women going. Why DON'T women go? I think there is a feeling like it's an old boy's club, and a lot of women are worried about what their work-life-balance will look like once they have a patch on their shoulder. Also...for myself, personally, I always felt like I just wasn't smart enough. It felt like being in 7th grade science again where I let the boys wire my circuits for me because "girls aren't good at that." There's a little bit of imposter syndrome going on, too. Imposter syndrome is basically when you feel like an imposter at work. Despite having years of experience and loads of qualifications, many people (especially women) still feel like they aren't as good/smart/qualified as everyone else they work with. It's like one day you're going to walk into work and everyone else will suddenly realize that you suck. How do we fix this? I think fixing the overall expectations on work-life balance in the CAF is a good start.
- I would definitely consider a one-year tour-length extension an in-house requal. I think most flying squadrons are trying to do in-house [requalification] these days. The tour-length extension sounds new, and I think that would be an awesome thing to offer.
- Reassigning year-groups could be promising. One thing I've spoken to a lot of women about is feeling like their OPRs take a huge hit after 12 weeks of maternity leave. It's harder to fill an OPR with 9 months' worth of stuff, especially when pregnancy doesn't exactly lend itself to lots of work-related opportunities (planning a big TDY for example). At a minimum I think women's OPR dates should be re-set so they get a full 12 months of work on them after maternity leave (and I would recommend it for anyone who has to take more than about 30 days of convalescent leave). I would definitely

recommend resetting year groups be OPTIONAL, because otherwise it could be seen as delaying promotion opportunities, leadership opportunities, pay raises.

- Telling women to act more like men is probably not the right answer. I am currently at USAFA and have led several gender forums, and I have noticed that younger generations experience gender issues differently than we do, and many of the traditionally "female" traits that older generations find to be leadership liabilities (caring/compassion, being more social and less technical, etc.) are now seen as assets. I hate to suggest that this problem will "fix itself" if we just wait long enough -- but I do think that many of the problems we have identified won't exist in future generations of warfighters, or at least will look very different.
- I think just extending the close out date by the length of leave taken is probably sufficient, and it would be awesome to apply it to men who take paternity leave (should that ever be extended beyond the pitiful 2 weeks) or anyone else who goes on extended convalescent leave
- Part of my frustration is that we keep talking about the fighter pilot shortage, but we continue to not promote outstanding 11Fs--that's across the board, not just women. If the DP quota system stays the same and we keep concentrating 11Fs together at ops units, we will just be competing against each other, rather than the population at large, and we will continue to make things worse.
- When I was a UPT instructor, I was shocked that in 3 years, I only saw 2 AD and 1 guard female officers come through T-38s. Many women aren't choosing fighters right off the bat, either. I think that's something the AF needs to look at.
- I think that many women would [be] against the idea of automatically being treated as HPOs just because we are female. Many of us on the leading edge of women in fighters worked so hard to be seen and treated as equals that bringing extra or attention or scrutiny on women because of their gender would be a step backward, as would relaxing standards just to accommodate more women in career fields. The reason many of us 'opted out' to have kids is that was our only option. I thought now it is slightly better with the 12 week maternity leave, but still not ideal. You are DNIF from the moment you find out your pregnant, and the length of the DNIF drives a TX-course to requal. When maternity leave was 6 weeks long, that meant taking a slot to upgrade a new pilot away, plus a pcs to a TX-course with a tiny newborn. For me, I was leaving [Base X] as a 4FL and they wanted to send me and [husband, male fighter pilot] to Luke. We wanted to have 2 or so kids. I was looking at IPUG , DNIF for pregnancy, TX-course, DNIF for Pregnancy, followed by TX-course. Oh, by the way, meeting my O-5 board in the process as an IP not contributing to the mission while my male peers were. Instead, we chose to go to [Base X], where I did a local checkout in the T-38 following pregnancies.
- I had some friends that did TX-courses with 6 week old infants--definitely not an ideal situation, especially as child care options are not available for TDY.
- I think it's a lot of the same problems that male fighter pilots are running into: trying to do too much work with too few hands and not enough hours in the day. I don't have much that's gender specific to add to this part of the conversation, except that women seem to be far less likely to put up with b.s. that puts their family life on the line, which is the biggest factor for a few women I know who moved to the reserves. If the overall quality of life issue were to be effectively addressed, I think retention of any fighter pilot would improve.

- I was at [Base X], and now that you mention it, my DO from B course and his wife PCS'd there last year to become squadron commanders, he's in the 38s and she's in T-6s. I was really excited to see two Strike Eagle warriors go be great advocates for the fighter community at UPT.
- To be honest, the only difference between 11F and 12F has to do with the fact there are fewer of us and so we aren't as represented or really even known about. So many more WSOs than pilots in my squadron double turn and work crew rest to crew rest just flying, and it cuts down on study time drastically, not to mention the fact that additional duties also exert a lot of pressure on our time. I understand, though, that as long as the 11F issues are addressed, 12F issues will follow, so I'm willing to sit tight and see what happens.
- Tough one. If you look at all the women who are still in, most are not married to other fighter pilots. They're either single, no kids, or married to stay-at-home dads. We both would've liked to stay in, but AFPC said we wouldn't be stationed together. I was on the CAF command list and my OG had a few different command options for me, but the porch denied joint spouse for each one. That made the decision easy to retire. Keeping the family together was a bigger priority than command for us.
- Well thanks for highlighting this issue! I think its better coming from a dude!!! People may actually listen! Haha! I don't know why more women aren't interested in fighters, or flying in general. Our numbers overall (including airlines) have stagnated. I really don't understand it. In the airlines (my lame life now), people always say that women don't become pilots due to family reasons, but that doesn't explain why so many women are flight attendants...same lifestyle. I am definitely NOT a believer in quotas either and I don't think anyone, male or female, should be sent to fighters unless they're 100% on-board and they're 100% qualified. I think our numbers will always be small, but I do wish we could figure out a way to get women to stay in. Do girls leave fighters at a higher rate than in other career fields? It's a slippery slope because I don't think anyone wants special treatment, but unfortunately, it seems like the things that need to be done to keep us will be perceived as special treatment. I'd love to hear about what you learn during this project. It's something I'm pretty passionate about!
- Yeah, that was a giant kick in the proverbial junk to us! I heard they're fixing it though. I know [Callsign] was offered it as well, but she's well under the weight...not cool.
- Retention: with women, I don't think this one is winnable - honestly. If we want to have a family, specifically children, it seems challenging to find time/support from the AF. So we leave. Note, I am not married or a mother yet but I do see this being an issue even though I would love the opportunity to command one day. I will likely be forced to choose and personally, family will win. This is not because I want to stop flying or leave the Air Force but when you take a year off flying to have a child you're off the precious timeline. We both know how important the timeline is to our Air Force.
- I think your answer can be seen in the length of my responses. For me the decision whether to stay in will ultimately come down to how having children plays out. Clearly I have put a lot of thought into it, and still have no real solution. I think the career intermission program needs some major improvement for it to be a viable solution for all the issues which I described above. If given a 1, 2 or 3 year option that gets [tacked] onto the end of your commitment with no other stipulations, I think you would see a major increase in retention. I have had an amazing career and been given

more opportunities than I ever imagined. Personally, I have had zero “glass ceiling issues,” when it comes to being a female in my career field. So beyond taking a look at the career intermission program, I have no other suggestions on retention.

2.) For those who transitioned to the Guard/Reserve, or left flying fighters entirely, were there female specific reasons?

- For me, the decision to continue to be a fighter pilot is purely based on how it will work for me to have kids and stay in the jet. If it is a smooth process with patience and understanding from my commanders in regards to TXs and jobs I can hold while I am pregnant, then you can count me in for 20! If it is a challenge and I have to battle to get back in the jet after having kids, then I will more than likely punch and look to go to the guard or reserves.
- Retention in general not just women...but a factor for me (I got out of AD after 12 years) was the near constant PCS cycle and not knowing where you are moving thing. One thing I didn't think about when I started my career was how an AD job working with all dudes...working 12-14 hours a day, and moving every 1-3 years would affect my personal life. Its pretty hard to have friends who are girls in that situation. Also hard to have a boyfriend/husband...let alone kids. You can only join the guys so many times at the strip club before you just want to go shopping and get a pedicure, you know? ;)



Appendix VII – AF Gender Integration Debrief Focus Point

DFP: Why did the AF fail to transition from “Representation to Inclusion” in the CAF?

- CF #1: Fighter culture evolved slowly and involuntarily
 - EE: Hostile environment largely eliminated in 2012 (following scandal)
 - EE: Gender-specific equipment delayed or non-existent (ongoing)
 - EE: Conformity valued over inclusiveness
 - EE: Avenues to report chauvinism and sexism inadequate/unused
- CF #2: The AF “Opened the Door” to women with insufficient accommodation
 - EE: ‘Technocrat’ path to senior leadership overemphasized
 - EE: No alternate career path to senior leadership created
 - EE: Encouragement to delay/forgo childbirth an undue sacrifice
 - EE: Recent accommodation efforts not adequate or tailored to fighters
 - EE: Mentorship lacking and intervention too late to encourage retention
- CF #3 (**Root Cause**): Excellence valued over Inclusiveness in the AF
 - EE: Unhelpful aggregation with racial and ethnic minorities
 - EE: Case for diversity not made to CAF warriors by CAF warriors
 - EE: Diversity rhetoric nonsensical and at times illogical, hurting appeal
 - EE: Promotion system rigidity (24 year “pole year” until 2017 repeal)
 - EE: Promotion system predictability (non-IDE select = career death)
 - EE: High Potential Officer selection timing and criteria disparage women

Appendix VIII – High Potential Officer Data

[Source: Air Combat Command Directorate of Personnel, CAF Developmental Team]
[Current as of 12 Apr 17]

Reflective of five year groups

MWS	FEMALE HPOs	TOTAL HPOs	PERCENTAGE FEMALE
FIGHTER	1	121	0.83%
BOMBER	1	37	2.70%
C2ISR	1	37	2.70%
CSAR	8	89	8.99%
RPA & U2	1	15	6.67%

TOTAL FEMALE	TOTAL HPOs	PERCENTAGE FEMALE
12	299	4.01%

Appendix IX – Recommendations

Recommendation #1: Fix Lingering Uniform and Equipment-Related Concerns.

Immediately address “know-how”-related concerns raised by the CFPA and non-member CGOs for ordering existing gender-specific flight gear like flight suits and female piddle packs. Confirm availability of female flight suits in (both green and tan) and conduct focus group to determine if design failed to meet women’s requirements. The AF should consider replacing the decades old current flight suit, due to advancements in fire resistant materials, manufacturing processes and breathability, especially for communities, like fighters, who actually require fire resistance for flight duties.³⁶ Ensure most current solution for in-flight urination for females works, and if not, redesign as an urgent requirement. After 25 years, these concerns should not exist.

Recommendation #2: Adjust the Sabbatical for Fighter Community. The CIP’s three year break from career demands represents an attractive option and a step forward, but should be community-specific, given the demands of fighter aircraft on women. First, since they are Duty Not Involving Flight (DNIF) immediately when found to be pregnant, and as noted in the findings also likely to seek non-flying positions before even attempting to get pregnant, the CIP needs to be more flexible than its current “open window” and boarded construct. CAF fighter aircrew should be allowed expedited consideration, and near automatic approval of CIP, to allow more flexibility and ease “career timing” pressure. Second, consider reducing the payback to 1:1 for women in critically manned specialties, like fighter aviation. Third, increase the awareness campaign on the particulars of CIP, especially how resetting yeargroups functions to level the playing field with peers. Here again, modify as needed for the individual so as not to miss important career milestones, like promotion, unless CIP timing would make them less competitive. One respondent said, “It REALLY helps to see higher-ranking women making it happen”. Tailoring the sabbatical could go a long way to retaining the proven talent already in the AF, demonstrate a commitment to inclusion, and build a larger pool of candidates for squadron command and senior leadership.

Recommendation #3: Extend Ops Tour Assignment Length One Year for Pregnancy.

Suggested by a CFPA member, this option allows women more control over family planning, alleviating timing stress during a typical two-year eight-month operational tour, and could be a key factor which keeps women in ops vice ending their careers in other capacities. Also, consider options to maintain currency in high-fidelity simulators for part of the pregnancy so as not to require a TX course. If one is required, do it in-house. Limitations like having backseat qualified IPs can be overcome. Finally, utilize simulators to keep female IPs “in the game” during pregnancy, as their health allows, so the requalification and getting back on the step happens that much faster.

Recommendation #4: Return CGO Fighter Pilots to Phase II of SUPT. Due to critical manning, the fighter community has not been able to support T-6 training at the CGO level for a number of years, and while respondents indicated motivation sources varied from childhood experiences to mentors in and out of the service, having fighter presence in the first phase of training could help insure well qualified pilot candidates move forward to the T-38 phase of training. This is not to say that more women will necessarily chose fighters, but would help

illuminate the insular culture of the fighter community to the uninitiated. According to AFPC, “we have 9 11F’s in the United States Air Force Academy flying program”, though ROTC can be much more hit or miss, and having those initially inspired at their commissioning source continue to view fighters favorably will benefit the community. CGO-level interaction is key, as compared to loftier fighter representation in command billets, since student pilots look up to and interact daily with front-line instructor pilots.

Recommendation #5: Designate ALL Female Fighter Pilots HPOs. Female fighter pilots are equally capable in the air, and possess tremendous potential for future leadership in the AF, but as noted by respondents, are seldom able to compete with the career paths of male pilots due to having temporarily fallen behind to have children with no chance to catch up. Therefore, as a temporary measure lasting a decade or more until the representation of women in the fighter CAF increases as a sustainable rate, designating basic course graduated and mission qualification training complete female fighter pilots HPOs may help retain women longer in service and to higher grades, creating a larger pool in the field grade and senior officer ranks, which in turn could “normalize” their presence and encourage others to follow in their footsteps. Once 11Fs reach the representation of 12Fs (currently 7.13%), add 12Fs until females in the fighter CAF reach the overall female officer accession percentage. Being identified as an HPO could serve to open new avenues of career advancement and increased flexibility. Importantly, these women would benefit from increased mentorship, access to premiere career broadening opportunities, and deliberate development from senior officers HPO designation allows. If not formally designated as HPOs, these select groups of female aviators should at least be treated as HPOs. The numbers of females are currently so low, it would likely not be an undue burden on the system (See Appendix VIII), and would again demonstrate that the diversity they bring is valued. Respondents made familiar with the proposed recommendation gave it mixed reviews, with some expressing concern for perceptions of favoritism, until it was explained to be a temporary measure to pull out of the ongoing stagnation. If adopted, the Execution Error of nonsensical and at times illogical diversity rhetoric needs to be addressed first, since the fighter CAF prefers “clear, concise, correct communication”, not overly embellished prose full of platitudes. As was done in this study, women’s issues should be disaggregated from racial and ethnic concerns, where appropriate, when discussing and evaluating Diversity and Inclusion.

The CAF Developmental Team should also consider sliding HPO on-ramp timing to the right, to better allow for women to have children earlier in their careers and amass sufficient documented excellence (OPRs/Decorations/Deployments/IDE attendance) used as criteria for HPO selection. Also, sliding right favors mid-career performance over the “hot from the start” mantra of today. Squadron command, for example, should be the litmus test for group and wing command, not a foregone conclusion of continued high performance along an accelerated path. When examining HPO selection statistics, aggregating the entire CAF belies that every career field has equal opportunity for advancement to General Officer, therefore it is helpful to examine how women’s selection rate in specific career fields (Appendix VIII). Finally, the AF must divorce itself from the idea that “the rate of excellence should equal the rate of accessions”, and consider, as this paper opines, what barriers the “trailblazers” among us might face when competing with the majority.

Recommendation #6: Foster “Elite Status” of Combat Squadrons to Foster Retention in the Fighter CAF. In what can only be understood as a “social-leveling” effort, a process by which “everyone is a warrior” and of equal value to the organization, the AF seems to have forgotten what it takes to fly fighters. Pilots, for example, engage in intense competition for a pilot slot (especially in Reserve Officer Training Corps), compete for a T-38 for Phase III training, earn a fighter assignment at pilot training graduation, survive Introduction to Fighter Fundamentals and Fighter Training, and then endure years of intense training at home, frequent Temporary Duties, six-month-long combat rotations, etc., at the cost of millions of dollars. Under the current promotion system, however, despite promotion boards choosing the “best officer”, the reality of the current system is that the last time an officer competes with his or her peers is Squadron Officer School (SOS). After SOS, senior leaders are deliberately developed from within career field stovepipes, to ensure a sufficient cadre of senior officers to command within those specialties. This means that despite having endured an intense selection and training process and a high-risk career, they are no more likely to command than any other specialty, and are quite often dumbfounded when not selected for promotion to major or lieutenant colonel.

Consider the stoic response of fighter aircrew recitation of the “Airman’s Creed”, which has not been embraced by the fighter community: few know the words, fewer still embrace the idea that everyone in the AF is equally a warrior. Instead of hoping holdouts in the fighter community will get on board with this credo, separate or retire, the AF should instead embrace the idea of elite flying units, as it already does with other communities (e.g., Combat Controllers) and as is seen in sister services (e.g., Navy Seals). The Army has a Soldiers Creed as well, but few if any look to their most elite units with a “me too” attitude, instead their elite status is a useful recruitment and retention tool, attracting the best-of-the-best to units like the Green Berets and Delta Force.

Recommendation #7: Be Honest and Proceed with Caution. Recent aggressive efforts to accelerate the creation of a “Noah’s Arc of Diversity”, the “two-by-two” illusion often seen in AF publications and Hollywood films, though well intentioned, harms inclusion and risks alienating a community that fiercely defends its meritocracy, costs millions of dollars per unit of inventory, and takes decades to build.³⁷ With the manning crisis in full swing, implementation of further D&I initiatives should be socialized, gaining the buy-in of this important community.³⁸

Appendix X – Future Research

Research Recommendation #1: Create an Equally Competitive Alternate Career Path to WIC. In the MAF, the PHOENIX HORIZON programs select officers with the highest potential for deliberate development (i.e. HPOs) to become senior leaders through strategic-level study. It competes favorably in their community vs. MAF WIC graduates. The same could be created for the fighter community, where a solid grounding in of fighter tactics on one or two operational tours could be then supplemented with internships in-and-out of government, advanced academic degrees, and non-traditional leadership opportunities outside the CAF before returning to fly. This program would yield strategic leaders and diverse thinkers, which is more important than tactical prowess in O-6 and above levels of command, since the criteria and measures of success at the tactical level, and ability to directly influence decisions at the squadron level, differ from the indirect means of influence at the strategic level. For example, flying standards, standard game plans, and “thinking with one mind” at the tactical level lend toward the ability to anticipate actions of teammates and subordinates to overcome the fog of war. At that level, emphasizing and replicating to the maximum extent possible the tactical expertise of Weapons Officers within squadrons makes sense. Diversity of thought becomes more important at higher levels when crafting solutions to wicked global problems, innovating courses of action on staff, and leading large, diverse organizations at the wing level and above. Given that in the current system favors the aforementioned ‘technocrat’, there is a risk groupthink and resultant fragility.

Research Recommendation #2: Explore Why Female Fighter Pilots are Overrepresented in the F-15E and A-10. Looking at statistical analysis in Appendix III, it appears women have had a more difficult time penetrating the “old guard” communities of F-15C, F-22, and F-16. Additional research could confirm a working hypothesis that women seek access to a broader network of women within the Strike Eagle community since it is the only remaining community with WSOs, some of whom are women. Interestingly, the two female fighter pilot WIC graduates, the first female General Officer, the first female USAF Thunderbird, and the first female F-35 pilot also came from this community. Further research would be needed, specifically to pull data from pilot training bases and compare female’s dream sheets to the their overall ranking in the class, to see if they are self-selecting or being otherwise encouraged to gravitate to the F-15E. Desire to fly the A-10 could also be examined...its frequent use to deadly effect in sixteen years of counterinsurgency likely played a role.

Notes

¹ Lt Col “Grinder” Mau, the USAF’s sole F-35A fighter pilot, completed her “fini” flight on April 24, 2017 to begin terminal leave prior to retirement. The next female F-35A fighter pilot begins training in May 2017, though she represents a “rob Peter to pay Paul” proposition, since she is currently one of only two F-22 female fighter pilots out of 228 total F-22 pilots.

² The first female F-16C pilot to attend the AF Weapons School begins training in July 2017.

³ "Robin Olds Quotes," Robin Olds Quotes, accessed April 14, 2017, http://www.goodreads.com/author/quotes/3367393.Robin_Olds.

⁴ DBlow2003, YouTube, February 27, 2014, accessed April 14, 2017, <https://www.youtube.com/watch?v=hooKVstzbz0>.

⁵ “Facebook rant against moustaches by Air Force officer, lambasted on CAF Facebook Group by a female fighter pilot. February 26, 2017, forum members prefer non-attribution.”

⁶ Douglas Martin, "Robin Olds, 84, Fighter Ace and Hero of Big Vietnam Battle, Dies," The New York Times, June 19, 2007, accessed April 14, 2017, <http://www.nytimes.com/2007/06/20/us/20olds.html>. Also, Nate Jaros, "USAF Pilot Retention: Throwing Money at Problems," Fighter Sweep, September 14, 2016, accessed April 05, 2017, <https://fightersweep.com/6192/usaf-pilot-retention-throwing-money-at-problems/>.

⁷ 28 April 2018 will be 25th Anniversary. Also, Rowan Scarborough, "She has the Right Stuff: Female Combat Pilots have been Flashing Their Skills for 20 Years," The Washington Times, March 25, 2013, accessed April 01, 2017, <http://m.washingtontimes.com/news/2013/mar/25/more-than-a-sound-barrier-female-pilots-have-displ/>.

⁸ Note: she is known to Star Wars fans as Dorovio Bold, but was nameless at the time of the film’s release.

⁹ Donna Dickens, ""Star Wars" Female Fighter Pilots Cut From Final Films," BuzzFeed, December 11, 2012, accessed April 05, 2017, https://www.buzzfeed.com/donnad/star-wars-female-fighter-pilots-cut-from-final-f?utm_term=.oaZNYZy52x#.yjEpAaAPxk.

¹⁰ "Rare Return of the Jedi Unedited Scene | Star Wars Celebration Europe 2," YouTube, August 21, 2013, , accessed April 05, 2017, <https://www.youtube.com/watch?v=0Nes3kczdTk>. Also, Jack Jenkins, "3 Progressive Messages To Look For While You Rewatch The Original Star Wars Trilogy," ThinkProgress, December 17, 2015, accessed April 05, 2017, <https://thinkprogress.org/3-progressive-messages-to-look-for-while-you-rewatch-the-original-star-wars-trilogy-af73e1e4ce25>.

¹¹ ‘Driver’ is a colloquialism in the fighter community for ‘Pilot’ (i.e. Viper Driver, Eagle Driver). Also, Susana Polo, "Rogue One's Best Cameo is Female Pilots, After 33 Years on the Cutting Room Floor," Polygon, December 16, 2016, accessed April 05, 2017, <http://www.polygon.com/2016/12/16/13955092/rogue-one-deleted-characters>.

¹² "Feminism and Women's Studies: Facts About Women in the Military, 1980-1990," Feminism and Women's Studies , January 19, 2005, accessed April 14, 2017, <http://feminism.eserver.org/workplace/professions/women-in-the-military.txt>.

¹³ Ray Delgado, "First U.S. Woman Fighter Pilot Ready to Take Wing : Lt. Jeannie Flynn bided her time in flight instructor's course until the Air Force's combat ban was lifted. Now she will fly the F-15E.," Los Angeles Times, February 16, 1994, accessed April 05, 2017, http://articles.latimes.com/1994-02-16/news/mn-23582_1_air-force.

¹⁴ "From Representation to Inclusion: Diversity Leadership for the 21st-Century Military (Final Report)," Homeland Security Digital Library, December 31, 2010, accessed April 13, 2017, <https://www.hsdl.org/?abstract&did=11390>. For an opposing political view, see "New Commission Wants "Diversity" Taken to New Extremes," News & Commentary - Center for Military Readiness, accessed April 13, 2017, <https://cmrlink.org/content/article/34552>.

¹⁵ Virginia S. Walker, "Hope is Not a Strategy: Join Spouse Assignment Policy and Its Effects on Officer Retention in the USAF". Air University. April 2016. Also, Edward Walker, "Leveling the Playing Field: Rethinking the Career Aviator". Air University. April 2005.

¹⁶ Ibid., E. Walker.

¹⁷ See Appendix IV for an example Post-Mission DFP.

¹⁸ "Unless otherwise noted, all quotations attributed to "respondents" come from the closed Facebook group of the Chick Fighter Pilot Association, whose members prefer to remain anonymous." See Survey Questions in Appendix V, and Complete Responses in Appendix VI.

¹⁹ See Appendix I.

²⁰ David Wroe, "Women Poised to Start Flying RAAF Fighter Jets," The Sydney Morning Herald, February 04, 2016, accessed April 14, 2017, <http://www.smh.com.au/federal-politics/political-news/women-poised-to-start-flying-raaf-fighter-jets-20160205-gmm7s.html>.

²¹ Air Force Personnel Center, , accessed April 14, 2017, <http://www.afpc.af.mil/Air-Force-Demographics>. Also, T. Hudson Jordan, "Moving From Diversity to Inclusion," Profiles in Diversity Journal, accessed April 14, 2017, <http://www.diversityjournal.com/1471-moving-from-diversity-to-inclusion/>. "Latest Annual Data," Women's Bureau (WB) - Recent Facts, accessed April 14, 2017, https://www.dol.gov/wb/stats/latest_annual_data.htm#age.

²² Stephen Losey, "Air Force Secretary's Diversity Plan will Mean Quotas, Critics Say," Air Force Times, March 9, 2015, accessed April 14, 2017, <http://www.airforcetimes.com/story/military/careers/air-force/2015/03/09/air-force-secretary-deborah-lee-james-opportunities-women-minorities-and-enlisted-airmen/24505205/>.

²³ Robert L. Brown, "Methodology of the Debrief," *USAF Weapons School Student Paper*, June 10, 2006. Also, see Bob "Cujo" Teschner, "The Vocabulary of the Mission Debrief," *USAF Weapons Review*, July 2005, 2-3.

²⁴ Sheryl Sandberg, "So We Leaned In ... Now What?," TEDWomen 2013, December 2013, accessed April 01, 2017, https://www.ted.com/talks/sheryl_sandberg_so_we_leaned_in_now_what#t-692943.

²⁵ Permission to use "MATSU" and meaning obtained from the respondent.

²⁶ DGAF means "Don't Give A F_ck"

²⁷ Jen DiMascio, "When the Pentagon First Let Women Fly in Combat (1993)," AviationWeek, April 28, 2015, accessed April 14, 2017, <http://aviationweek.com/blog/when-pentagon-first-let-women-fly-combat-1993>.

²⁸ Ibid. Nathaniel Frank, "Women in Combat: The Lessons of Progress," The Huffington Post, January 24, 2013, accessed April 14, 2017, http://www.huffingtonpost.com/nathaniel-frank/women-in-combat-the-lesso_b_2544765.html.

²⁹ Nancy Parrish, "Investigate Air Force for Openly Violent, Sexist and Hostile Environment to Women," The Huffington Post, November 14, 2012, accessed April 14, 2017, http://www.huffingtonpost.com/nancy-parrish/air-force-sexual-assault_b_2129880.html.

³⁰ Pre-release Think Tank study on UPT attrition, in regard to "continu[ing] to increase the number...female candidates entering pilot training", recommends to "explore whether or how to change the predominant culture, which may require larger numbers of minorities/women". Received on February 16, 2017". Also, Stephen Losey, "Air Force Secretary's Diversity Plan will Mean Quotas, Critics Say," Air Force Times, March 9, 2015, accessed April 14, 2017, <http://www.airforcetimes.com/story/military/careers/air-force/2015/03/09/air-force-secretary-deborah-lee-james-opportunities-women-minorities-and-enlisted-airmen/24505205/>.

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³² "Costly Affirmative Action," May 24, 1995, accessed April 13, 2017, <http://econfaculty.gmu.edu/wew/articles/95/costly-affirmative-action.htm>. Also see, Jamie McIntyre, "Sources: Navy had Different Standards for Women Pilots," CNN, June 9, 1997, accessed April 13, 2017, <http://www.cnn.com/US/9706/09/pentagon.navy/index.html>.

³³ "Facebook closed group, CAF Fighter Career Field, hosted by Headquarters Air Force/A3 at the Pentagon, membership rules require anonymity".

³⁴ Tyler Rogoway, "The USAF's Deadliest F-16 Viper Pilot On Women, Combat, And The F-35," Foxtrot Alpha, July 14, 2014, accessed April 14, 2017, <http://foxtrotalpha.jalopnik.com/the-usafs-deadliest-f-16-viper-pilot-on-women-combat-1603954525>.

³⁵ Senior Airman Alexis Siekert, "Female Air Force Fighter Pilot Stands Alone," Military.com, March 29, 2013, accessed April 01, 2017, <http://www.military.com/daily-news/2013/03/29/female-air-force-fighter-pilot-stands-alone.html>. "Canary in the coalmine" is a popular analogy in diversity literature.

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³⁸ Tara Coop, "Air Force, Airline Industry Working on Joint Solution to Pilot Shortage," Stars and Stripes, January 26, 2017, accessed April 01, 2017, <https://www.stripes.com/news/air-force-airline-industry-working-on-joint-solution-to-pilot-shortage->

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