CHARTING A NEW PATH: MODERNIZING THE U.S. AIR FORCE FIGHTER PILOT’S CAREER DEVELOPMENT

by

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PREFACE

As an F-16 fighter pilot with twelve years of experience, I have witnessed first-hand how the USAF manages its fighter pilots. The USAF is now facing increasingly complex challenges as a service with a recent focus on modernization and confronting our enemies around the globe. Unfortunately, the service seems unable to cope with the current manning crisis and needs to reassess how to foster its greatest asset… its people!

A “warrant officer” program has been a topic amongst fighter pilots around the bar for years. Had such a program been implemented it could have proved influential in my decision to remain in Active Duty service. Hopefully this research paper and its investigation will spur a discussion and lead to changes in policy that will help retain future generations of the world’s most combat capable fighter pilots.

I cannot thank my wife enough for her patience and understanding throughout this process, in addition to the time spent on the completion of my Masters Degree requirements over the past two years. Thank you! I would also like to thank my research advisor Dr. Gregory Intoccia for his help shaping and refining this paper. Finally, I extend my appreciation to my classmates, whose tireless efforts helped produce this product.
ABSTRACT

The purpose of this research is to develop baseline research that proposes a Warrant Officer type program that provides the USAF with greater flexibility in better posturing the fighter pilot force for success in the future. This paper asks the question: how can the USAF utilize warrant officers to improve retention and better develop its fighter pilot force? It employs a problem/solution methodology to accomplish this by investigating the factors contributing to the current United States Air Force (USAF) fighter pilot retention problem. Its key findings include documentation that fighter pilots are being drawn from Active Duty in significant numbers because of their increasingly competitive edge in the airline industry. Current USAF monetary retention programs have become ineffective in retaining the required number of fighter pilots within the force. Additionally, fighter pilots have become increasingly frustrated with the demands of the USAF promotion system requirements while attempting to balance their ability to maintain tactical flying skills. Its key recommendation includes the immediate implementation of a permanent USAF Flight Officer (FO) program to solve the current fighter pilot exodus. This program would provide an alternative career path or choice to fighter pilots at the midpoint of a potential twenty-year career. It would for the first time allow fighter pilots to choose a technical only flying career path lacking the traditional officer progression opportunities, or continue on the current officer career progression model.
SECTION 1: INTRODUCTION

The United States Air Force (USAF) is currently in the midst of a major fighter pilot exodus. Aviators with decades of combat experience are leaving at an alarming rate. The Active Duty is currently 520 fighter pilots short of its manning requirement with an expected shortage of 700 fighter pilots by 2021. Fighter pilots are quickly becoming a precious resource, as the 3,448-person career field is 15 percent undermanned and growing. The fighter pilot shortage is currently more acute than at any point in the USAF’s history as the total force is now at its lowest overall strength since its inception in 1947.

Yet, the fighter pilot shortage is happening as global disorder has significantly increased and the United States’ comparative military advantage has begun to erode, further exasperating the crisis. The complex security environment the United States faces spans across the spectrum of military operations from high-technology near-peer militaries to evolving transnational terrorist groups. China for instance has focused on air superiority by increasing its fourth-generation fighter fleet from 24 aircraft to over 700 in less than twenty years. The United States’ ability to counter these growing threats from the air falls squarely on the training and technical competence of a disenchanted fighter pilot force.

The shortage level is also beginning to ripple beyond the fighter pilot community and is affecting a larger part of the USAF. In an effort to keep operational fighter squadrons properly manned, Air Force Personnel Center (AFPC) has been forced to short other required fighter pilot manning positions. While operational combat squadrons and F-16 training units are still being held at 100 percent manning, Operational Test and
Weapons School manning has fallen to 85 percent, staff manning has fallen to 48 percent, and pilot training manning (T-38 and T-6 aircraft) has fallen between 33 and 3 percent. This shortage has forced AFPC to begin making policy-impacting decisions, which will continue to worsen with the retention problem. The USAF and AFPC have a limited ability to help control or influence manning levels within the current legacy officer structure in this dynamic environment.

If this trend is not reversed it could have major implications for the future of the USAF. In the short-term the shortage will directly affect the combat readiness of its fighter communities, as a shrinking career field takes on an ever-growing number of missions and global responsibilities. Beyond the short-term, lower staff manning levels will begin to effect USAF policy, systemic under manning will continue to spread uncontrollably, and officer candidates available to lead the USAF as a service will become limited. The USAF cannot continue bleeding its brightest fighter pilots, and must take bold action to retain these officers as both technical experts and future leaders.

This research paper will address the question: how can the USAF utilize warrant officers to improve retention and better develop its future fighter pilot force? This paper proposes a USAF Flight Officer program as a solution to help rectify the retention issue and better posture the fighter pilot career field. This program would provide a new opportunity in a fighter pilot’s career progression, by allowing fighter pilots to choose a technical flying career path, or continue on the currently established officer leadership career path.

This paper maintains that the USAF must find a creative way to solve the fighter pilot retention problem by modernizing the fighter pilot’s career development. Research
conducted will analyze the strengths and weaknesses of using “warrant officers” tailored for use specifically in the fighter forces of the USAF. If the proposed approach is followed, the USAF would be able to maximize its human capital, helping to retain interested fighter pilots with a new career avenue focusing on their primary skill – air combat! Fighter pilots interested in current leadership opportunities would still be able to do so by opting out of this program and maintaining the traditional officer career track. A Flight Officer program would help the USAF to posture an adaptive fighter pilot manning and career progression model for future success by retaining a wider breadth of officers interested in differing opportunities. An alternative career path for fighter pilots has been a subject of informal debate for years within the fighter community. However, dynamic market forces, a shrinking yet increasingly sophisticated fighter force, a growing pilot shortage, and the ineffective USAF response to remedy the situation all demand methodical research of the Flight Officer concept.

This research paper will employ a mixed methodology research approach to determine a better way to develop fighter pilots through the implementation of a Flight Officer program. The problem/solution method will compose the general framework used to identify the problem of fighter pilot retention. The research question will be investigated through both quantitative and qualitative analysis, by conducting a review of available data and previously conducted surveys. It will also be supplemented by personal interviews, which will shed light on more complex issues concerning the fighter force. The data from these approaches will be analyzed and the results will be incorporated into the USAF Flight Officer program recommendation.

To remedy the fighter pilot retention problem, research will aim to understand the
background behind training fighter pilots, officer pay and the aviation retention program, the officer promotion system, fighter pilot mistrust of USAF policies and common fighter pilot frustrations. An explanation of the role of warrant officers and an investigation into how they are used within the Department of Defense (DoD) will help lay the foundation for future integration of such a program in the USAF. Strengths and weaknesses of a potential USAF program will be analyzed, and opportunities that would help motivate and foster the force as a whole will be assessed. This research will then propose and outline a USAF Flight Officer (FO) program specifically designed to rectify issues within the current fighter pilot career development model. Finally, this paper will discuss any considerations for future analysis.

**SECTION 2: BACKGROUND**

“The mission of the United States Air Force is to fly, fight and win … in air, space and cyberspace”.

To that aim the USAF has and continues to develop technology and training programs second to none, ensuring our nation’s victory in these domains. The success of the USAF mission relies heavily on the shoulders of its fighter pilots and their capabilities in combat. However, any romantic visions of fighter pilot life fall in stark contrast with the reality of the USAF’s inability to retain them. Figure 1 summarizes the extent of the fighter pilot retention problem. In an effort to rectify the fighter pilot shortage, this section aims to understand many of the underlying reasons that are causal in creating an environment that has led to the current fighter pilot exodus.
FIGURE 1: Fighter Pilot Supply vs. Demand

Fighter Pilot Timeline

Fighter pilots and their associated training programs take decades to cultivate. These pilots require years of training and investment to develop the skills necessary to win in modern combat. It takes upwards of three years to graduate fighter pilots through Undergraduate Pilot Training (UPT), Introduction to Fighter Fundamentals (IFF), and airframe specific Formal Training Courses (B-Course or FTU) flight training. Within this timeframe they will also require all of the associated water survival, land survival, and resistance training before they even show up to their first combat unit. At this point the average cost to taxpayers is six million dollars to train per fighter pilot, who has yet to be combat qualified. Further Mission Qualifying Training (MQT), Flight Lead
Upgrade (FLUG), and Instructor Upgrade (IPUG) ensure pilots are combat qualified to lead increasingly demanding formations and missions. Finally, Weapons Instructor Courses (WIC), Forward Air Controller-Airborne (FAC-A), evaluator upgrades, and additional specialized training further hone a fighter pilot's skill throughout their career.

It is at the pinnacle of a fighter pilot’s military aviation career and at the height of their technical proficiency that they can decide on whether or not to leave the USAF. This decision most often occurs for the first time in a fighter pilot’s career upon reaching the end of their ten-year Active Duty Service Commitment (ADSC) incurred at the completion of their pilot training. At this juncture their training makes fighter pilots a highly marketable commodity outside the USAF. Additionally, pilots with this level of experience are increasingly in short supply. The USAF as a force currently has the fewest number of aircraft hence the fewest pilots to fly them since its inception, compounding the shortage problem. Analysis of barriers to retention will be focused at this crucial decision point, at the end of fighter pilots ADSC and about the mid-point of a potential twenty-year USAF career if retained.

Other Flying Opportunities

The immediate and most visible threat to USAF fighter pilot retention is the draw that other flying opportunities are having on USAF fighter pilots and pilots in general. A recent Government Accountability Officer (GAO) study projects that on average between 1,900 and 4,500 commercial pilots will be employed annually over the next decade. While that projection has remained relatively constant over the past decade, the biggest challenge for the airline industry has become hiring new pilots after the 2009 Colgan Air, Inc. crash, in New York. Following this accident the Airline Safety and Federal Aviation
Administration (FAA) Extension Act of 2010 enacted legislation that changed first officer hiring requirements from 250 hours to a more stringent 1,500 hours. All airline pilots must now obtain an Air Transportation Pilot (ATP) rating, and accumulate these additional hours, which on average will cost a new civilian pilot $100,000 dollar to obtain. This legislation has made military pilots a much more marketable and highly desired commodity in the commercial sector since they have this equivalent training already.

The more restrictive airline hiring policy is having a ripple effect across all aspects of the USAF including the total force. Air National Guard (ANG) and Air Force Reserve Component (AFRC) positions are becoming available as those pilots move to fill a lucrative civilian market. This environment has opened up another highly sought after opportunity for Active Duty fighter pilots to fill. ANG and AFRC positions are very competitive to Active Duty fighter pilots as these positions offer all of the benefits of Active Duty flying without the drawbacks. Fighter pilots are drawn to having a stable home life in one location after enduring ten years of Active Duty deployments, temporary duty travel and training away from home. Additionally, flying status is guaranteed and there is no worry about career advancement or posturing for future career opportunities. This supply and demand gap is expected to worsen and opportunities for active fighter pilots outside the military continue to grow.

**Pay and the Aviation Retention Program**

As a cornerstone of USAF policy since 1989, to help retain pilots the USAF established the Aviation Retention Program (ARP), otherwise known as the aviation bonus. Fighter pilots normally earn an average over $100,000 a year by the time they
have reached their ADSC, the same as any other equivalent time in grade rated aviation officer. Flight Pay only equates to a fraction of that amount, $650 in a month by the ten-year mark.

### Estimated Air Force pilot pay, including flight pay and average basic allowance for housing:

<table>
<thead>
<tr>
<th>Rank</th>
<th>Captain</th>
<th>Major</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years of service</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Pay</td>
<td>$106,300</td>
<td>109,700</td>
</tr>
<tr>
<td></td>
<td>114,800</td>
<td>117,800</td>
</tr>
</tbody>
</table>

### Major airlines' average annual pay, by aircraft size:

<table>
<thead>
<tr>
<th>Aircraft size</th>
<th>Small</th>
<th>Small</th>
<th>Mid</th>
<th>Mid</th>
<th>Large</th>
<th>Large</th>
<th>Small</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay</td>
<td>$51,510</td>
<td>79,847</td>
<td>95,613</td>
<td>102,517</td>
<td>113,444</td>
<td>122,620</td>
<td>175,601</td>
<td>203,692</td>
</tr>
</tbody>
</table>

**FIGURE 2: Military and Civilian Pay**

However, the ARP aims to augment this compensation by offering additional pay to compete with the commercial sector in return for a prolonged service commitment. From its inception until 2012 the ARP was $125,000 for five years of additional service. In response to lower retention rates, the ARP was expanded to $225,000 in 2013 for nine years of additional service. Amazingly the USAF was only able to retain 46 percent of
fighter pilots through the program, eligible for a $225,000 nine-year bonus in FY2014. The bonus take rate was 13 percent less than the previous year, and this trend is not projected to reverse course. This downward trend is a stark contrast when compared to 1993 statistics when “roughly 80 percent of pilots elected to stay in the service more than 11 years”.

‘Up or Out’ Air Force

Another compounding problem specific to fighter pilot retention is they are often caught between two competing realities. First, the USAF demands its fighter pilots to be tactical experts, ready to ensure air dominance in a multitude of possible engagements at a moments notice. Fighter aircraft systems, sensors, weaponry, tactics and enemy threats continue to rapidly evolve. The increasing complexity of modern aerial warfare requires fighter pilots to focus an increasing amount of time on excelling in their primary duty of being a credible combat aviator. Additionally, the complexity and level of effort of flying fighters will only increase as new capabilities come online. The F-35 is a fifth generation multirole aircraft that is slated to replace the remaining A-10, F-15 and F-16 fourth generation fighters. This single aircraft and its fighter pilots will need to cover the spectrum of USAF capabilities that older fourth generation fighters were able to compartmentalize based on their specialization.

Second, they must still ensure continued leadership development as USAF officers, to remain “the best qualified officers” for promotion within the system. As officers, fighter pilots are charged with leading the most advanced Air Force in the world. As they rise through the ranks they assume more responsibility and are crucial in setting USAF policy. The most visible example is Chief of Staff of the Air Force (CSAF),
General Mark A. Welsh III, who currently serves as the USAF’s senior leader, who began his career as an A-10 pilot. The USAF remains committed to an “up or out” promotion system where officers must continue to “check” all the career progression requisites to remain competitive for officer positions. These competing interests and their growing requirements have become increasingly unrealistic and/or stressing to achieve within the fighter community.

FIGURE 3: Officer Career Pyramid

Legacy of Mistrust

The fighter pilot community has endured institutional changes and policy shifts such as sequestration the same as the rest of the USAF. However, there have been
several specific USAF policies the community has contended with, creating profound and
lasting negative effect on fighter pilots, which have further eroded the trust of the
USAF’s decision making.

“Fighter Bills,” as they are known within the fighter pilot community, are fighter
pilot required positions that AFPC must fill by removing fighter pilots from their primary
flying aircrafts (e.g. F-15, F-16, etc.). These positions are not desired because pilots no
longer fly their primary aircraft, and some of the positions are completely non-flying,
such as Higher Headquarters Staff jobs and Army Air Liaison Officers (ALO) jobs.
Other fighter bills are flying positions with Air Education and Training Command
(AETC), such as UPT and IFF instructors. While these positions are known to be
necessary, and some fighter pilots even request UPT and IFF flying positions as a break
from the high paced operational fighter units, these jobs are generally frowned upon by
fighter pilots as they no longer fly their primary aircraft. Fighter pilots compete to stay in
their primary airframe because once they lose their qualification in their primary jet, there
is no guarantee they will ever be re-trained back into the community.

Another specific USAF policy imposed on the fighter community was the
implementation of Transformational Aircrew Management Initiatives for the 21st
Century (TAMI-21) in 2007. This force management process was created to help fill the
growing unmanned Remotely Piloted Aircraft (RPA) career field with experienced pilots.
This policy moved fighter pilots from flying their primary aircraft to “flying” an
unmanned aircraft. This situation has only finally reversed due to the current fighter pilot
shortage, as AFPC has recently begun allowing RPA operators who were previously
qualified fighter pilots to return to their fighter communities. Shortly after TAMI-21 was
instituted, a similar scenario was repeated while standing up the MC-12 Liberty program. The MC-12 was a manned multi-crewmember aircraft that conducted persistent reconnaissance over Iraq and Afghanistan. These programs have created a generation of fighter pilots that mistrust the decision-making of the USAF and its policies regarding fighter pilot manning.

**Common USAF Frustrations**

The draw of commercial airline, ANG and AFRC opportunities presents a problem for the USAF in retaining fighter pilots, but additional stressors within the USAF are also responsible for pushing fighter pilots away from Active Duty service as well. Fighter pilots (and many other career fields) are often frustrated with the additional duties they are expected to assume as support organizations across the USAF have drawn down. Moreover, “doing more with less” is a motto that has become part of the fabric of USAF culture, demanding more and more out of the personnel and resources of the smallest USAF organization since its inception. Not only does this affect a fighter pilot’s work life, but the additional duties also permeate into a pilot’s personal life. The stressors of an increasing number of deployments, temporary duty (TDY), and training has led to a higher ratio away from families at home.

Many of the other barriers to retention are common to Airmen across the entire USAF and are not necessarily specific to the fighter pilot career field. Fighter pilots also routinely complain of lengthy duty hours, unrelenting training exercises, an erosion of AF culture and focus on the mission, deteriorating morale, and inability to focus on personal goals. These factors are not new and are most famously voiced by Captain Ron Keys in his “Dear Boss” letter written to the commander of Tactical Air Command (TAC) shortly
after the Vietnam War (reference Appendix A). These frustrations effect some fighter pilots more than others just like any other career field, but the combined effect of all of these frustrations help contribute to an environment facilitating an easier decision to transition from Active Duty service to other available career opportunities.

SECTION 3: ANALYSIS

*We can't reach in someplace and grab more manpower to fix a problem anymore. And so we have got to figure out different ways of using our people in a more efficient way or we will wear them out. And if we lose them, we lose everything.*

- General Mark Welsh
  *Atlantic Council Speech*

Many in the fighter community have informally advocated for years that fighter pilots should maintain a status similar to that of “Warrant Officers” (WO). The idea of being a professional aviator or technician and breaking the chains from the established traditional officer career path is very popular among the fighter pilot community. This section aims to analyze if a USAF WO type of program for fighter pilots would help alleviate the current retention issue.

**Warrant Officers**

The roles and definitions of WOs vary among the services, and each utilizes these experts in their own manner. The Army Combined Arms Center define a WO as,

Possessing a high degree of specialization in a particular field in contrast to the more general assignment pattern of other commissioned officers. Warrant officers command aircraft, maritime vessels, special units, and task organized operational elements. In a wide variety of units and headquarters specialties, warrant officers provide quality advice, counsel, and solutions to support their unit or organization. They operate, maintain, administer, and manage the Army’s equipment, support activities, and technical systems. Their extensive professional experience and technical knowledge qualifies warrant officers as invaluable role models and mentors for junior officers and NCOs.
This definition clashes considerably with the role defined by 10 U.S.C. § 101, U.S. Congress for a commissioned officer, as they “are typically the only persons, in a military environment, able to act as the commanding officer of a military unit”.30 A review of the two definitions help delineate expectations in a manner that allows WOs to foster a culture that enables them to be the specialized technical experts of their craft, while allowing traditional officers to fall under the more common and understood commissioned officer roles and responsibilities.

As summarized in a 2002 Congressional Budget Office (CBO) Report, of the 1.1 million enlisted and 200,000 officers in the military only 15,100 of them served as WOs at the time of the reports publication.31 As highlighted in Figure 3, all U.S. armed services employ warrant officer grades except the U.S. Air Force.32 Additionally, the USAF is the most officer heavy service considering its large number of rated aviators, giving the USAF the highest ratio of officers to enlisted members of all the services. The WO profession is only a small portion of the total force, on average making up only 1.1 percent of all service members in the military.
FIGURE 4: Warrant Officer Numbers

Warrant Officer Utilization in other Services

During WWII the United States Army Air Force (USAAF), in its days before becoming the USAF in 1947, utilized WOs throughout its ranks. Additionally, the USAF was the only service to specifically use Flight Officers (FOs) as a means to rapidly grow its aviation position ranks. These FOs were saluted by enlisted airmen, yet were referred to as “third lieutenants” by other officers, as they fell below all traditional officer ranks. During WWII some 200,000 FOs are believed to have “served as pilots, bombardiers, navigators, flight engineers, and fire-control officers”. USAF FOs served a distinct purpose of providing a very technical skill, which required officer level education. The USAF’s creative solution was to provide them entitlements greater than their enlisted
counterparts (e.g. rank, pay and benefits), yet deprive them of the full traditional officer opportunities and advancement to placate the rest of the officer corps. Ultimately, the USAF WO program came to a close after “the service stopped making appointments to that rank in 1959”. Because of this, the USAF is now the only military service that does not utilize a WO program or an equivalent program within its rank structure.

The U.S. Army has the longest and most established WO program of the services. The delineation of WO and Officer roles has helped the Army transform the WO rank into a major fixture of its operations over the past century. Additionally, these responsibilities and rank structures are further outlined in AR 611-112, Manual of Warrant Officer Military Occupational Specialties, and are reviewed annually to maintain their accuracy. The Army has put great effort into its WO program, which also acts as a reward to enlisted troops from as far back as “World War I who lacked either the educational or other eligibility requirements necessary for continuance in the commissioned status”. These positions exist in 42 highly specialized and technical U.S. Army career fields.

In 2006 the Navy embarked on standing up its own aviator WO program. The intent was to train “pilots and naval flight officers on P-3 Orion, EP-3 Aries, E-6 Mercury aircraft and some Navy helicopter squadrons”. The origin of the recent Navy program began against the backdrop of the 9/11 attacks. In 2002 the Navy recruited 1,200 new aviators and the career field began rapidly expanding. The Navy became concerned that few of these new officers would have any chance of advancement in the future based on the influx of new aviators. In response the Navy initiated the aviator WO program to essentially cap many of these officers from being eligible for promotion. Unfortunately,
the program only lasted six years and was cancelled in 2012 after only 49 WO positions were created. The abrupt cancellation was due to a reversal in recruiting numbers as the fiscal crisis reduced budgets and manning levels around the services.

**Program Strengths**

The implementation of a USAF fighter pilot WO program would have many benefits to the fighter pilot community and the USAF as a whole. First, it could provide considerable fiscal relief to the service, by freeing up needed resources to further bolster the health of the fighter community. In theory the USAF nine-year $225,000 ARP has been a great incentive in keeping fighter pilots in the force, considering the minimum six million dollar investment each. Unfortunately, the policy has not been updated with any significance, at least sufficient to make an impact on today’s market or in keeping up with the pay scales of the airline industry. The recent expansion of the ARP in 2013 from five to nine years only lengthens the commitment, but the monetary incentive remains the same at $25,000 per year. The “improved” nine-year ARP seems to only benefit candidates that already intend to stay in the USAF for a twenty-year career.

The ARP truly provides no new incentives for undecided fighter pilots and is proving to be an antiquated attempt to maintain the fighter pilot force. Considering the current fiscal crisis and budget constraints, the USAF will most likely be unable to compete head-to-head with the commercial sector in terms of monetary compensation as a method to retain fighter pilots. Without significantly improving ARP incentives the USAF will continue to struggle with its retention rates. However, a WO program could draw upon the same USAF strengths used to help recruit fighter pilots to begin with. A tailored USAF WO program could provide a non-monetary incentive to high-performing
fighter pilots much like the Army’s program does. By developing a program with fighter pilot desires in mind, such a program could help incentivize pilots that would otherwise leave the USAF without requiring an increased monetary incentive, or potentially any monetary incentive at all.

Second, a USAF WO program would help in rectifying the frustration with the legacy, leadership only progression system. Fighter pilots that do not meet ‘up or out’ requirements become less likely to be competitive for “good” jobs and are relegated to undesirable jobs. A WO program could cap an officer at their current rank and pay-grade alleviating them of higher education degrees, military education and staff requirements. The promise of unparalleled flying opportunities without the bureaucratic barriers of advancing through the officer ranks could help retain interested fighter pilots. This would also allow for an increased focus on technical proficiency, which would benefit the fighter community in the future as our security environment continues to become more demanding.

Considering the rapid technological changes and associated effort in maintaining these systems, a WO program could provide additional dedicated experts to offset the growing technological requirements. Weapons shops are responsible for a growing number of responsibilities to support combat operations. Crypto-variable keys required for communications and weapons, databases required for navigation and ground collision avoidance, and a growing number of combatant command responsibilities are exceeding the capacity of a squadron to ensure seamless operations. WOs could help support squadron weapons officers and provide long-term expertise, support and continuity at the squadron level and above.
Third, a WO program would provide an increased ability for the USAF to affect its own retention rates in a manner that fosters the force. Fighter pilots have become increasingly skeptical of the USAF’s ability to properly manage force structure after the catastrophe of implementing TAMI-21 and subsequent programs. Official USAF policy at the time stated: “as a result of TAMI-21, the Air Force will allow fighter and bomber pilots with limited experience to volunteer for long-term reassignment to special operations and [Unmanned Aircraft System] mission areas”. In reality, there was no “volunteering” for this program. Inexperienced fighter pilots were ripped from their primary aircraft, which they worked hard to earn, and were sent to permanently fly undesirable unmanned aircraft. The lasting effects of such policies have created a generation of fighter pilots that mistrust the system, and have seen from experience that USAF policy will never benefit service members.

Finally, an overall increase in retention rates would directly correlate to improved manning levels, which could help bolster some fighter pilot Staff, ALO, UPT and IFF positions. A WO program could further improve the manning and perception of these positions by providing some guarantee to WOs that they would return to their primary airframe after filling these positions. A WO program could then provide an avenue for technical experts to spread their wealth of knowledge across a large spectrum of USAF organizations and communities. The probability of fighter pilots accepting or desiring a position which takes them out of their primary aircraft would increasing if a WO program is implemented by providing fighter pilots with assurances that they could get back to flying their primary aircraft following such an assignment. A WO program would help foster the fighter pilot force and the USAF as a whole.
Program Weaknesses

The implementation of a fighter pilot WO program does have some drawbacks and would need to overcome these issues. First, a USAF WO program for pilots flies in the face of the current record of success that does not ultimately tie officers’ careers to specialties, but rather to the higher value of leadership. The USAF justification for ending WO positions in 1959 was that it did not need another rank mixed somewhere between the enlisted and officer corps.44 Unlike the Army, which overcame the ambiguous WO relationship, the USAF did not care to understand how to utilize FO technical skills within its existing culture.

A WO program would limit the potential officer candidate pool for future leadership positions, as selected WO pilots would be committed to their functional specialty. Interested or selected pilots entered into a WO program would opt out of the traditional leadership career path in order to focus on a technical only career path. Presumably, those who would be excellent leaders may self-select for a technical path limiting the officers available for higher leadership positions. The USAF could potentially run into a shortage of qualified leaders if the WO program absorbs the most qualified officers, or too many of them.

Second, limiting officer career progression opportunities entirely could help retain pilots interested in technical opportunities, but could have the opposite effect on officers interested in the current career progression opportunities. The Army WO program provides a glimpse of this as the program does have its benefits, but it also has presents some challenges. Army WOs continue to struggle for better status lobbying for better pay, commissioning opportunities and special career legislation.45 Limiting USAF
officer opportunities could lead to a similar environment.

Third, the USAF must ensure it is committed to and properly managing any WO program and not using it in a manner similar to the TAMI-21 and MC-12 programs that fighter pilots have come to loathe. The recent Navy aviator WO program was only a half-hearted attempt at implementing a WO program similar to the Army’s. It was implemented as a personnel management tool, and tactical jets such as F/A-18 Hornets and S-3 Vikings were not eligible for inclusion in the program. The Navy used these tactical jets as a lure for increased recruitment, but would not allow WOs to secure these highly sought after position. Instead, the Navy allowed its less desired airframes and officers it deemed less likely for promotion to be eligible for the WO program. This failed program highlights some of the pitfalls in implementing a future USAF fighter pilot program, and reveals that the USAF must commit to a long term plan and not a short sighted approach.

**Program Assessment**

Ensuring a steady retention rate within the fighter pilot community is of greater importance compared to that of other USAF career fields. This is because of the contrast in the time and investment required to replace their expertise. Normally, USAF technical training schools vary in length from four to fifty-two weeks depending on their profession or Air Force Specialty Code (AFSC), compared to a fighter pilots three-year development timeline.\(^46\) It is easy to assume a pilot is a pilot, but AFSCs vary among pilots depending on airframe flown and qualification. Unlike most USAF career fields, the ability to cross train to a different AFSC is not very plausible. The USAF attempted this before during the Vietnam War with disastrous results under the notion of a
“universally assignable” pilot program. In 1966 the aircraft loss rate in Vietnam was 0.25 per month, which ballooned to 4.5 per month by 1968 under the program. This inability to cross train effectively into the fighter pilot community compounds the issue and emphasizes the importance of retaining as many of the current fighter pilots as possible. Implementing a WO program could be a creative solution around this problem.

Fundamentally, the USAAF/USAF FO program provides a successful framework that would apply as the foundational premise for a re-instituted modern USAF program. However, a modern USAF FO program would still have to rectify the old problem of creating “in-betweeners” or social outcasts. This could be avoided by using the existing USAF rank structure and career development methods until fighter pilots reach the end of their pilot training ADSC. At this point fighter pilots could move into the FO career field essentially putting their career development and advancement through traditional means on hold. In this manner FOs could simply retain their current rank (generally Captains or Majors) minimizing the confusion on where they fit within the USAF culture. Issues that plagued the FO program in the past such as rank and social relationships as well as issues regarding pay and benefits would be easily resolved.

The U.S. Army has been using WOs in specialized aviation units with great success, setting the precedent for future implementation in the USAF for some of its fighter pilots. The U.S. Army does not use an all-WO or an all-traditional officer approach to manning. Instead WOs in aviation units only make up a small percentage of the force. However, their expertise has enabled them to become the backbone of Army Aviation operations. In adopting this approach, the USAF would not need additional officers to cover both leadership and FO position requirements.
In WWII the FO program was implemented to help resolve the problem of a shortage of pilots in a rapidly expanding force. In that environment FOs were created and developed as a separate and distinct group. The modern FO program would be implemented and developed to help remedy the current retention issue. An implemented FO program could help manning at both ends of the spectrum (over-manned or under-manned). Manning shortages are common, as they have occurred as recently as 1979 during the “hollow force” era, and again in the early 2000s.\textsuperscript{50} The implementation of a FO program would give AFPC a proactive mechanism to help control fighter pilot manning levels, instead of using draconian measures and ineffective programs, which is currently the only approach AFPC has to handle dynamic manning issues. It would give the USAF a controllable pool of personnel to use as a shock absorber during future manning challenges, by managing how many FOs are allowed into the career field or not. This personnel tool would help control the officer manning pyramid by allowing for an increase in FO entries when pilot manning is low, yet retaining the ability to limit FO entry when fighter pilot billets are over manned.

Additionally, a FO program could allow AFPC to target specific incentives, such as monetary (traditional ARP) and non-monetary (FO program) incentives, towards fighter pilots with differing interests thus increasing retention. Funds saved by retaining fighter pilots through a FO program could potentially be used to increase the existing ARP bolstering its competitiveness with the commercial market for pilots seeking a monetary incentive.

\textbf{SECTION 4: USAF FLIGHT OFFICER PROGRAM}

USAF fighter pilot WOs should be referred to as a Flight Officer (FOs), in an
effort to differentiate it from traditional warrant officer programs. The name Flight Officer and the program itself have historical ties to the previously discussed and abandoned USAF program. A USAF FO program would need to be adapted to suit officer ranks unlike the current model used by the U.S. Army. However, the USAF would benefit greatly from using the Army foundational WO structure as a starting point in developing its own program (Reference Figure 5).

FIGURE 5: Warrant Officer Leader Development Model

Fighter Pilot FOs would be selected based on merit and interest in entering such a program. They would be selected at the end of their ADSC and their traditional career progression would be paused. However, FO career progression within the program and opportunities would need to be developed to continue challenging FOs allowing them to
pursue different opportunities. FOs could be used to fill a variety of flying positions outside of their primary aircraft such as foreign exchanges, IFF and UPT knowing that they will return to their primary aircraft and will leave the service fully qualified. This would help ensure sharp aviators are able to spread their wealth of expertise, in a manner that is not currently feasible. An ADSC would be extended to retain FOs to a twenty-year career or as required by AFPC manning requirements, and benefits should be adjusted to accommodate the new career path.

An implemented FO program will help create a cadre of technical experts as defined by the Army Combined Arms Center, in a departure from the traditional Title 10 role of USAF officers. USAF FOs would maintain the same level of proficiency as a traditional fighter pilots assigned to Fighter Squadrons. This program should be used to reward and retain fighter pilots, interested in maintaining a technical only profession, which would be otherwise lost to competitive forces if not implemented.

SECTION 5: CONCLUSION

Recommendation

The USAF and AFPC should immediately take action and implement a FO program within the fighter pilot community in order to avoid a sizeable depletion in the number of Air Force Active Duty fighter pilots. If positive corrections are not made in fighter pilot force management the USAF will continue to lose its best and brightest aviators. This continued loss of talent will take years to remedy, and is occurring at a time when threats against the nation continue to advance, and the USAF becomes involved in an increasing number of conflicts.

The USAF must update its retention incentives and policies to ensure the health of
the fighter pilot force. A non-monetary FO program incentive to enable increased retention is crucial to force development, as traditional ARP incentives within the current career progression model are not sufficient in sustaining the fighter pilot force. An FO program must guarantee that fighter pilots will continue flying their primary aircraft or provide assurances that they will return to their primary aircraft if selected for, or volunteering for a “fighter bills” assignment. Fighter pilots must be empowered to focus on technical ability and be relieved of officer progression requirements, which have become a barrier to retention and mission focus. Future research should analyze the viability of implementing FOs in all pilot career fields as well as WO positions in non-aviation related career fields within the USAF.

Conclusion

Fighter pilots have put years of study and effort into becoming the best at what they do, and the USAF has invested heavily in developing them as combat aviators. At the end of a fighter pilot’s ADSC they are free to make a choice of whether to continue to do what they love in Active Duty service, or take their knowledge and expertise somewhere else. Unfortunately, the USAF has become unable to retain an increasing number of them and fighter pilots are leaving at worrisome rates.

Fighter pilots first and foremost want to fly, and specifically want to fly the primary aircraft they have worked hard to earn and master. As they reach their ADSC their opportunity to do so greatly diminishes. They are pushed by an “up or out” policy requiring them to focus an increasing amount of effort on military education, formal education and non-flying assignments. Even the appealing monetary policy setup by the USAF has proven to be an ineffective incentive to compel fighter pilots to remain in
Active Duty. Research has shown that years of drastic policy shifts, unpredictable hours and other common USAF frustrations, have become enough of a factor to push fighter pilots away from Active Duty positions. An increasing number of pilots are severing ties with the USAF and are seeking employment with institutions that understand their strengths. These companies foster a pilot’s ability to do what they love as a primary profession – fly. Unfortunately the USAF has yet to create a solution that centers on flying as the main priority for a fighter pilot. Until then, the USAF will continue to struggle to retain fighter pilots.

This research proposes a Flight Officer program be instituted as an alternative solution to fighter pilot retention. Pilots would be incentivized by unique flying opportunities and not solely by monetary persuasion. A FO program would improve many aspects of the USAF aviation community. First, it would provide an increased focus on technical excellence. As technology and modern warfare continue to change and advance, and it is imperative that fighter pilots be at the forefront of tactical learning and mastery. Additionally, a FO program would help facilitate the spread of aviation expertise across the USAF in a manner that is not possible within the current career development structure.

Such a program is flexible enough to help AFPC retain fighter pilots during turbulent times, and would provide a tool to help stabilize fighter pilot manning over the long term. If the USAF wishes to preserve its fighter community, A FO program should be considered. The program would integrate into the existing USAF manning structure, and would create a backbone of fighter pilot experts throughout the force as the USAF forges into the future.
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APPENDIX A

The Dear Boss Letter*

Dear Boss,

Well, I quit. I’ve finally run out of drive or devotion or rationalizations or whatever it was that kept me in the Air Force this long. I used to believe in, “Why not the best,” but I can’t keep the faith any longer. I used to fervently maintain that this was “My Air Force,” as much or more than any senior officer’s…but I can’t believe any more; the light at the end of my tunnel went out. “Why?” you ask. Why leave flying fighters and a promising career? Funny you should ask—mainly I’m resigning because I’m tired. Ten years and 2,000 hours in a great fighter, and all the time I’ve been doing more with less—and I’m tired of it. CBPO [Central Base Personnel Office] doesn’t do more with less; they cut hours. I can’t even entrust CBPO to have my records accurately transcribed to MPC [Military Personnel Center]. I have to go to Randolph to make sure my records aren’t botched. Finance doesn’t do more with less; they close at 15:00. The hospital doesn’t do more with less. They cut hours, cut services, and are rude to my dependents to boot. Maintenance doesn’t do more with less; they MND [maintenance non delivery] and SUD [supply delete] and take 2.5 to turn a clean F-4. Everybody but the fighter pilot has figured out the fundamental fact that you can’t do more with less—you do less. (And everybody but the fighter pilot gets away with it…when’s the last time the head of CBPO was fired because a man’s records were a complete disaster?) But on the other hand, when was the last time anyone in the fighter game told higher headquarters, “We can’t hack 32 DOCs [designated operational capability] because we can’t generate the sorties?” Anyway—I thought I could do it just like all the rest thought they could…and we did it for a while…but now it’s too much less to do too much more, and a lot of us are tired. And it’s not the job. I’ve been TDY [on temporary duty] to every dirty little outpost on democracy’s frontier that had a 6,000-foot strip. I’ve been gone longer than most young jocks have been in—and I don’t mind the duty or the hours. That’s what I signed up for. I’ve been downtown and seen the elephant, and I’ve watched my buddies roll up in fireballs—I understand—it comes with the territory. I can do it. I did it. I can still do it—but I won’t. I’m too tired, not of the job, just the Air Force. Tired of the extremely poor leadership and motivational ability of our senior staffers and commanders. (All those Masters and PMEs [professional military educators] and not a leadership trait in sight!) Once you get past your squadron CO [Commanding Officer], people can’t even

* This letter was written a few years after the end of the Vietnam War by Capt. Ron Keys to Gen. Wilbur Creech, then commander of TAC. See p. 65 for historical context.
pronounce esprit de corps. Even a few squadron COs stumble over it. And let me
cite you—in the fighter business when you’re out of esprit, you’re out of corps—
to the tune of 22,000 in the next five years, if you follow the airline projections.
And why? Why not? Why hang around in an organization that rewards excellence
with no punishment? Ten years in the Air Force, and I’ve never had a DO or Wing
Commander ask me what our combat capability is, or how our exposure times are
running during ops, or what our air-to-air loss and exchange ratios are—no, a lot
of interest in boots, haircuts, scarves, and sleeves rolled down, but zero—well,
maybe a query or two on taxi spacing—on my job: not even a passing pat on the
ass semiannually. If they’re not interested, why should I be so fanatical about it?
It ought to be obvious I’m not in it for the money. I used to believe—and now
they won’t even let me do that.

And what about career? Get serious! A string of nine-fours and ones as long
as your arm, and nobody can guarantee anything. No matter that you’re the Air
Force expert in subject Y…but if the computer spits up your name for slot C—you’re
gone. One man gets 37 days to report remote—really now, did someone slit his
wrists or are we that poor at managing? Another gets a face-to-face, no-change-
for-six-months-brief from MPC…two weeks later? You got it—orders in his in
basket. I’m ripe to PCS—MPC can’t hint where or when; I’ve been in too long
to take the luck of the draw—I’ve worked hard, I’ve established myself, I can do
the job better than anyone else—does that make a difference? Can I count on
progression? NO. At 12–15 hours a day on my salary at my age, I don’t need that
insecurity and aggravation. And then the big picture—the real reasons we’re
all pulling the handle—it’s the organization itself. A noncompetitive training
system that allows people in fighters that lack the aptitude or the ability to do
the job. Once they’re in, you can’t get them out…not in EFLIT, not in RTU,
and certainly not in an operational squadron. We have a fighter pilot short-
fall—didn’t you hear? So now we have lower quality people with motivation
problems, and the commander won’t allow anyone to jettison them. If you haven’t
noticed, that leaves us with a lot of people in fighters, but very few fighter pilots,
and the ranks of both are thinning; the professionals are dissatisfied and most of
the masses weren’t that motivated to begin with. MPC helps out by moving Lts
every 12–15 months or so—that way nobody can get any concentrated training
on them before they pull the plug. Result: most operational squadrons aren’t
worth a damn. They die wholesale every time the Aggressors deploy—anybody
keep score? Anybody care? Certainly not the whiz kid commander, who blew in
from 6 years in staff, picked up 100 hours in the bird, and was last seen checking
the grass in the sidewalk cracks. He told his boys, “Don’t talk to me about tac-
tics—my only concern is not losing an aircraft…and meanwhile, get the grass
out of the sidewalk cracks!”—and the clincher—integrity. Hide as much as you
can…particularly from the higher headquarters that could help you if only they
knew. They never will though—staff will see to that: “Don’t say that to the
general!” or “The general doesn’t like to hear that.” I didn’t know he was paid
to like things—I thought he was paid to run things... how can he when he never hears the problems? Ah well, put it off until it becomes a crisis—maybe it will be overcome by events. Maybe if we ignore it, it won’t be a problem. (Shh, don’t rock the boat). Meanwhile, lie about the takeoff times, so it isn’t an ops or maintenance late. (One more command post to mobile call to ask subtly if I gave the right time because “ahh, that makes him two minutes late,” and I will puke!) Lie about your DOC capability because you’re afraid to report you don’t have the sorties to hack it. “Yes, sir, losing two airplanes won’t hurt us at all.” The party line. I listened to a three-star general look a room full of us in the face and say that he “Didn’t realize that pencil-whipping records was done in the Air Force. Holloman, and dive toss was an isolated case, I’m sure.” It was embarrassing—that general looked us in the eye and said, in effect, “Gentlemen, either I’m very stupid or I’m lying to you.” I about threw in the towel right there—or the day TAC fixed the experience ratio problem by lowering the number of hours needed to be experienced. And then they insult your intelligence to boot. MPC looks you straight in the eye and tells you how competitive a heart-of-the-envelope three is!... and what a bad deal the airlines offer! Get a grip—I didn’t just step off the bus from Lackland! And then the final blow, the Commander of TAC arrives—does he ask why my outfit goes 5 for 1 against F–5s and F–15s when most of his operational outfits run 1 for 7 on a good day? (Will anybody let us volunteer the information?) Does he express interest in why we can do what we do and not lose an airplane in five years? No—he’s impressed with shoe shines and scarves and clean ashtrays. (But then we were graciously allotted only minimum time to present anything—an indication of our own wing’s support of the program. Party line, no issues, no controversy—yes, sir; no, sir; three bags full, sir.)... And that’s why I’m resigning... long hours with little support, entitlements eroded, integrity a mockery, zero visible career progression, and senior commanders evidently totally missing the point (and everyone afraid or forbidden to inform them.) I’ve had it—life’s too short to fight an uphill battle for commanders and staffs who won’t listen (remember Corona Ace?) or don’t believe or maybe don’t even care. So thanks for the memories, it’s been a real slice of life.... But I’ve been to the mountain and looked over and I’ve seen the big picture—and it wasn’t of the Air Force.

“This is your captain speaking... on your left you should be able to see Denver, Colorado, the mile...”

FIGURE 6: Infamous Dear Boss Letter

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