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MASTER OF MILITARY STUDIES

**Missing the Mark:
A Study of US Marine Corps Aviation Talent Management and Retention**

SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF MILITARY STUDIES

Major Kyleigh M. Cullen

AY 2019-20

Mentor and Oral Defense Committee Member: Dr. Bradford Wineman

Approved: 

Date: 3/17/20

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Executive Summary

Title: Missing the Mark: A Study of US Marine Corps Aviation Talent Management and Retention

Author: Major Kyleigh M. Cullen, United States Marine Corps

Thesis: Senior Marine Corps leaders must address the underlying issues that negatively affect talent management and retention in the aviation community to develop innovative and enduring solutions that can effectively reverse the growing deficit of Marine Corps aviators.

Discussion: The United States military is facing a crisis in pilot retention, and the Marine Corps is no exception. This crisis is occurring during a time when worldwide demand for pilots is increasing, and it has become exponentially easier and more desirable for military pilots to transition to a career in the commercial aviation industry. Concerns over a hindered aviation training pipeline, degraded aircraft readiness, minimal flight time, and poor quality of life exacerbate the problem. Independently, each of the Marine Corps' sister services have recognized the problem and implemented solutions to increase training throughput and provide varied incentives to retain aviators. Conversely, the Marine Corps approach to closing the inventory gap addresses retention and not training or accessions. Thus far, the Marine Corps has limited its primary retention efforts to continuing captains that have been twice passed for promotion on active duty and offering blanket bonuses to pilots at the end of their service contract. With no end in sight to the global pilot demand, the Marine Corps cannot only throw money at the problem or the pilot deficit will continue to grow. The Marine Corps must acknowledge the underlying culture issues that have led to an increasingly gapped pilot inventory and consider the diverse programs enacted by sister services to resolve the pilot retention crisis.

Conclusion: Marine Corps retention efforts, thus far, have proven ineffective at decreasing the pilot inventory gap. By widening its aperture and following the example of sister services the Marine Corps can effectively manage talent within the aviation community to fill the company grade roles and retain experienced aviators.

DISCLAIMER

THE OPINIONS AND CONCLUSIONS EXPRESSED HEREIN ARE THOSE OF THE INDIVIDUAL STUDENT AUTHOR AND DO NOT NECESSARILY REPRESENT THE VIEWS OF EITHER THE MARINE CORPS COMMAND AND STAFF COLLEGE OR ANY OTHER GOVERNMENTAL AGENCY. REFERENCES TO THIS STUDY SHOULD INCLUDE THE FOREGOING STATEMENT.

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The United States military is experiencing a retention crisis within the aviation community that has become so pressing, it has drawn the attention of senior military and government officials. Beginning in 2013, sequestration led to years of underproduction in pilot training pipelines and reduced aircraft readiness, ultimately resulting in a shortfall of greater than 3,000 pilots across the Department of Defense.¹ In addition, a rising need for pilots in the commercial aviation industry is exacerbating the issue. The Marine Corps is no exception in this crisis. What is exceptional, however, is the limited approach the Marine Corps has taken when addressing the problem. Nearly every report or article written on the subject of military pilot retention discusses pilot production, aircraft readiness, monetary compensation, and quality of life. While greater compensation from the commercial aviation industry is a tempting scapegoat, military pilots are generally driven by service, not money, and consequently, are drawn to leave the service by the simpler, higher quality lifestyle offered by civilian aviation. With all this in mind, merely “throwing money at the problem” will not be sufficient to stem the flow of departing aviators.

In the Marine Corps, there is a distinct gap of experienced and qualified company grade officers, those that hold the rank of captain or below, caused by under accession of aviators during sequestration, years of underproduction in flight training, and decreased retention rates. Marine Corps leaders must acknowledge the problem of a growing gap in the company grade inventory, actively seek feedback, and discuss solutions with the target audience and sister services to address the fundamental issues that negatively affect talent management and retention in the aviation community and develop innovative and enduring solutions. This paper will discuss the current Marine Corps pilot deficit and its underlying causal factors, evaluate retention

strategies already in place across the services, and recommend policy and procedure changes to improve retention rates.

Current State of Marine Corps Aviation

The problem Marine Corps aviation is currently facing has been developing for the better part of a decade but until recently has not been truly acknowledged. In a 2017 hearing before the House Armed Services Sub-Committee on Military Personnel, Lieutenant General Mark A. Brilakis stated that “while the Marine Corps does not currently have a shortage of aviation personnel, we are experiencing a shortage of trained aviators, particularly in specific platforms.” He also noted that the ideal retention rates of 91% had dropped as low as 86%.² In fact, the shortage in trained aviators began well before 2017 and the overall pilot inventory has been on a steady decline since 2015. The tactical aviation community has been particularly affected, losing a net total of more than 200 pilots between 2014 and 2019, nearly a quarter of the total inventory.³ The gap in trained and experienced aviators is most notable in the company grade ranks, those that make up the majority of pilots in operational squadrons. Based on requirements of the 2018 Marine Corps Aviation Plan, there were 632 pilots missing from the company grade inventory, a fraction of whom were delayed in training and more that simply did not exist.⁴ Broken down by aircraft type, overall fixed-wing, company grade aviation strength stood at 52% and rotary wing was at 76% in March 2019.⁵ Despite the growing deficit of aviators, company grade specifically, the problem is being masked by staffing techniques that generally keep operational billets filled. Manning in operational squadrons, for the most part, has remained at appropriate levels because company grade billets are being filled by excess majors, some aviators are serving in back-to-back fleet tours, pilots are no longer permitted to fill “any Marine” billets that were previously available to them, and other non-flying aviator billets are

left gapped. While these efforts have accomplished the goal of keeping a requisite number of pilots in operational units the steady decline in the pilot inventory is worrying, and should it continue, more billets will remain unfilled and the operating force will feel the effects.

The Marine Corps is not blind to the fact that it is losing pilots and has implemented several programs, primarily monetary in nature, to entice aviators to remain in the service. In March 2018, the Marine Corps increased monthly Aviation Career Incentive Pay (ACIP) rates for all aviators, reaching the maximum allowable rate of \$1,000 per month for pilots with greater than ten years of aviation service.⁶ Adding to the monetary benefits of aviation service, in Fiscal Year 2018 the Marine Corps offered its first aviation bonus since 2011, offering jet and tiltrotor pilots \$20,000 per year for an additional two years of service.⁷ The aviation bonus has been offered every year since then, opening up to more communities, expanding the eligible population, increasing in size, and offering varying contract lengths. The most recent bonus contract lengths vary from three to eight years at rates from \$15,000 per year to the maximum allowed by Congress, \$35,000 per year. Only pilots who have fulfilled their initial service obligation and have not been passed over for promotion to major are eligible, and contract length and bonus size are dependent on the type of aircraft flown and years of active service of the individual.⁸ For pilots that have been passed over for promotion twice and are being forced from the service by the Defense Officer Personnel Management Act policy of “up-or-out,” the Marine Corps presents an opportunity for continued service. In 2017 and every year after, twice passed captains have been selected for continuation, allowing the member to choose to stay on active duty for an additional three years in exchange for slightly higher separation pay.⁹ Continuation is now being extended to twice passed majors as well, permitting them to continue serving up to 24 years. Other retention measures are not meant to incentivize continued aviation service but

rather force it. To begin, initial flight contract lengths for all aviators, regardless of platform, have increased from six to eight years. Additionally, this past year, company grade aviators were notified that any requests for transitions to Marine Special Operations Command or any other branch of service “are not being approved at this time.”¹⁰ In addition to keeping Marine aviators in the service, the Marine Corps is now asking any reserve aviator who is willing to return to active reserve status on a first come first served basis, offering lump-sum payments of \$20,000 or \$30,000 for two or three years of active service, respectively.¹¹ All of these initiatives are temporary solutions aimed at retaining anyone willing to stay, but they are insufficient to retain the quality aviators that the Corps needs unless the deeper problems are addressed.

Framing the Problem

If the Corps is going to improve pilot retention and rebuild the aviator inventory, it will need to view the problem holistically. The issues that Marine Corps aviation is facing range throughout an aviation career, and by breaking them out from accessions to retirement it is possible to see why the Corps is plagued by retention problems.

Investing in the Corps’ Youngest Aviators

The large shortfall in the company grade inventory has not formed due to an exodus of those pilots, in fact, because of the eight-year commitment incurred at the end of flight training, most pilots are not eligible to leave the service until they are “in-zone” for or have been promoted to the rank of major. So, if the deficit of company grade officers is not a product of poor retention, it then stands to reason that the Marine Corps is simply not producing enough new aviators to fill these ranks. The Marine Corps, as part of the naval service, relies heavily on the Naval Air Training Command (NATC) to train its pilots and, consequently, shares the challenges of manning and maintaining the pilot training pipeline. Difficulties with aircraft

readiness, suboptimal instructor pilot manning, and various other administrative or policy hurdles have led to eight years of underproduction in the last eleven.¹²

Typically, from the time a student checks-in at Marine Aviation Training Support Group 21 (MATSG-21) to the time they arrive at their first operational squadron, depending on their selected platform, they have spent an average of three to five years in training, one to two years more than is required to complete the training syllabus. Because of the aforementioned roadblocks to moving students through the training pipeline, many Marines end up delayed and as a result a student backlog forms, further increasing the amount of time they spend at the training commands. In 2018, there were over 1,300 Marine aviators in the training pipeline,¹³ yet Fleet Replacement Squadron graduation rates have been upward of 60 short of annual goals, ranging from 260 to just over 300 per year for the last four years, clearly not a high enough rate to reduce the stockpile of students stuck in the training pipeline.¹⁴ Increased time-to-train caused by administrative requirements and down-time between segments of the training syllabus, some of which is factored into the total time-to-train, is a significant contributing factor to the throughput problem. For the past two years, time-to-train has been on average half a year longer than what is prescribed in the syllabus for rotary wing and tiltrotor pipelines and a year and a half over for tactical aviation platforms.¹⁵ A significant amount of the delay in moving students through the training pipeline comes from dwell time spent as students are preloaded for training events. As an example, the current time it takes a Marine, on average, to get from initial check-in to primary flight training is approximately nine and a half months, of which, only about thirteen weeks are spent completing training requirements.¹⁶ All of the time spent waiting to train could serve as an excellent opportunity for students to begin working on their Professional Military Education (PME), one of the many additional duties that take pilots away from their

flying jobs, however, Marine Corps University has implemented a policy preventing Marines from pursuing PME before completing their primary Military Occupational Specialty (MOS) training. Nonetheless, the dedicated officers of MATSG-21 make every effort to keep the Marines that are waiting to begin their training gainfully employed with leadership opportunities, community service, and education to prepare them for the syllabus ahead, but for every day a student is delayed the operating force suffers.

As previously stated, the Marine Corps relies heavily on NATC to develop the training syllabus, maintain and develop training platforms, and instruct students. However, the Marine Corps is required to provide a requisite number of instructor pilots relative to student production requirements and historically Marines have been underrepresented in the NATC instructor pool. In 2016, a large push to fill Marine instructor billets was underway and still NATC was short on Marine instructors as they have been consistently since the end of 2014.¹⁷ Currently, there are seventeen gapped Marine instructor billets across all of the training squadrons in NATC that are supported by MATSG-21, a number which accounts for only the flying billets and not various administrative support billets that also require aviators.¹⁸ Not only is flight school being understaffed but, because of a culture that has developed in which flight instructor jobs are not seen as “career-enhancing,”¹⁹ the Corps does not always send its most qualified or experienced pilots and officers to mold the youngest, most impressionable generation of aviators.

The Cascading Effects Associated with Aircraft Readiness

For years now, the Marine Corps has been monitoring and struggling with the fact that legacy platforms and high operational tempos from decades of war in multiple theaters have resulted in decreased aircraft readiness rates. From 2014 to 2019, Marine Corps aviation has been reporting Ready Basic Aircraft (RBA) rates, aircraft that are mission capable and

Functional Check Flight (FCF) complete, ranging from the mid to low fifties. Of those RBA aircraft, generally less than 30% are reported to be Full Mission Capable (FMC) and Non-Mission Capable (NMC) rates have ranged from 30% to 40%.²⁰ These averages reflect all Type/Model/Series (T/M/S) aircraft but legacy communities such as the F/A-18 Hornet and CH-53E Super Stallion have suffered the most. In 2016, Marine aviation reported that only 31% and 29% of these aircraft, respectively, were mission capable.²¹ Compare that to December of 2017 when it was reported that a mere 26% of Marine F/A-18 were mission capable.²² Not only are these readiness statistics jarring but, the Marine Corps is also short of aircraft in its total inventory as well. In a 2017 readiness hearing before Congress, Lieutenant General Steven R. Rudder reported that the Marine Corps was 115 aircraft, or 20%, short of its desired inventory.²³ The effects of aircraft readiness go beyond just the capability to deploy that piece of equipment to combat. Readiness has a marked effect on the ability of the Marine Corps to train and maintain the proficiency of its pilots.

There is a common understanding that military pilots should, at a minimum, be flying fifteen to sixteen hours per month to maintain the most basic levels of tactical and technical proficiency. Lower readiness rates have ultimately led to a decrease in monthly flight time and a resultant loss of overall proficiency for Marine pilots. Following the drawdown of the wars in Iraq and Afghanistan and coincident with sequestration, the Marine Corps began to see flight hours drop. In fiscal year 2017 Marine Corps aviation, as a whole, flew 60,000 fewer hours than it did in fiscal year 2013.²⁴ Individual pilots flew on average 13.5 hours per month in 2016 and subsequent years have seen flight time increase up to 15.4, 17.9 and 17.1 hours per month respectively in 2017, 2018, and 2019.²⁵ It is important to note that these numbers are fleet averages and that individual flight time may vary by community, personal qualification

progression, and deployment status. For example, deployed squadrons typically log 50% more flight hours per month than non-deployed units,²⁶ and in 2017 pilots in the F/A-18 community recorded, on average, 12.7 hours per month, while in 2016 CH-53E pilots averaged only nine hours per month.²⁷ To relate these numbers and as a point of comparison, pilots completing a fleet tour in 2017 left their squadron with an average of 20% fewer flight hours than their counterparts in 2007.²⁸ As the adage goes, “practice makes perfect” and without the opportunity to develop, or even maintain, their skills Marine aviators have become less proficient, increasingly more dangerous, and, therefore, driven to leave the service for careers that will provide them with more opportunity to maintain their skill set.

Decreasing readiness rates have resulted in less flight time for Marine aviators, increased pressure on commanders, and, subsequently, diminishing proficiency which can be correlated to rising aviation mishap rates. In an informal survey conducted during February 2018, of a group of 42 Marine aviators, a mix of whom were active duty, reserve, separated, and retired, 33% indicated they felt they were required to operate outside of their level of training and proficiency, 80% said maintenance affected their ability to fly enough to remain proficient, and 79% said they felt Marine aviation was unsafe due to decreased pilot proficiency.²⁹ Aligned with decreasing aircraft readiness and pilot flight time mishap rates rose dramatically after 2014. There are three subcategories of aviation mishaps (flight mishaps, flight related mishaps, and aviation ground operations mishaps) and four severity classes (Class A, B, C, D), together they constitute the mishap class. Mishap rates are calculated by the number of mishaps per 100,000 flight hours. Specifically, Class A flight mishaps, incidents involving loss of life, permanent total disability, loss of aircraft, or greater than \$2 million in damage,³⁰ rose to over three in fiscal year 2015, peaking in 2017 at 4.32, and then returning to 2.96 in 2019. Four of the five years, Class A flight

mishaps were above the ten-year average of 2.65.³¹ Of the 37 mishaps in this category, 84% cite human error, 68% cite aircrew factors, 59% cite supervisory personnel, and 53% cite material malfunction as causal factors to the mishap event. In addition, Class C mishaps have risen since fiscal year 2013 from a previous low of 4.36 to the current fiscal year 2019 rate of 10.83, with similarly high rates of aircrew, human, and material factors.³² Less opportunities to fly are a detriment to safety but also prevent pilots from completing training and earning qualifications in a reasonable timeframe, causing pilots to become dissatisfied with their military service.³³ The effect that decreased readiness rates, low flight hours, and a rising number of mishaps has had on the retention of aviators has not gone unnoticed by Marine Corps leadership.

This alarming trend has been identified and is being addressed by the Marine Corps through multiple lines of effort: sustainment of the legacy fleet, modernization of new airframes, funding readiness accounts, and investing in maintenance personnel. Independent Readiness Reviews have revealed lessons learned that have resulted in readiness recovery initiatives such as the Depot Readiness Initiative (DRI), CH-53E Reset, and the V-22 Readiness Program (VRP). The DRI and Reset successfully return FMC aircraft to the flightline with no cost to the operational level.³⁴ The intent of these programs is to maintain legacy aircraft until they can be fully replaced by new airframes. The F-35 has been introduced to replace aging F/A-18 platforms, and the Marine Corps is taking on F/A-18s that the Navy has divested to maintain the fleet until the F-35 transition is complete. The new CH-53K is expected to be Initial Operations Capable (IOC) in fiscal year 2021 and after both of these transitions, the Marine Corps will be fully divested of legacy platforms.³⁵ In addition to maintenance and modernization initiatives, funding for spare parts has increased to a level not seen in over a decade. In 2018, accounts were funded to 96%, a marked improvement compared to previous years where they were at 76%.³⁶

Similar to the gap in aviators that the Marine Corps has seen, leaders have also recognized a void of qualified and experienced maintenance personnel resulting from the drawdown. As such, efforts are underway to retain and bring on the most talented and highly qualified maintainers. An “Aircraft Maintenance Kicker” was offered in 2019 and again in 2020 to reenlisting Marines that hold special qualifications. Marines that are current as Collateral Duty Inspectors (CDI), Collateral Duty Quality Assurance Representatives (CDQAR), Quality Assurance Representatives (QAR), and Safe For Flight (SFF) are offered \$20,000 to reenlist for four years and remain at their current unit for either two or three years.³⁷ In addition to investing in enlisted maintainers, the Navy and Marine Corps have also budgeted to hire 2,900 artisans, engineers, and logisticians to the Fleet Readiness Centers, where aircraft undergo depot level maintenance.³⁸ So far, all of the readiness efforts combined have proven successful. General Robert B. Neller reported in a 2019 statement before Congress that, depot level throughput has met service goals, NMC maintenance and supply rates have decreased, and in-service repairs have reached the service goal.³⁹ Only time will tell if these trends can continue to improve the overall aviation readiness of the Marine Corps.

Quality of Service, Quality of Life, and the Work-Life Balance

It has been noted across the services and specifically by the Marine Corps that job satisfaction and quality of life are the most influential factors in determining retention of aviators.⁴⁰ According to Colonel Gaines Ward, the manpower plans officer, the Corps is monitoring work-life balance and day-to-day squadron life closely.⁴¹ In data collected by the Manpower Plans and Policy Division via a survey of Marines when they entered the service, met career milestones, and exited the service, many of the officers within the Aviation Combat Element do not intend to stay past their initial commitment and cite work-life balance, civilian

career opportunities, family, and the promotion system as reasons influencing their desire to leave the Marine Corps.⁴² An aviation-specific retention survey conducted by the Marine Corps in 2015 revealed that pilots were concerned with insufficient equipment and parts to fix aircraft, inadequate flight time to remain proficient, and extensive time spent at work which negatively affected their personal and family time.⁴³ Several factors have led pilots to express concern over their quality of life including high operational tempo and concerns for safety associated with decreasing flight time, but the crux of the issue lies with the amount of time spent at work and away from family when at home in a non-deployed status.

The so-called “golden path” discourages alternate career paths (although the Marine Corps preaches the “well-rounded Marine” mantra to exhaustion) and creates competition among pilots to gain qualifications, leading to a “face showing” work mentality. In a recent *Task & Purpose* article, a Marine pilot relayed a story of the guidance he and his peers were given when they arrived at their first squadron, “every one of you should want to be a Weapons and Tactics Instructor (WTI).” This is a sentiment that resonates throughout the aviation community, as it is often seen as a measure of success and a path to command, though it is neither an official requirement for promotion nor selection to command.⁴⁴ However, opportunities to attend the WTI course, which only runs twice a year, are not unlimited and therefore not everyone can become a WTI. This causes peers to compete with one another for qualifications and can create an unfavorable work environment in which individuals stay at the office for longer hours to “show their dedication to the squadron” so that they are the ones selected for progression.⁴⁵ Pilots that indicate they do not desire to become a WTI or express interest in a less valued career path are often “put on the bench” and will never get near the number of flight hours or

qualifications as their peers. This culture is pervasive and leads to expectations that pilots spend more, often unproductive, time at work and get minimal time at home with their families.

Compounding the cultural problem, non-flight related requirements continue to be piled on aviators, taking them away from their flight duties and off-duty time. Of the 42 Marine aviators polled in the previously mentioned survey, 82% cited too many assigned tasks unrelated to flying as a contributing factor, major concern, or most prevalent factor in their decision to remain in service; 66% said additional duties and ground jobs detracted from readiness and proficiency; and 75% indicate lack of a work-life balance as influencing their decision to leave the service.⁴⁶ In addition to the complex and exceedingly technical job of knowing and flying aircraft, pilots are required to complete annual training, attend PME courses, and serve in administrative ground jobs, such as operations schedule writer, adjutant, logistics officer, or airframes division officer. Non-flight related tasks either keep pilots out of the cockpit, specifically in the case of PME where an aviator must miss a valuable night of training to attend the after-hours course, or keep them in the office for extended hours just to get everything done. More often than not, pilots do not have any previous training for their assigned ground jobs, yet they are listed as the Marine's primary billet on their fitness reports. This means the only indication of a pilot's aeronautical skill is a single directed comment in the Reporting Senior (RS) remarks if they comply with the performance and evaluation manual and include it. By not explicitly listing a pilot's qualifications on their fitness report, the board is not given a full picture of who that officer is and along with the failure of that individual to complete a non-flight related "requirement," an otherwise stellar pilot and officer may be passed over for promotion and forced out of the service. Frustration with career opportunities, inundation with mounting non-flight related responsibilities, and less personal and family time can and do result in

dissatisfaction with quality of life. The way pilots view their leadership's ability and desire to address concerns over quality of service and work-life balance can result in pilots seeking career opportunities elsewhere.⁴⁷

Opportunities Outside the Service

Industry growth, mandatory retirements, and higher FAA safety standards have led to a high demand for experienced aviators in the airline industry. Worldwide passenger demand is growing and is forecast by the International Air Transport Association to double over the next 20 years.⁴⁸ To meet this demand, the Bureau of Labor Statistics' employment projections suggest that there will be a need for roughly 1,900 and 4,500 pilots per year, on average, over the next decade.⁴⁹ Compounding the problem, when the Federal Aviation Administration (FAA) increased the mandatory retirement age in 2009 (14 C.F.R. §121.383), from 60 to 65, it created a bubble that hit the airlines in 2014 when an abundance of pilots reached mandatory retirement. Forecasts estimate that anywhere between 36% and 42% of the workforce will retire by 2026.⁵⁰ In response, the increased hiring trend began and since then the airlines have been hiring over 3,000 new pilots every year. As a result of another 2009 change to FAA regulations, fewer civilians have been pursuing aviation as a career, causing the airline industry to recruit military pilots more heavily. In response to the 2009 Colgan Airlines crash in Buffalo, NY, the FAA Extension Act of 2010 ruled that to be hired as a First Officer (also known as a co-pilot) at an airline, pilots must hold an Airline Transport Pilot (ATP) certificate, requiring a total of 1,500 flight hours. Previously, pilots were only required to hold a commercial pilot certificate, which can be achieved with only 250 hours of flight time. Military pilots, however, are afforded special allowances when it comes to this rule. They are eligible for a restricted ATP certificate and can be hired with only 750 hours of flight experience, which can be achieved by the end of

an initial fleet assignment.⁵¹ For civilians, the time and cost associated with earning a Bachelor's degree in an aviation specialty and flying the required number of hours are approximately \$120,000 and at least five years. As such, the FAA has seen the number of original airman certificates issued annually decline steadily for the past decade⁵² Concerns over the high cost of education and low entry-level pay rates at regional airlines have resulted in fewer civilians hires, forcing airlines to rely more heavily on military pilots to meet their hiring needs.

Transitioning to civilian aviation is relatively simple for military pilots and because of the airline industry's promises of increased pay, better advancement opportunities, and improved lifestyle. Therefore, many pilots are being lured from the service. Pilots for the communities that are struggling most, jets and tiltrotor, generally meet all the requirements for a restricted ATP and can get hired by a major airline with minimal out-of-pocket expenses. Once hired, pilots are typically guaranteed 75 flight hours per month and are paid for as much even if they do not fly all 75 hours. Salaries are paid by the flight hour, so by flying more pilots can increase their earnings. Captains at major airlines, on average, will make \$200,000 per year in base salary while working less than half of each month.⁵³ Rotary wing pilots, who need significantly more training before an airline career, are also being incentivized to leave the service for regional airlines. For example, Pacific Southwest Airlines (PSA) advertises that they offer \$23,000 and assistance applying for VA benefits toward transition training, flights and lodging to company headquarters to complete ATP certification, an \$18,000 bonus, starting salary of over \$50 per hour, and guaranteed flow through to the majors in six to seven years.⁵⁴ Many other regional airlines offer similar programs and despite the pay cut that a rotary wing aviator may take initially, the rapid advancement opportunities and effort based pay scales make transitioning worthwhile. On top of wages, employment by the airline industry offers numerous other

benefits, not least of which is an abundance of personal time. When airline pilots are not flying, they have no other duties, allowing them to study their trade, spend time with family, or pursue other interests. Improved quality of life compounded with pay incentives have many Marine pilots questioning whether or not to remain in the service, and based on projected industry trends this is not going to change anytime soon.

Sister Service Retention Initiatives

Reality is that the problems Marine Corps aviation is facing are not unique to the Marine Corps. Pilots from all of the services echo the same sentiments, and each service has developed distinct programs exclusive to their service to solve the retention problem. One approach that is common among all of the military services is to offer aviators bonus incentives to remain on active duty.

Bonuses: Throwing Money at the Problem

In an attempt to provide compensation that is more competitive with the airlines and stem the flow of aviators leaving the service, bonuses are now being applied across all of the military services. The Navy is offering department head retention bonuses to pilots selected to the rank of Lieutenant Commander (O-4) at rates ranging from \$10,000 to \$35,000 per year in exchange for three to five years of obligated service.⁵⁵ In 2018, the Air Force expanded its bonus program, offering the maximum annual payment permitted by law, \$35,000, across all communities. Contracts vary in length, with a maximum length of twelve years for a payout of \$420,000.⁵⁶ The Army is maintaining flexibility in its bonus program, reviewing the inventory quarterly and adjusting aviation bonuses accordingly. At present, they are offering Warrant Officers a lump sum payout of \$90,000 for an additional three years of service. What sets the Army aviation bonus program apart from the others is that pilots can opt-in to take a bonus up to one year prior

to the end of their initial service obligation and aviators are required to hold minimum qualifications to be eligible.⁵⁷ It is estimated that even with services offering the maximum allowable bonus rates this will not be enough incentive to keep military pilots from leaving the service and transitioning to a career in commercial aviation. A business case analysis mandated by the 2017 National Defense Authorization Act (NDAA) to look into the potential for future increases in aviation bonuses concluded that it would take bonuses of up to \$62,500 to reverse current attrition trends.⁵⁸ After seeing negative trends in their bonus take rates, the Air Force has already requested that congress increase maximum bonus rates.

Of all the military services, the Air Force has been offering aviation bonuses consistently for the longest period and therefore has the benefit of being able to observe trends in bonus take rates to measure their effectiveness. From 2010 to 2016, the percentage of Air Force pilots taking continuation bonuses dropped by 32%, reaching the lowest levels seen since 2001.⁵⁹ In 2016, take rates dipped below 40% and this trend has continued. From 2018 to 2019, the Air Force saw bonus take rates drop another 4.9%.⁶⁰ In 2018 the Marine Corps offered its first bonus since 2009 and observed take rates of 74%.⁶¹ Just one year later, this number dropped to 55%, a mere 2% higher than historical retention rates.⁶² Tim Kane noted the ineffectiveness of blanket bonuses in his book *Bleeding Talent: How the US Military Mismanages Great Leaders and Why it's Time for a Revolution*, noting that bonuses are counter to sound market retention principles.⁶³ Given that 96% of Air Force pilots who refuse the continuation bonus choose to separate from the service, dwindling take rates are not a positive indicator for the Air Force or any of the sister services that rely heavily on bonuses to improve retention.⁶⁴ In recognition of this fact, many of the services have implemented other initiatives to retain aviators, none more aggressively than the Air Force.

Air Force

The Air Force has been affected by the pilot retention crisis more than any other service and accordingly they have put the most amount of effort into combating attrition. In recognition of the fact that money alone will not keep pilots in the service, the Air Force has been attacking the problem via multiple lines of effort. Air Force Chief of Staff, General Dave Goldfein, says that there is a list of 69 different initiatives the Air Force is exploring, the most important of which is ensuring that squadrons have strong and effective leaders. General Golfein recognized that inspirational squadron commanders, who are given decision authority and resources to meet mission accomplishment, will be most effective at improving pilot retention.⁶⁵ In 2017, the Air Force increased ACIP to a maximum of \$1,000 per month for pilots with greater than twelve years of flying service.⁶⁶ They are also bringing aviators back into the service with the Voluntary Retired Return to Active Duty (VRRAD) program. The VRRAD program began in 2017 and recently expanded to allow as many as 1,000 officers to return to the service.⁶⁷ These two incentives are makeshift efforts similar to the aviation bonus, but many more of the Air Force initiatives have nothing to do with monetary benefits.

The majority of the Air Force efforts are focused primarily on the vital task of improving the quality of service and quality of life of its aviators. The focus has been on allowing pilots to spend more time in the cockpit, creating more career stability, and providing alternative career paths. To keep pilots in the cockpit and reduce distractions from their flying jobs, the Air Force has been evaluating staff positions to determine the feasibility of using non-aviators in many billets, reviewing requirements to get rid of unnecessary non-flight related training and administrative duties, and increasing contractor support to squadrons.⁶⁸ To provide more stability for pilots and their families, the Air Force has reduced requirements for 365-day

deployments and off-station exercises.⁶⁹ Additionally, pilots are being allowed to stay in assignments longer, specifically with the Second Assignment In-Place program which is designed to provide more stability at the end of an aviator's career.⁷⁰ In addition to modifications to their assignment system, the Air Force is conducting a beta test of a "fly-only" Aviation Technical Track (ATT).⁷¹ It was determined in the RAND corporation study that an ATT would be favorable to a Warrant Officer track, as it would target officers who missed or would prefer to forgo key developmental opportunities.⁷² However, while the Air Force is not implementing a Warrant Officer program at this time leadership has not ruled it out as an option in the future.⁷³ Some more creative solutions that the Air Force is exploring include engaging with industry on cooperative solutions that would allow military pilots to transition to civilian aviation careers later and assessing the practicability of using light attack aircraft, a version of training aircraft equipped with weapon systems, in uncontested environments that would reduce the time required to produce qualified pilots and relieve operations tempo for advanced fighter pilots.⁷⁴ The main focus of effort is on retaining experienced aviators because of the much higher cost associated with training a new pilot but the Air Force is also optimizing their flight training program.

The Air Force has made efforts to streamline their training pipeline and increase production to continue to feed the need for pilots. In 2018 when the T-6 training aircraft were grounded, the Air Force's training command took advantage of the situation to review the pilot training syllabus and optimized it to save between five and nine weeks of training time. Increased training efficiency is just one way that the Air Force intends to increase its annual training capacity to 1,480 pilots per year.⁷⁵ Additional training capacity is required, however, to meet this goal. The service hopes to accomplish this by creating new training squadrons and

adding incentives for instructor pilot duty.⁷⁶ While most of the Air Force initiatives have not been in place long enough to truly prove their effectiveness, the multidimensional approach that the service has taken will likely have a positive impact on retention.

Army

The US Army already has a warrant officer flight program in place and, as such, is less concerned with improving the quality of life of its soldiers. Pilots in the Warrant Officer ranks are focused entirely on their jobs as aviators and are not burdened with extra administrative duties, so the Army's focus of effort is on incentivizing continued service, increasing accessions, and improving the training pipeline. To incentivize service the Army is exploring various compensation and career options. Since 1998, the Army has offered \$840 per month as the maximum ACIP for officers serving greater than fourteen years.⁷⁷ In line with the Air Force and Marine Corps, the Army is considering a boost in ACIP along with offering additional incentive money, termed "pro-pay," for aviators who earn valued qualifications. Proposed career options that will allow Army officers to earn some of those qualifications include a Captain Intermission Program, in which selected captains will have their year group pushed so they can serve as flight instructors for two years and remain competitive in the future.⁷⁸ To provide more stability for aviators and their families, the Army is increasing tour lengths to four years.⁷⁹ The Army sees flexible career options and positive leadership as drivers toward increased retention, however, with a large part of the Army warrant officer population nearing retirement eligibility the Army is also putting a great deal of focus on accessions and training.

Nearly 30% of all Army warrant officer aircrew are retirement eligible and more than 40% have over seventeen years of active service, as such the Army is working proactively to replace these individuals before they leave the service. To increase the population that is

qualified for aviation service, the active federal service maximum for a warrant officer transition has been reduced from twelve to eight years.⁸⁰ The Army has also opened up its flying warrant officer ranks to board selected aviators who are currently serving as commissioned officers.⁸¹ Accordingly, the Army has increased warrant officer accessions from 308 to 475 annually and plans to maintain this rate until 2024. To manage increased input the Army is putting a large focus of effort on flight training. They are actively recruiting recently retired pilots, leveraging the reserve component and contractors, augmenting training bases with additional aircraft and simulators, establishing a mobile training team, and adjusting the program of instruction to gain efficiencies.⁸² One innovative approach the Army is taking to increase training efficiency is the addition of virtual reality training, termed Aviator Training Next, which will allow pilots to get more repetitions conducting basic skills and ideally produce better pilots in a shorter period of time. The ultimate goal is for the Army to graduate 1,300 students annually from flight training, an effort that has already helped the Army to decrease its aviator shortage.⁸³ By taking a two-pronged approach to the pilot attrition problem, equal focus on retention and accessions, the Army is likely to see continued success in refilling its aircrew ranks.

Navy

While the Navy is planning to offer aviators flexible career options and increased incentive pay, their main focus of effort is in increasing training throughput to close the widening gap in the pilot inventory. The Navy hopes to accomplish this by fully funding and staffing the training command to produce 1,100 naval aviators each year.⁸⁴ For the first time in years, the Navy has increased its fiscal year 2019 training command readiness funding. Additionally, to address an instructor pilot gap the Navy will increase the number and use of reserve instructor pilots, reintroduce the Selective Retained Graduate (SERGRAD) program, and creating a

Professional Flight Instructor (PFI) program. Through the SERGRAD program, highly performing newly winged aviators are kept at the training command for a one-year period to instruct basic flight maneuvers. The PFI program serves as a “flight only” track for naval aviators; it allows selected pilots who have completed a department head tour to spend the remainder of their career instructing students at the training command.⁸⁵ Fortunately, the efforts being put forth by the Navy to improve production rates will also benefit Marine Corps production, but, overall, a more well-rounded approach to the retention problem is required if the Marine Corps hopes to close the gap in its pilot inventory.

Recommendations

Due to the urgency of the pilot inventory problem, the Marine Corps must continue to implement programs that provide immediate results, but those programs can be modified in such a way as to ensure that the Corps is retaining its most talented aviators. To establish positive retention trends, the Marine Corps needs to shift focus beyond short-sighted incentive programs, to sweeping programs that will provide lasting effects. This paper intends to provide suggestions that will allow the Marine Corps to achieve both immediate and enduring results.

Immediate Talent Management and Retention

General David Berger noted in his Commandant’s Planning Guidance that, “the only way to attract and retain Marines capable of winning on the new battlefield is to compete with the tools and incentives available to them in the marketplace.”⁸⁶ The aviation bonus, increased ACIP, and continuation are an immediate reaction to the Marine Corps aviation retention problem and their effectiveness is questionable. However, implemented appropriately, some near-term talent management tools can help the Marine Corps to retain the most talented, highly qualified pilots it needs. By adjusting the timing of the aviation bonus and restructuring it to

more specifically target pilots with valued qualifications the Marine Corps will provide the message that it values its pilots and the significant amount of time and effort that they put into progressing in their field. Discussing retention at an event held by The Heritage Foundation, General Berger said, “In retention, we have to be more agile, we don’t have to wait until her last year, last six months.”⁸⁷ He was specifically talking about reenlistments, but this idea can also be transferred to pilot retention. Typically, by the time pilots have reached the end of their service agreement they have already made up their mind as to whether or not they want to move on from the Marine Corps. As a result, many of the pilots taking the aviation bonus are aviators that would have stayed in anyway. Colonel Sean DeWolfe substantiated this when he said, “I didn’t stick around because there was a bonus. I wanted to be around Marines, and a bonus just happened to be there.”⁸⁸ If, similar to the Army, the aviation bonus was offered up to one year before the end of an aviators initial service contract, it would send the signal that the Marine Corps values its aviators enough to offer them compensation before they are no longer legally beholden to the service and pilots would have the opportunity to consider continuing their service earlier.

Beyond showing pilots that their service is valued, the Marine Corps should restructure the aviation bonus to retain experienced pilots that hold higher-level qualifications. Again, the Commandant expressed this sentiment in his planning guidance stating, “We should use money like a focused weapon, and aim it at the exact individual we need. Currently, we target people via a mass fires approach, instead of more selective targeting.”⁸⁹ The practice of targeting individuals with specific qualifications was implemented on the enlisted side with the Selective Retention Bonus and Aviation Maintenance Kicker after senior leaders recognized a gap in experience and qualifications. Following a readiness review, Lieutenant General Jon Davis,

former Deputy Commandant for Aviation, said “Fixing the problem requires both tracking the qualifications and retention of these enlisted maintenance leaders.”⁹⁰ Similar to the kicker offered to enlisted aircraft maintainers, the aviation bonus offered to pilots should be reconstructed to offer increased incentives for Marines that hold higher-level qualifications. A sliding bonus scale based on required or valued qualifications within each type/model/series community would allow the Marine Corps to apply bonuses more effectively and retain the most highly trained and qualified pilots. This will act as an indicator to individuals who put the time and effort into earning those qualifications that their hard work has not gone unnoticed and, overall, compensation will be a sign of a Marine’s value to the Corps.

The Marine Corps has also been losing highly qualified pilots via the “up or out” promotion system, and by rethinking the way promotion boards approach pilot promotions this problem can be alleviated. As it stands, the Marine Corps promotion system rewards Marines that are well-rounded, but as occupational fields, such as aviation, become increasingly technical it is more important for the Corps to promote individuals who have mastered the skills associated with their occupational specialty. General Berger has emphasized his concern over the current system’s ability to manage and retain the Corps’ most talented individuals stating, “we are losing talent right now. In the literal up-or-out sense, we have to open our aperture to find room to keep more than we are keeping right now.”⁹¹ A recent update to the Military Occupational Specialty (MOS) Manual facilitates tracking and prioritizing pilot qualifications and can aid in highlighting aviators that should be promoted and retained. Changing the conduct of promotion boards to manage aviation talent could be accomplished in two different ways. The first and simplest option would be to run promotion boards as they are now with aviators on the boards specifically to brief board members on the qualification progression of pilots, the MOS codes associated with

those qualifications, and, most importantly, the value and merit inherent to those qualifications. A second option would be to separate pilots from the rest of the officer population into an aviation only competitive category, similar to the financial management MOS. In either case, board members would be able to distinguish and select pilots based upon their overall performance as an officer and their aeronautical skill. By adjusting the focus to include flight performance and potential in the talent management and retention process the Marine Corps will likely see improvements in the capability of its aviation force.

Fixing the Underlying Issues

For years now, Marine Corps leadership has recognized that monetary incentives are not going to improve retention, yet the institution continues to use money as a stopgap rather than exploring options that could fix the underlying issues leading to retention problems in the first place. In 2017, Lieutenant General Brilakis told Congress that there was not a connection between bonuses and retention and that via a survey it was determined that a pilot's greatest desire was to accomplish their main job as Marines and fly more.⁹² More recently, Lieutenant General Rudder told the Senate, "incentives are something that it is not all about money and we hear that loud and clear."⁹³ Outside of bonuses, the Marine Corps must seek solutions for its two identified problems: production and retention.⁹⁴ By investing in flight school, a critical formative stage for young Marine officers, and making steps to improve job satisfaction and the work-life balance of pilots, the Marine Corps can begin to turn the tide of the retention problem, with lasting solutions.

The Marine Corps can show it is invested in its youngest aviators and assist in increasing production by providing more buy-in to the training commands and removing the stigma associated with flight school instructor billets. To begin, the Marine Corps should mirror the

Navy and fully staff flight school instructor billets with mature aviators and leaders that have proven themselves in the fleet. When pilots are selected to serve as instructor pilots, they should be put through a screening process, similar to their Navy counterparts. Screening could be in the form of clearly defined qualification, proficiency, and leadership metrics, and approval from the commanding officer of their previous command or, an application process to MATSG, in which the command has final authority to accept or decline an applicant. Another way the Marine Corps can follow suit with the Navy is by strengthening support of the Marine Corps Reserve Instructor Pilot program. Currently, each training squadron is limited in the number of reserve billets allotted and each reserve instructor is only permitted to remain with that unit for three years. By adding more billets and extending tour lengths the Marine Corps can capitalize on the instructor talent it already has to fill instructor requirements that will be ever-increasing as production requirements continue to rise. Pointed attention to staffing and quality of instructors will send the message that the Marine Corps is invested in flight training but additional messaging from senior leadership is essential to changing a culture that has devalued instructorship at the entry-level. Weapons and Tactics Instructors are held in very high esteem, yet they are providing tactical instruction to pilots who have already learned basic aviation skills. The instructors who are teaching those basic skills should also be given the credit they are due and more accomplished aviators should be encouraged to instruct at this level. Changing culture is a difficult and somewhat ambiguous task but, by taking a few concrete steps and providing top-down support the Marine Corps can show that it is fully invested in its youngest aviators.

In an effort to increase the amount of time pilots spend in the cockpit building proficiency the Marine Corps has made restoring aircraft readiness a priority. The various efforts to improve current readiness, maintain an aircraft maintenance experience base, and

modernize legacy aircraft should continue to be monitored. However, the service recognizes that job satisfaction and quality of life are the most influential factors in retaining aviators yet has continues to believe that aircraft readiness alone will improve the job satisfaction and quality of life of its aviators. In fact, of the seven reporting elements specifically requested by Congress in the 2018 NDAA, the Marine Corps was the only service that abstained from comment on “quality of life” and “quality of service.”⁹⁵ Apart from enhancing aircraft readiness, the Marine Corps needs to explore alternatives that will provide aviators flexible career options and improve the work-life balance of squadron pilots.

One possibility for providing pilots flexible career options and future stability, while also increasing pilot proficiency and the lethality of the force, would be the implementation of a “flight-only” Limited Duty Officer (LDO) track. An LDO track is fully permissible under Title 10 US Code section 5589 and is already in use in the aviation maintenance community. Through his planning guidance, the Commandant has expressed dismay with the current manpower model, suggesting it discourages top performers who would like to continue their service but are not as interested in promotion or command.⁹⁶ He has subsequently stated that he is interested in developing a system that would allow Marines like this to specialize at a particular rank, based upon their talent.⁹⁷ To efficiently and effectively implement an LDO program for pilots, it is recommended that interested individuals apply for acceptance and are subsequently screened by a board. Based on predetermined service requirements, the board would then select the most highly qualified applicants to fill the available LDO slots. Pilot LDOs would be permitted to continue flight service up until mandatory retirement but with the understanding that they would never promote past a predetermined rank. Similar to the Navy PFI program, this could also open up an option for Marine professional flight instructors as well. Instituting alternate career

options will provide Marines aviators opportunities to manage their own careers and improve job satisfaction but the Marine Corps has a greater challenge to face in improving quality of life.

Quality of life for service members is largely tied to their work-life balance, and while the proposals mentioned here may help to improve quality of life no program will fix that entirely. Engaged leadership and a culture shift will be most effective in improving work-life balance in the aviation community. Retention programs require direct communication from all levels of leadership, showing willingness and desire to address the concerns of Marine pilots.⁹⁸ Young pilots progressing through the ranks desire mentoring and coaching from involved leadership. By providing more frequent face-to-face mentorship, leaders can help guide young pilots through tough career decisions and instill a sense of purpose by helping them to see how they are contributing to the mission of the squadron, the service, and the nation. Mentorship should largely be informal but by requiring Marines to formally acknowledge fitness report debriefs with a signature the Marine Corps could ensure that each individual is being reached at least once annually. Leaders actively involved in mentorship will indicate to pilots that they are valued at work, but leaders must also set the proper tone to ensure that pilots can maintain a work-life balance. The “work for work’s sake” mentality is largely a product of culture, which as previously stated can be very difficult to change. Proper support from top-down leadership and community-wide buy-in can correct this by acknowledging that quality of work is preferred to quantity of work. Working excess hours with minimal time at home for rest and recuperation is not only a safety concern, as pilots are proven to be less effective, and frankly dangerous, when they are fatigued, but it is detrimental to the service. Suffering the effects of long-term fatigue and over-work pilots are more prone to leave the service in search of a lifestyle more accommodating to them and their families. This last recommendation is perhaps the most

difficult to implement because it requires engaged, capable leaders at every level to buy-in and effect a culture change, however, it is the most critical when it comes to retaining aviators.

Conclusion

The Marine Corps currently finds itself with an ever-increasing gap in its pilot inventory. Years of high operational tempo because of multiple wars have degraded aviation readiness. Aircraft readiness compounded with under-accessions during sequestration has brought Marine Corps aviation to a point of crisis that cannot be ignored, and thus far the Marine Corps focus on production and retention has failed to meet the mark. Current retention programs are stopgap efforts that are aimed at retaining pilots, not fixing the fundamental issues pushing pilots out of the service in the first place. Hopeful aviators join the Marine Corps for love of country and to serve something greater than themselves. However, those reasons do not always carry Marines through a career when the service uses and abuses them, especially when they can no longer see the purpose behind their hard work and sacrifice. Sister services are facing a similar crisis and have implemented a wide variety of programs and initiatives to resolve the problem. Following their example, senior Marine Corps leaders can impact talent management and retention in the near-term while also addressing the underlying issues that have consistently negative effects on retention in the aviation community. The Marine Corps can only hope to restore the Aviation Combat Element by implementing innovative solutions that will have lasting effects on talent management and retention.

Notes

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