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# ANALYSIS OF INFLUENCES OF SEPARATION DECISIONS IN THE FINANCIAL MANAGEMENT CAREER FIELD

### **THESIS**

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AFIT-ENV-MS-18-M-243

# DEPARTMENT OF THE AIR FORCE AIR UNIVERSITY

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Wright-Patterson Air Force Base, Ohio

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# **Analysis of Influences of Separation Decisions in the Financial Management Career Field**

### **THESIS**

Presented to the Faculty

Department of Systems and Engineering Management

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Air Force Institute of Technology

Air University

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In Partial Fulfillment of the Requirements for the

Degree of Master of Science in Cost Analysis

Shauna Young, BS

First Lieutenant, USAF

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# Analysis of Influences of Separation Decisions in the Financial Management Career Field

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#### Abstract

The purpose of this research was to analyze influences on separation decisions of active duty Air Force financial management officers. Researchers tested nine variables to determine their separation implications. The tested variables were major command, age, prior enlisted service, spouse, commissioning source, AFIT cost analysis master's degrees, engagement, crystallization of job alternatives, and exhaustion. Results proved that age, prior enlisted service, having a spouse, and being an Air Force Academy or AFIT graduate correlates to whether a financial management officer will separate from the Air Force. In addition, the engagement level or having a defined list of job alternatives readily available correlates to separation as well. Researchers recommend that Air Force leaders continue sending students to the Air Force Institute of Technology because AFIT graduates are remaining in the Air Force as long or longer than non-AFIT graduates are. Another recommendation is to increase the amount of commissioned service years that prior enlisted officers must serve from ten years to fifteen years. Requiring more years of commissioned service will help decrease the shortage of field grade officers in the financial management career field.



#### **Dedication**

I dedicate this thesis to everyone who has helped me get to this point. To my parents and family for always supporting me and to all my past teachers, coaches and friends who offered a word of encouragement and those who mentored me along the way. To my "Ohio village" thank you for being there as I travelled along this journey through AFIT. I also dedicate this thesis to the young men and women who do not yet believe that they are capable of completing such a journey. Always believe in yourself and know that you are powerful beyond measure.



# Acknowledgments

I would like to express my appreciation to my thesis committee. Thank you for your expertise and for guiding me along this thesis process. Also, I want to sincerely acknowledge my classmates for their charismatic personalities, being willing to help in times of need, and for making my time at AFIT more enjoyable.



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# **Analysis of Influences of Separation Decisions in the Financial Management Career Field**

#### I. Introduction

### **Background**

The United States Air Force encompasses a variety of career fields to accomplish its mission of flying, fighting, and winning in air, space, and cyberspace. Being the world's superior force in air, space, and cyberspace comes with a vast amount of responsibility to include having global coverage, providing agile combat support, having innovative technology, and delivering the right people to the right place at the right time. To maintain superiority, support mission requirements, and have the ability to engage in operations at a moment's notice, Airmen are always on duty. The Air Force currently employs 660,000 active, guard, reserve, and civilian Airmen (Wilson & Goldfein, 2017). Of the total Air Force, active duty officers make up 62,037 (AFPC, June 2017). The officer corps is responsible for achieving the Air Force mission, managing resources and leading all Airmen by example.

Financial Management (FM) officers are responsible for maximizing resources for our nation's Air Force; meaning they provide the analysis and support for decision makers to effectively utilize available resources. Additionally, FM officers provide solid and credible cost estimates on defense programs, provide timely and accurate pay and travel services to our Airmen, and must account for every dollar spent.

Funding is a critical asset for the Air Force to complete its operations and accomplish the mission. Maintaining the right number of quality personnel that are



responsible for the billions of dollars throughout the Air Force is a monumental task requiring strategic deliberation. When the FM career field does not contain an adequate number of personnel then the Air Force mission is at stake.

### **Problem**

Though the FM career field is vital to the Air Force's mission, there are not enough senior FM officers to carry out the required duties. Senior officers, referred to as Field Grade Officers (FGOs) hold the rank of major (O-4) through colonel (O-6). Junior officers or Company Grade Officers are second lieutenants (O-1), first lieutenants (O-2), and captains (O-3).

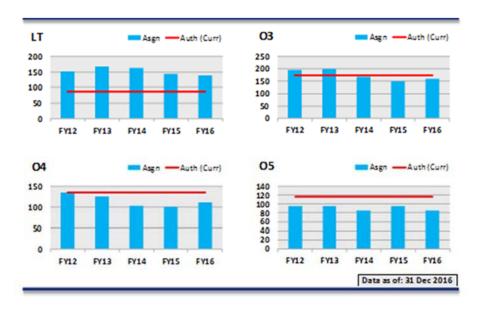


Figure 1: Current Authorizations vs Assignments (Cash & Decker, 2017)

Figure 1 depicts authorized billets and actual assignments for Financial Management officers from FY12 to FY16. Authorized positions are grade specific and correspond to the unit-manning document. Assigned positions denote positions currently



filled by a military member. There is a surplus of lieutenants in all five years shown. As rank increases, the surplus of officers declines and there eventually becomes a shortage of officers. Since there are not enough field grade officers to assign to the authorized billets, this results in senior captains performing the duties of a field grade officer, without the expected experience and years of knowledge the Air Force requires.

	Commanders	
	<b>Budget and Finance Chiefs</b>	
	Air Staff	
	MAJCOM FMAOs	Critical
	Joint Positions (0-4 and above)	(Must Fill) 100%
	Remote Assignments	100%
	Air Force Cost Analysis Agency	
	Financial Management Acquisition Leader (FMAL)	
-	MAJCOM Staff	
•	FOAs	Priority Fill
•	DRUs	85%
	Non-FMAL Acquisition Positions	
	<b>Deputy Positions</b>	Fill to Entitlement

Figure 2: FM Non-Rated Prioritization Assignment Plan (Cash & Decker, 2017)

Figure 2 displays the Air Force Personnel Center's "must fill" financial management assignments. FGOs fill half of the listed critical assignments. The shortage of FGOs results in CGOs and government civilians filling vacant FGO billeted positions. Designated authorities converted many colonel and a number of lieutenant colonel and major positions to civilian positions. Inexperienced officers are filling leadership positions because of the low numbers of field grade officers in the career field. The problem of not having enough senior FM officers affects the CGOs because they lack proper mentoring. As a result, the junior officers who have not received adequate mentoring for future roles and responsibilities will still promote to FGOs (Combs, Davey,



& Gualano, 2002). Another problem is the lack of visible progress for junior officers. More specifically, CGOs do not see a plethora of FM senior officers in higher Air Force leadership positions. FM CGOs see a diminishing career track, not an incentive to stay in the career field. For example, a newly commissioned second lieutenant plans their career progression and aspires to make O-7. When referencing the career track of FM general officers, and comparing the likelihood of making general as a finance officer compared to other career fields, the second lieutenant learns that there are not many FM generals or FM officers in high Air Force leadership positions. This will continue to be an on-going problem unless the Air Force devises a solution.

Theories on why there is a shortage of active duty officers in the Air Force vary broadly. The shortage of officers affects multiple career fields to include FM. Previous retention studies state that the military lifestyle is not conducive for raising a family (Ethridge, 1989) and that officers are discontent with the promotion system (Brooks, 2013). One hypothesis about why the FM career field in particular experiences a shortage in officers is there is not a solid career progression track (Combs, Davey & Gualano, 2002). Furthermore, anecdotal thoughts are finance was not a career field that officers intentionally wanted to enter and FM officers are an afterthought compared to other career fields. With some implications as to why the Air Force experiences a shortage of officers, researchers examine reasons as to why the problem persists.



#### **Research Focus**

Prior research conducted on voluntary turnover of Air Force financial management officers showed that commissioning source, rank, marital status, time in service, and deployment experience influenced an officer's decision to separate from the Air Force before serving 20 years. Additionally, results proved that officers who served in comptroller squadrons reported higher levels of exhaustion than all other job types (Galbraith, 2017). This study extends these findings and either confirms previous results by examining a different data set or determines whether other factors influence separation decisions, such as age and prior enlistment, or if a specific major command, (MAJCOM) influences the decision to separate.

## **Research Questions**

In analyzing the data about financial management officers, the researchers asked the following questions:

- 1. Which Major Commands (MAJCOM) contribute to financial management officers' decisions to separate from the AirForce?
- 2. How does age influence FM officers' separation decisions?
- 3. How does prior enlisted service influence separation with FM officers?
- 4. What impact does having a spouse have on an FM officer's decision to separate from active duty Air Force?
- 5. Which commissioning source contributes most to whether an officer is more likely to separate from the Air Force?
- 6. What impact do AFIT cost analysis master's degrees have on separation?
- 7. How does engagement in the workplace influence FM officers' decisions to separate?



- 8. How does crystallization of job alternatives influence FM officers' decision to separate?
- 9. How does exhaustion in the workplace impact FM officers' decisions to separate?

## Methodology

This study utilizes data from the Air Force Personnel Center, consisting of financial management officers who have left the active duty Air Force from January 2003 until October 2017. The data lists each officer's base assignments, total years of active duty, age at separation, marital status, source of commission, any professional military education, and other demographic information. With this data set, researchers conducted statistical analysis to determine trends in the data, any significant variables, and to cross check findings with a previous FM retention study. Chapters three and four provide more insight on the tests used and the analysis performed.

The second data set used in this study comes from a survey sent to all Air Force financial management officers in December 2016. The 74-item online survey assessed constructs such as turnover intentions, organizational commitment, employee burnout, and perceived availability of civilian job alternatives. The researchers used a 6-point Likert scale to measure and compare rated responses. The survey consisted of an openended response section for officers to provide any additional information (Galbraith, 2017).

Analysis of the two data sets provides answers to the previously stated research questions. The data from the Air Force Personnel Center allows the researchers to



crosscheck findings from prior research. The new data may present different findings than before.

## **Assumptions/Limitations**

The officers that make up the financial management career field are all different and each has varying reasons for separating from the Air Force. Based on the information available from the select amount of FM officers, the conclusions obtained from this research make inferences about the career field as a whole as to why FM officers separate from the Air Force. Researchers assume that the data reported from the survey by Galbraith (2017) is accurate. Officers provided responses based on their personal viewpoints, but there is no way of verifying whether respondents gave in to reporting bias and provided responses they thought were socially acceptable instead of the actual truth. The data from the Air Force Personnel Center is limited to separated officers in the period of January 2003 to October 2017. Assumptions include that every respondent assigned the same degree of value on each level of the Likert scale. For example, on the Likert scale of 1 to 6, 6 being strongly agree, all respondents who chose level six indicate the same degree of satisfaction. If the degree of satisfaction is not uniform throughout the responses based on the Likert scale value, then the data from the survey is unreliable. For instance, if two respondents chose level six, but one respondent valued 6 as strongly agree, while the other respondent valued 6 as moderately agree, then the results are inconsistent and unreliable.



## **Summary**

The research questions, methodology, and assumptions and limitations will guide this research in determining factors contributing to FM CGOs separations. The next chapter provides various literature reviews and presents results from past research about junior employee turnover. Chapter III goes in depth about the methodology used to gather and analyze the data. Chapter IV explains the results of the research and the final chapter discusses those results and provides recommendations to Air Force leadership.



#### II. Literature Review

#### Overview

The Air Force continues to operate after downsizing its personnel. Personnel numbers reduced by 30% from when Airmen were engaged in Operation Desert Storm 26 years ago (Wilson & Goldfein, 2017). The Chief of Staff of the Air Force, General David Goldfein plans to expand the size of the active duty Air Force from its current size of 317,000 to 350,000 (Wilson & Goldfein, 2017). Active duty personnel are those who work full time, as opposed to reservists or guardsmen, whom are only on part-time. The Fiscal Year (FY) 2017 Air Force Military Personnel Appropriation plans to implement a strategy that will recruit and retain skilled and selfless Airmen needed to meet the Air Force's increasing core mission requirements. From FY 2015 to FY 2017, the Air Force has increased its active duty officers by about 1,000 (Military Personnel, Air Force, 2017). While officer numbers have increased by recruiting efforts, retaining Airmen after five years of service remains an issue. Considering that the Air Force as a whole is experiencing personnel shortage issues, it follows that specific career fields, such as FM, may have shortages as well.

The term *turnover* describes voluntary separation from the Air Force. The high turnover of Company Grade Officers (CGOs) persistently causes an issue of not having sufficient FGOs. Low FGO numbers date back to the 1980s. Past research on the topic of factors relating to junior officers separating from the Air Force after their initial Active Duty Service Commitment (ADSC) provides insightful information. An ADSC is an amount of time that a service member is obligated to serve in exchange for an investment



of money, time, training, and education. The ADSC also communicates when the service member is eligible to separate or retire from active duty (AFI 36-2107).

Conclusions from prior research on specific career fields that experience personnel shortages such as pilots and other rated officers, civil engineers, and financial management officers present a common theme of factors relating to the separation of active duty Air Force CGOs. As described in studies from Ronald Blackburn, Nancy Combs, Rose Etheridge, Virginia Galbraith, and J. Tice, job satisfaction, promotion opportunities, the assignment system, family-work life, and civilian opportunities are all related to CGOs separating from the Air Force before retirement. To make a clear distinction, retirement eligibility refers to a service member serving 20 or more years of active duty service and separation refers to serving less than 20 years. The following section explains retention issues that previously occurred.

#### **Previous Studies**

Research conducted in 1978 on the turnover of junior officers highlights a problem that the Air Force still faces today. Data from a 1977 Air Force Quality of Life survey focused on a sample of male officers with less than seven years active service. The model used tested the independent variables of tenure, satisfaction with pay, perceived quality of the promotion system, and perceived opportunity for civilian employment against the dependent variable turnover (Blackburn & Johnson, 1978). Results showed that satisfaction with pay, promotion, and perceived opportunity for civilian employment were not significant in determining turnover. Job satisfaction, however, was a significant factor for predicting turnover with junior officers.



Although this study occurred over three decades ago, and only examined turnover with male officers, the issues and findings are still relevant today with respect to both male and female officers because retention is still a concern today with males and females. Data for this thesis provides evidence of female retention problems and reveals that in the FM career field, females separate at a higher rate than males. Present day CGOs are separating from the Air Force with five to eight years of service, the same as they were a few decades ago. Years have gone by, but the apparent problem seems to persist.

In 2002, Air Combat Command (ACC) investigated the Financial Management (FM) officer personnel issue to determine if FM had a retention problem, and if so, compare it to other Mission Support career fields. The study initiated when the Air Force Personnel Center (AFPC) reported the status of FM personnel and highlighted a decrease in lieutenant colonel personnel. At the time, the manning status of lieutenants was roughly 329% (Combs, Davey, & Gualano, 2002). With the large number of lieutenants, ACC's research question was "Why do we have so few lieutenant colonels?" To investigate the issue, researchers devised a 39-question survey to garner thoughts from FM personnel on certain key issues. Alongside the survey, the researchers obtained personnel and year group data from 1979-2001 and compared it against personnel data from other mission support career fields.

The raw data revealed that FM had a problem retaining captains. The research team examined the Cumulative Continuation Rate (CRR), a statistic used by AFPC to estimate the number of officers who reach their 4th year and plan to stay to their 11th year of service. The CCR for FM officers was only 37% (Combs, Davey, & Gualano,



2002), meaning that 63 out of every 100 officers entering their fourth year of service were not expected to complete their 11th year of service. From that rate, the Air Force lost over half of newly pinned captains, resulting in the problem of having a shortage of Field Grade Officers (FGOs) to fill crucial positions. To remedy this problem, AFPC should strive for at least a 60% CCR. From that, the FM career field only loses 40 out of every 100 officers, compared to 63 and retains more officers. The data further revealed that most captains who separated were doing so between 5-8 years of service – near the end of their initial active duty service commitment (ADSC). Knowing that the FM career field had such a low CCR, AFPC would need to increase the amount of commissioned lieutenants to rectify the issues of those captains who planned to separate to ensure an adequate amount of FGOs. AFPC calculations showed that FM needed to bring in 90 lieutenants every year, yet the average for the past 10 years was only 71 (Combs, Davey, & Gualano, 2002). Knowing that a huge bulk of captains intend on separating from the Air Force, yet not producing enough lieutenants, continues the problem.

Researchers from the study contacted recently separated captains to gain insight on their reasons for leaving. Causes were lack of job satisfaction, family considerations, good opportunities on the outside, lack of mentorship, insufficient leadership opportunities, and a desire for more structured lieutenant training programs (Combs, Davey, & Gualano, 2002).

Galbraith's 2017 study provided a current outlook of the financial management career field and added more insight to the on-going problem of FM officers separating from the active duty Air Force. The study examined the various jobs within the career



field and determined if the job differences affected the burnout rate of FM officers. FM officers have an Air Force Specialty Code (AFSC) of 65xx. More specifically, 65Fx for budget officer or 65Wx for cost analyst. Results indicated that even though the two AFSCs have different job responsibilities, no significant difference in their burnout levels exist (Galbraith, 2017). The research did reveal that the FM officers who serve in comptroller squadrons reported higher levels of exhaustion than the other FM jobs. Part of the FM officer shortage problem could potentially lie within the comptroller squadrons.

Another aspect of Galbraith's study looked at whether Air Force Institute of Technology (AFIT) Graduate of Cost Analysis (GCA) students have higher turnover than non-AFIT GCA graduates do. The Air Force invests \$113,992 per FM officer who goes through the AFIT GCA program (Galbraith, 2017). Having AFIT GCA graduates separate from the Air Force after their AFIT service commitment reduces long-term return on investment (ROI) by the Air Force. Even though AFIT graduates serve their payback requirement, the Air Force would benefit more if these officers completed 20 years of service by utilizing these officers' leadership and technical capabilities. AFIT graduates learn unique analytical skills, equipping them to be major assets to both the public and government sectors. Since the government made the investment in AFIT graduates, then remaining in the Air Force would produce a higher ROI and would contribute to increasing the FGO count.



## **Promotion System**

Other past studies reveal that officers are not satisfied with the current promotion outcomes. The current promotion system forces officers to separate from the Air Force if their record is not competitive for promotion. There is no room for competent, though perhaps stagnant, performance; meaning an officer must continually show improvement in their ability to perform at a higher rank. As such, if an officer performs consistently and produces good work in a job at which they excel at, perhaps enjoy, no additional reward is given. The Defense Officer Personnel Management Act (DOPMA) of 1980 is at the core of the current structure of the promotion system. The purpose of DOPMA was to govern officer management and maintain a high-quality, numerically sufficient officer corps, establishing a ceiling on the number of officers in each grade above O-3 (Rostker, Thie, Lacy, Kawata, & Purnell, 1993). The implementation of DOPMA served to balance the amount of officers in each officer grade, but due to FM officers leaving the Air Force before retirement, DOPMA's balancing goal is not as effective as originally planned.

Table 1: DOPMA Up or Out Promotion System for "Due Course" Officers

Officer Pay Grade	Promotion Opportunity (percentage promoted from surviving cohort)	Promotion Timing (primary zone years of service)	Career Expectations	Career Pattern (cumulative probability to grade from original cohort less attrition)
O-2	100% if fully qualified	2.0	2X nonselect & separation	96%
O-3	95%	3.5/4	2X nonselect & separation or may be allowed to stay on active duty until retirement at 20 YOS	82%
O-4	80%	10±1	2X nonselect & separation or may be allowed to stay until 24 YOS; normal retirement at 20 YOS	66%
O-5	70%	16±1	30% of 2X nonselectees can be retired before normal (28 YOS) retirement	41%
O-6	50%	22±1	Normal retirement at 30 YOS, but 30% early retirement possible after 4 years in grade	18%



Table 1 outlines the DOPMA promotion opportunity and time horizon for each grade. Promotion to O-2 and O-3 essentially depends on time-in-service. At the O-4 promotion, officers meet a board to compete for promotion, which entails stratification among their peers. As the chart displays, the promotion rate decreases, and even more so as officers progress further in rank.

Table 2 depicts the timeline of when an FM officer is eligible for promotion after captain. The earliest an officer has the opportunity to advance ahead of their peers in rank is after 12 years of service when the opportunity for below the promotion zone (BPZ) occurs. If an officer does not make the two years or one year BPZ, then they still have the opportunity to promote with the rest of her year group in the promotion zone (IPZ). Not having the opportunity to advance in rank than less capable peers until after halfway through an officer's career can diminish an officer's motivation to continue performing at 100% because recognition for the effort does not occur instantly.

Table 2: Projected Date of Record Chart for Financial Management Officers

If your DOR to Captain is:	You are forecasted to meet the following boards:						
	Major		Lt Col			Colonel	
	IPZ	2 Yrs BPZ	1 Yr BPZ	IPZ	2 Yrs BPZ	1 Yr BPZ	IPZ
01-Jan-2012 - 31-Dec-2012	2017B	2020	2021	2022	2026	2027	2028
01-Jan-2013 - 31-Dec-2013	2017D	2021	2022	2023	2027	2028	2029
01-Jan-2014 - 31-Dec-2014	2018	2022	2023	2024	2028	2029	2030
01-Jan-2015 - 31-Dec-2015	2019	2023	2024	2025	2029	2030	2031
1 Jan 2016 - 31 Dec 2016	2020	2024	2025	2026	2030	2031	2032
1 Jan 2017 - 31 Dec 2017	2021	2025	2026	2027	2031	2032	2033
1 Jan 2018 - 31 Dec 2018	2022	2026	2027	2028	2032	2033	2034

### Job Satisfaction

Job satisfaction plays a vital role in determining whether an officer decides to separate from the Air Force or not. Job satisfaction refers to whether an officer is content



in his position concerning the nature of the work and responsibility. John Locke, one of the most influential psychologists, defines job satisfaction as "a positive relationship characterized by pleasurable or positive state of mind resulting from the job experience" (Locke, 1976). An officer's motivation level, their leadership support, and communication on the job all influence job satisfaction. If officers are not motivated to perform well on the job, then they will not likely be satisfied with the job.

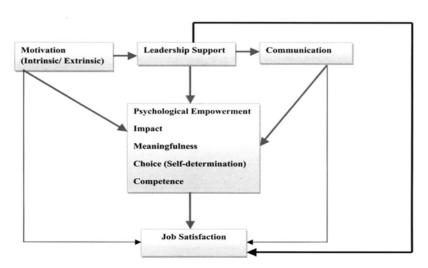


Figure 3: Factors Impacting Job Satisfaction

There are two types of motivation: intrinsic or extrinsic. Intrinsic motivation derives from within an individual; based on internal factors that individual wishes to satisfy. External rewards drive extrinsic motivation. Examples of such rewards are money, recognition, or grades drives extrinsic motivation. An article of employee motivation states that, "an employee experiencing a state of intrinsic motivation tends to be committed to the job and self-fulfillment through it" (Aldag, 1979). With intrinsic motivation, there is no need to provide extra compensation or make up worker performance awards because the employee possesses internal drive to perform well on



the job. Extrinsic motivation adds incentives to get the employee to perform at a desired level. Both types of motivation aid in job satisfaction.

Organizational commitment and engagement factor into job satisfaction. When an employee willingly goes beyond their job description, speaks positively about the organization outside of the workplace, takes a genuine interest in their work, and feels like a valued member of the organization, then job satisfaction level increases. Job engagement indicates whether an employee is mentally interested in the work. The more the work captures the employee's attention and interest, then the more engaged the worker will be, thus, creating a higher chance of job satisfaction.

As Figure 3 shows, leadership support also influences job satisfaction. Employees who have positive relationships with their supervisors generate feelings of meaningful work and have a good impact on their jobs (Abd-El-Salam et al., 2013). Supervisors play an important role in determining an employee's satisfaction level. If an employee is not satisfied with some aspect of the job, then the employee can go to their supervisor to communicate the issue. Having a positive employee-supervisor relationship is beneficial in solving problems. A negative relationship fosters reluctance on the employee's behalf to seek the supervisor for a solution. Additionally, a negative relationship with the supervisor could add to the employee's discontent with the job.

Having the right motivation, leadership support, and the autonomy to communicate on the job, feeds into an employee's psychological empowerment, this affects their perception of their work performance. Performance is better when employees feel their work brings meaning or that they have the ability to contribute to the greater good of the organization. Job satisfaction declines when employees perceive their work



as not contributing to the organization, when they are not motivated to perform well, when they are not able to communicate their issues, or when leadership does not support them.

Again, one of the questions this study answers is whether FM Air Force officers are engaged in their jobs. The study also analyzes the relationship between an officer's level of job engagement and separation from the Air Force.

#### **Prior Enlisted Service**

Air Force enlisted Airmen have the opportunity to compete for and complete officer training. As a commissioned officer, job responsibilities increase and the member experiences different benefits as well. Commissioning as an officer with prior enlisted service indicates that an officer may retire from the Air Force without serving 20 years within the officer ranks, as the years served as an enlisted Airman count towards retirement. For example, even though an Airman may only serve 12 years as a commissioned officer, he may still retire from the Air Force due to the 8 years of enlisted service.

In the sense of providing Airmen with more leadership opportunities, the enlisted to officer program is great, but has its issues. It presents a false number of available officers when senior leadership tracks future officer personnel. A prior enlisted officer must serve as an active duty officer for a minimum of ten years before being eligible to retire with the officer rank (Title 10, U.S. Code Section 3911). After serving ten years as a commissioned officer, the rank held is captain.



The previously stated studies explained that the FM career field loses most of its officers at the captain rank. Given the time requirement for prior enlisted officers to serve, some of the officers who leave the career field are not merely separating, rather they are retiring from service due to their enlisted time. Chapter 4 covers this issue in more detail.

## Family Life

Family can be a motivator to either remain in the Air Force or separate early. This research analyzed whether having a family impacts FM officers' decision to separate from the active duty Air Force. Compared to fifty years ago, present day family life differs from the traditional household of yesteryear. In the past, husbands often had the sole responsibility of having a job and providing financially for the family, while the wives took care of the home and children. Today, both husbands and wives have careers. In some instances, only the wives provide financially, while the husbands remain at home. Depending on the family needs, the Air Force lifestyle can deter some members from remaining on active duty.

Air Force officers encounter a Permanent Change of Station (PCS) every three to four years, which can make raising a family under these conditions difficult. If children are involved, then considerations for them arise, ensuring that they maintain a stable social life and remain on track with their education when changing locations. There are times when an officer's duty may be demanding and require long work hours, placing more stress and home related responsibilities on the spouse.



In addition to the requirements of a normal assignment, spouses endure deployment periods with duration of six months to a year. For some spouses, this timeframe can resemble them being a single parent or a single household because of the absence of the military member in the home for a significant amount of time. Decisions in a marriage incorporate the thoughts of both spouses; therefore, "The most consistent findings regarding the family-retention relationship is the positive relationship between spouse opinion and the member's decision." (Etheridge, 1989) If a military member's spouse is not satisfied with the military lifestyle, then the member is more inclined to separate.

Another key concept to evaluate is the military member's gender. Female members with families are more likely to leave the service (Ethridge, 1989). First, considering the female member is married to a civilian spouse, their spouse will have to bear the consequences of each PCS. Finding a job every few years in a new location can be stressful. Air Force installations have Airmen & Family Readiness Centers, whose goals are to assist troops and their families in a variety of ways such as helping spouses find employment, aiding in financial hardships, and locating schools for children. Despite this resource, occurrences still arise where spouses have difficulty obtaining employment, which can leave the spouse with a negative perception about being a military spouse.

Dual military families encounter unique challenges. In a dual military marriage, the female is more likely to separate because she may not be able to perform the traditional matriarchal roles while simultaneously being a military member due to time away from the family for temporary duty (TDY), deployments, or long work hours (Tice, 1986). When both parents are away at work for a long period or have conflicting work



schedules that prevent them from tending to home needs, then the female is usually the one to sacrifice her career for the family (Tice, 1986). Additionally, in the dual military family, there are service members who enter the Air Force with a plan already in mind of only serving the ADSC, then separating to start a family. In either case, male or female, or having, a civilian spouse or dual military, family life affects military retention.

## **Assignment System**

Along with considerations of family life, Galbraith's survey data revealed comments from FM officers expressing concerns about the officer assignment system. Upon commissioning into the United States Air Force, cadets fill out an assignment preference form, which allows them to list personal preference of base locations.

Officers, document their base location preferences into an Airman Development Plan (ADP) to communicate to the assignment's team the officers' desires for base preferences and jobs. The officer's preferences are considered, but ultimately the assignments' team allocates jobs based on Air Force mission requirements, officer professional development, individual career field direction and then the member's desires (AFPC, 2017).

### **Major Commands**

The Air Force has bases worldwide and groups the hundreds of possible assignment locations together by mission. The mission of a particular location determines its Major Command (MAJCOM). There are ten MAJCOMS: Air Combat Command



(ACC), Air Education and Training Command (AETC), Air Force Global Strike

Command (AFGSC), Air Force Material Command (AFMC), Air Force Reserve

Command (AFRC), Air Force Space Command (AFSPC), Air Force Special Operations

Command (AFSOC), Air Mobility Command (AMC), Pacific Air Forces (PACAF), and

United States Air Forces Europe (USAFE).

Each MAJCOM mission is unique, requiring a specific set of skills and objectives to achieve the mission. Starting with ACC, its mission is to "organize train, equip, and maintain combat-ready forces for rapid deployment and employment while ensuring strategic air defense forces are ready to meet challenges of peacetime air sovereignty and wartime air defense" (acc.af.mil). "AETC recruits, trains, and educates quality people for the aerospace force and the nation" (af.mil). "AFGSC is responsible for organizing, training, and equipping Intercontinental Ballistic Missile forces, B-2 and B-52 bomber forces, and other deterrence capabilities to conduct operations in support of combatant commanders" (af.mil). AFMC develops, acquires and sustains aerospace power needed to defend the U.S. and its interests; which is accomplished through management, research, acquisition, development, testing and maintenance of existing and future weapons systems (af.mil). AFRC provides citizen Airmen to defend the U.S. and protect its interest through aerospace power (af.mil). AFSPC makes space reliable for the warfighter by continuously improving the command's ability to provide and support combat forces (af.mil). AFSOC provides combat search and rescue, agile combat support, information warfare, precision aerospace fires, psychological operations, specialized aerospace mobility and refueling to unified commands and delivers special operations power anytime, anywhere (af.mil). AMC provides airlift, air



refueling, special air mission and aeromedical evacuation for U.S. forces (af.mil).

PACAF provides ready air and space power to promote U.S. interests in the AsiaPacific during peacetime, crisis, and in war (af.mil). USAFE plans, conducts, controls,
coordinates and supports air and space operations to achieve U.S. and NATO
objectives based on taskings assigned (af.mil).

In addition to MAJCOMs, the Air Force has Direct Reporting Units (DRUs) and Personnel Reception Units (PRUs). These units have specialized missions and are directly subordinate to the Chief of Staff of the United States Air Force, or to a representative on the Air Staff (afhra.af.mil). DRUs and PRUs are not necessarily located on Air Force installations. Some of the units are located within government agencies in particular cities across the U.S. This research examines MAJCOMs and DRUs to assess whether they influence separation decisions.

### **Junior Employees**

Unlike their grandparents, over half of recent college graduates do not plan to stay with their first employer right out of college (Funk, 2016). After gaining some real world work experience, graduates often seek out other jobs, more aligned with their interests. Once commissioned into the Air Force, officers have a service commitment they must fulfill before separation eligibility. Usually the ADSC is four years, at which point many CGOs decide to leave the Air Force, and can lead to the problem this paper attempts to analyze. With four or more years of military service, officers have gained enough skills and expertise to be competitive in the civilian sector. Some career experts recommend leaving the current job if it is at a level lower than your qualifications and experience (Conlan,



n.d). After earning certifications within the military and attending various trainings, officers could potentially earn a higher salary in the civilian sector than in the military.

### **Commissioning Source**

Prior to becoming an Air Force officer, candidates participate in a commissioning program. The types of commissioning sources are the United States Air Force Academy (USAFA), Reserve Officer Training Corps (ROTC), Officer Training School (OTS), and Commissioned Officer Training for medical, legal, and ministry professionals. The purpose of a commissioning source is to prepare cadets to become an Air Force officer, by educating them about the Air Force and equipping them with leadership skill sets. Each of the commissioning sources has varying time requirements to complete the program and different ways of creating officers.

The Air Force Academy is a military school, where cadets undergo military training the entire time throughout their four years of school. Unlike the Air Force Academy, ROTC cadets have a civilian college experience and matriculate through the ROTC program with it being another class in their schedule for at least two years. OTS cadets enter the program already having a bachelor's degree and complete nine and a half weeks of training to become an officer. Essentially, each of the commissioning sources prepares an officer for active duty, but due to the varying durations of each source, the specific requirements of each commissioning program, and incentives facing individuals choosing between these options, commissioning source may be a factor why officers separate from active duty.



### Air Force Institute of Technology Graduates

The Air Force Institute of Technology is the Air Force's graduate school, focusing on engineering and management. In-residence AFIT students are mainly composed of Air Force officers. Selection into AFIT is highly competitive and applicants must meet specific eligibility requirements prior to being accepted. At AFIT, students receive a high caliber, defense focused education coupled with intense research. The analytical skills learned throughout the course of the program often places AFIT graduates above their peers in the areas of critical thinking and problem solving capability. After attending AFIT and putting their knowledge to use at the students' follow on assignments, these officers face the decision of remaining in the Air Force or separating to potentially receive a higher salary job due to their recently obtained technical abilities.

### **Summary**

Deciding to separate from the Air Force as a CGO is contingent upon a number of factors and the purpose of this thesis is to test whether specific factors are significant in making that decision. With knowledge from past studies, the researchers have a benchmark to compare and contrast when analyzing the variables of this particular research. The next chapter explains the tests and the type of analysis conducted.



### III. Methodology

### **Chapter Overview**

The essence of this paper is to determine factors related to why FM CGOs are separating from the Air Force and causing a shortage of FGOs in the career field. The purpose of this chapter is to describe the methodology of how the researchers determined their results. The chapter includes the hypotheses that were tested, describes the population and sample, and illustrates how the researchers collected and analyzed the data.

### **Research Hypotheses**

To determine factors related to CGOs separating from the Air Force, the researchers formulated hypotheses to test the research questions. The results from the hypotheses provide answers to the research questions. The hypotheses tested whether *separation* from the Air Force would be dependent upon selected independent variables. Classification for *retirement* requires an officer to serve a total of 20 or more years. *Separation* indicates that an officer served less than 20 years of total active duty service. To gain more insight on the career field, researchers tested hypotheses from a sample population of all separated FM officers from January 2003 – October 2017 and FM active duty FM officers as of December 2016.

**Hypothesis 1**<sub>0</sub>: MAJCOM is not related to separation **Hypothesis 1**: MAJCOM is related to separation

Hypothesis 20: Age is not related to separation Hypothesis 2: Age is related to separation



Hypothesis 30: Prior enlisted service is not related to separation Hypothesis 3: Prior enlisted service is related to separation

Hypothesis 40: Having a spouse is not related to separation Hypothesis 4: Having a spouse is related to separation

Hypothesis 5<sub>0</sub>: Commissioning Source is not related to separation Hypothesis 5<sub>1</sub>: Air Force Academy graduates are related to separation

Hypothesis 52: ROTC graduates are related to separation Hypothesis 53: OTS graduates are related to separation

Hypothesis 60: AFIT cost analysis master's degrees are not related to separation Hypothesis 6: AFIT cost analysis master's degrees are related to separation

Hypothesis 7<sub>0</sub>: Engagement is not related to separation Hypothesis 7: Engagement is related to separation

Hypothesis 8<sub>0</sub>: Crystallization of alternatives is not related to separation Hypothesis 8: Crystallization of alternatives is related to separation

Hypothesis 9<sub>0</sub>: Exhaustion is not related to separation Hypothesis 9: Exhaustion is related to separation

### **Population and Sample**

The population under examination is the entire financial management career field.

intentions of separating. The data gathered are from two sample populations. The first sample includes FM officers ranging from second lieutenants to colonels that have either separated or retired from the Air Force since January 2003 to October 2017. The first sample population includes 1,286 officers.

Targeted personnel are those who have separated from active duty Air Force and those who have



Table 3: Separated FM Officers from January 2003 to October 2017 (AFPC, 2017)

Grade	Officers
0-1	38
0-2	120
0-3	544
0-4	242
0-5	214
0-6	128

The second data set includes a respondent size of 235. Unlike the first sample, current (December 2016) active duty FM officers were participants in this sample. As of December 2016, the FM career field had 618 active duty officers (Galbraith, 2017). Of the active duty FM officers, 38% completed the distributed survey and Table 4 illustrates the grade breakout of those officers.

Table 4: Grade Breakout of FM Officers that Completed 2016 Career Field Survey

Grade	Officers
0-1	32
0-2	38
0-3	79
0-4	37
0-5	41
0-6	8



### **Data Collection**

The Air Force Personnel Center (AFPC) keeps a record of personnel information, including retirees and separated members. When service members decide to leave the Air Force or their specific career field, AFPC documents the information in a database. The database includes the member's rank, age, gender, marital status, number of years served, base locations, source of commission, separation date, professional military education, and what AFSC, if any, the member entered into after leaving active duty and going into the Air National Guard or Reserves. AFPC already possessed this data set and provided it to the researchers.

The second data set originated with Virginia Galbraith in a 2016 FM retention study. Galbraith constructed and sent out a survey to a target population of 618 FM officers ranging in rank from second lieutenant to colonel (Galbraith, 2017). The Air Force Survey Office vetted the 74-item survey and approved its release to the participants. The survey creator used a mixture of quantitative and qualitative data to gain insight of the population. The quantitative portion of the survey used a 6-point Likert Scale. The qualitative data consisted of survey respondents providing open-ended comments about the survey and the career field. The combination of qualitative and quantitative data allows the researchers to analyze the answers in a uniform manner, as well as receive detailed feedback.

### **Data Analysis**

After data collection, the researchers used statistical software to analyze the research questions and hypotheses. AFPC provided the data in Microsoft Excel



format. Researchers analyzed some of the data in Excel, but the majority of analysis of this data set was conducted using Statistical Package for the Social Science (SPSS). SPSS is a data analysis tool pack that allows you to import files of almost any type to analyze data, generate reports, produce descriptive statistics, evaluate trends, and more. To start the analysis process, the researchers cleaned the data.

The first step in cleaning the data set from AFPC required converting all of the relevant qualitative variables to quantitative variables. The variables that needed changing were sex, marital status, MAJCOM, and source of commission. The variables sex and marital status are coded into 0s and 1s. For sex, 1 represents male and 0 represents female. For marital status, 1 signifies the officer has a spouse and 0 signifies that the officer does not have a spouse. The data set contained 115 different offices referred to as MAJCOM. After vetting the list of offices, there were actually only 10 MAJCOMs. The other offices are direct reporting units (DRU) and personnel reception units (PRU). The researchers grouped all of the DRUs and PRUs together as one category. The variable MAJCOM contains 11 groups. The groups are ordered alphabetically then assigned a number, starting with 1. The 11<sup>th</sup> group is 'other', which are the DRUs and PRUs. Researchers recoded the source of commission variable into another variable labeled *commissioning category*. In this new variable, United States Air Force Academy (USAFA) graduates were coded as 0, Reserve Officer Training Corps (ROTC) graduates coded as 1, Officer Training School (OTS) graduates coded as 2, and all other remaining commissioning types coded as 3. Table 5 shows the original source of commission labeling along with the grouping code of the new variable.



One of the research questions asks whether the commissioning source influences separation decisions. The data set originally provided multiple information regarding commissioning source such as whether the officer commissioned through a two or four year program, whether they graduated as a distinguished graduate, and the data provided names of rare commissioning sources. Researchers chose only to analyze the three main commissioning sources: the Air Force Academy, ROTC, and OTS. Regardless if an officer went through a two year or four year ROTC commissioning source, the new coding just states ROTC. By aggregating the data, the researchers determined the effects of the three largest commissioning sources.

**Table 5: Commissioning Classification** 

Table 5: Commissioning Classification				
Source of Commission	Code			
USAF OTS GRADUATE	2			
U.S.A.F. ACADEMY	0			
ROTC 2-YR/FAG PGM	1			
ROTC 2-YR PROGRAM	1			
ROTC 4-YR/FAG PGM	1			
ROTC 4-YR PROGRAM	1			
DG ROTC 4-YR PGM	1			
DG ROTC 2-YR(FAG)	1			
AFACDDG	0			
ACAD MIL SCI-ANG	3			
DG ROTC 4-YR(FAG)	1			
DG ROTC 2-YR PGM	1			
ECPP EARLY COMMISSIONING PHYSICIANS PROGRAM (ANG)	3			
DIR APPOINTMT-CIV	3			
DIR APPOINTMT-MIL	3			
DG OTS GRADUATE	2			
OCS GRADUATE	3			
ROTC 2-YR PGM-ANG	1			
Commissioning Category	Code			
USAFA	0			
ROTC	1			
OTS	2			
Other	3			

Researchers added variables to the data set to complete the analysis of hypotheses. The added variables are retired, separated, prior enlisted, age category, and AFIT Grad. The retired variable formed by using the whole years of service at separation variable. If the whole year of service at separation was greater than 19, then retired received a 1 for yes. If the condition was not satisfied, then retired received a 0 for no. The variable separated formed in a similar manner. If the whole year of service at separation was less than 20 years, then the variable separated received a 1 for yes. If the years at separation was more than 20, then separated received a 0, indicating that the officer did not separate.

The *prior enlisted* variable formed using the *whole years of service at separation* variable and the *whole commissioned years of service* variable. If the *whole year of service at separation is* equal to the *whole commissioned years of service*, then the *prior enlisted* variable received a 0 for no prior enlistment. If the two variables are not equal, then the *prior enlisted* variable received a 1, indicating that the officer was prior enlisted.

The variable age category groups together the ages of the officers. Ages 22 – 25 make up category 1. Ages 26 – 32 is category 2; 33 – 39 for category 3; 40 – 46 for category 4; 47 – 53 for category 5; and 54 – 60 for category 6. In creating the variable *AFIT Grad*, the 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> academic institution name for each officer were examined. If any of the names included "AFIT WPAFB OH", then the variable *AFIT Grad* received a 1 for yes. If the officer did not attend AFIT, then the variable for that officer received a 0.

Three additional variables from the survey data of Galbraith's research included engagement, crystallization of alternatives, and exhaustion. In her study, Captain Galbraith included survey items that related to each of the three variables. To create one



score for each of the constructs, researchers calculated the averages for each construct, based off the values assigned for the corresponding survey item. For example, an officer who responded to the four engagement statements and gave a Likert Scale value of 5, 4, 2, and 4 received an engagement value of 3.75. Tables 6, 7, and 8 display the exact survey items.

**Table 6: Engagement Survey items** 

# I frequently find my work to be interesting I find my work to be a positive challenge This is the only type of work that I can imagine myself doing I feel more and more engaged in my work

**Table 7: Crystallization of Alternatives Survey Items** 

## Crystallization of Alternatives Survey Item

Right now I have a job offer "on the table" from outside of the active duty Air Force
I have found a better alternative than my present job

**Table 8: Exhaustion Survey items** 

## Exhaustion Survey Items There are days when I feel tired prior to arriving to work After work I tend to need more time than in the past in order to relax and feel better During my workday I often feel emotionally drained After my workday I usually feel worn out and weary

The researchers calculated descriptive statistics to understand the breadth and parameters of the data set. Once the data was transformed from qualitative to quantitative, the Pearson Chi-Squared Test, Analysis of Variance



(ANOVA), Logistic Regression Test, and Tukey's Multiple Comparison were used. The Pearson Chi-Squared Test detects whether there is a significant association between two categorical variables (Field, 2005). Similarly, ANOVA compares differences between several means and regression measures the relationships between variables. The post-hoc Tukey test compares groups within a variable and determines whether significant differences exists (Field, 2013).

### **Summary**

Retention and personnel intention studies often utilize surveys and the described methodologies. Each officer is different with unique circumstances that influence their decisions to separate from the Air Force. The data from AFPC provides insight on past officers and the second data set provides responses from active duty FM officers. The findings from our analysis generalize all FM officers separation decisions based on the available data. With the two primary data sets, the methodology of testing for the research hypotheses is sufficient and gives supporting data for officers' separation intentions.



### IV. Analysis and Results

### **Chapter Overview**

This chapter tests the research hypotheses and analyzes the data and results. First, researchers analyze the demographic data from the Air Force Personnel Center. Second, they tested the research hypotheses associated with this data set. Then they applied the same procedures for the data from Galbraith's survey.

### **AFPC Data Analysis**

The data set obtained from the Air Force Personnel Center contains 1,286

Financial Management officers that have left the Air Force, either from separation or retirement. Figure 4 displays the total breakout of these officers by rank, ranging from second lieutenants (O-1) through colonel (O-6). Figure 5 graphs the rank distribution based on whether the officer separated or retired from the Air Force. As depicted in Figures 4 and 5, the rank of captain contains the most losses. In the breakout of Figure 5, the majority of the 544 captain losses resulted from separations. Over 90% of the captains in the provided data chose to separate from the Air Force.

As the purpose of this research is to identify reasons why CGOs leave the Air Force, ultimately resulting in a shortage of FGOs, Figure 5 shows that over 70% of the majors retired. Although majors classify as a FGO, they are the first rank in the FGO category. Of the 176 retired majors, 142 (81%) of them were prior enlisted. Over half, (57%) of the officers in the data separated from the Air Force. We define separation as



leaving the Air Force before serving 20 years. Senior officers of the Air Force develop over time, meaning that an officer must ascend through all of the CGO ranks before being able to classify as an FGO, or senior level officer. To remedy the problem of not having enough FGOs in the FM career field, the Air Force needs to reduce the current separation rate.

### Separation vs Retirement



Figure 4: FM Officer Losses by Rank





Figure 5: Separated & Retired FM Officers by Rank

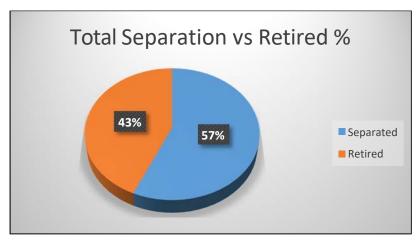


Figure 6: Total Separation vs Retired Percentage



Figures 7 and 8 depict another view of the data, showing the career field loss by year, ranging from 2003 – 2017. Aside from years 2004 – 2007, there looks to be a steady state of losses per year within the FM career field. For the years of 2003 – 2007, an increase in officer separations occurred, because during that time, the U.S. economy was demonstrating an economic boom and better financial opportunities were available outside of the military. In 2007, the U.S. economy experienced a financial crisis, which incentivized officers to remain in the military to maintain a secure income.



Figure 7: Total FM Losses by Year from 2003 – 2017



Figure 8: Separated & Retired FM Officers by Year

### Males vs Females

Overall, the Air Force consists predominately of males. With 62,037 total active duty Air Force officers, females make up only about 20.8% (afpc.af.mil). When looking at gender demographics, the FM career field resembles the Air Force's make-up of having majority males. Based on the FM officer data provided by AFPC, 76% of males left the Air Force and 24% of females left in the 14-year timespan. Of the males, 55% separated, and of the females, 64% separated. The retired and separated male percentage is not remarkably different, but females separate at a much higher percentage as depicted in Table 9. Reasons for this could be that females more often put their careers on hold to take care of family needs or to raise children. Although males sometimes take care of the home and child rearing, females still sacrifice their careers more often (Ethridge, 1989).



Table 9: Retired & Separation Percentage by Gender

Sex	<b>Total Count</b>	Percent Retired	Percent Separated
М	976	45%	55%
F	310	36%	64%

Table 10: Gender Comparison of Retired & Separated FM Officers

Sex	<b>Total Count</b>	Percent Retired	Percent Separated	Mean Separation/Yr
М	976	35%	41%	35
F	310	9%	15%	13
Total	1286	43%	57%	49

Figure 9 outlines how many males and females separated from the Air Force during the time span. The data set contains three times as many males than females, which accounts for why so many more males separated than females. After calculating the percentage of separations, Figure 10 illustrates that females have a higher separation percentage than males in almost every year the data covers.

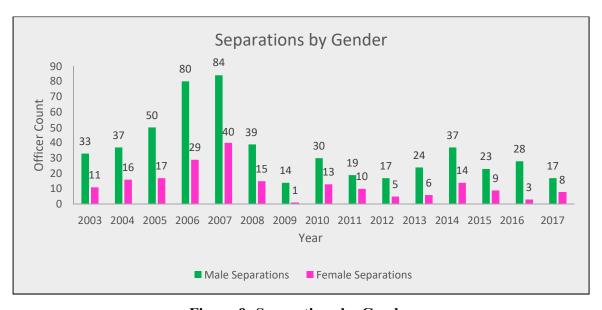


Figure 9: Separations by Gender



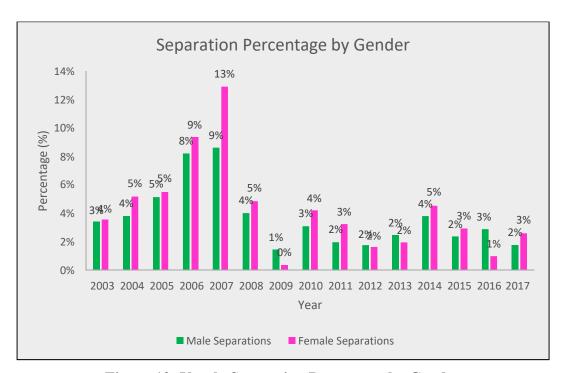


Figure 10: Yearly Separation Percentage by Gender

### **MAJCOM**

The first research question is 'Which Major Command (MAJCOM) contributes to FM officers' decision to separate from the Air Force?' As described in chapter 2, a Major Command is a higher level of command that oversees individual Air Force bases grouped together by mission. The researchers hypothesized that at least one MAJCOM would prove significant in separation decisions. Due to each of the MAJCOMs having varying mission requirements, the personnel of a particular MAJCOM may be overworked or exhausted, resulting in them deciding to separate from the Air Force. Figure 11 represents the MAJCOM each of the 1,286 officers worked at before leaving the Air Force. An officer may have been assigned to multiple MAJCOMs throughout their career, but the associated hypotheses for this thesis assumes that the last MAJCOM was the determining



factor in analyzing whether MAJCOM is a contributor of separation. The researchers focused on the last assigned MAJCOM because officers incurred different amounts of assignments based on how long they remained in the Air Force. The figure shows that the 'other' category, made up of DRUs and PRUs contained the highest number of officers who decided to leave the Air Force. Figure 12 contains the comparison of separation and retirement by MAJCOM. With the exception of Air Force Global Strike Command (AFGSC) and the group containing the DRUs and PRUs, all of the MAJCOMs had more officers separate from them than retire. Looking at the exact numbers, AFGSC only had 18 officers that left, but the DRUs and PRUs had 351 officers that either separated or retired.

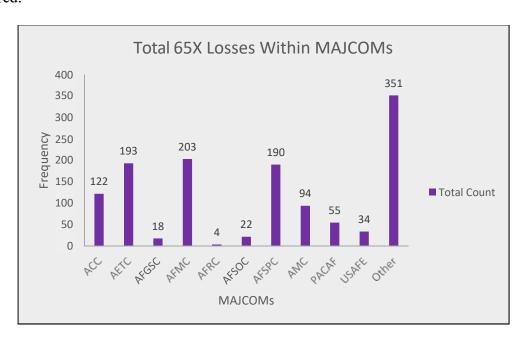


Figure 11: 65X Losses by MAJCOM



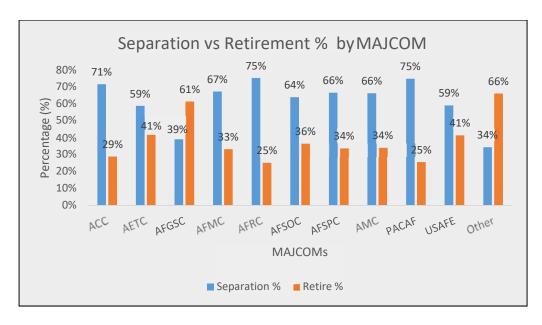


Figure 12: Separation and Retirement Percentage by MAJCOM

Hypothesis 1<sub>0</sub>: MAJCOM is not related to separation Hypothesis 1: MAJCOM is related to separation

In testing the hypothesis of whether MAJCOM has a relation to separation, the researchers conducted an ANOVA test. The test revealed that with the 11 groups, MAJCOM was statistically significant and related to separation. Testing at the 0.05 significance level, Table 11 reveals that the variable MAJCOM significantly relates to separation.

**Table 11: MAJCOM Significance ANOVA Output** 

ANOVA					
Separated					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	27.751	10	2.775	12.285	.000
Within Groups	287.998	1275	.226		
Total	315.749	1285			



In analyzing the results further, the researchers conducted a multiple comparisons test to determine whether a significant difference occurs between any of the groups in the MAJCOM. Table 12 presents the results. The only variable with evidence of being different from the others is the 'other' category.



**Table 12: MAJCOM Multiple Comparison** 

		Multiple Compa	risons			
Separated Tukey HSD						
I) MAJCOM Category	(J) MAJCOM Category	Tukey Hot			95% Confide	ence Interval
		Mean Difference (I- J)	Std. Error	Sig.	Lower Bound	Upper Bound
ACC	AETC	.128	.055	.420	05	.30
	AFGSC	.324	.120	.200	06	.7
	AFMC	.043	.054	.999	13	.2
	AFRC	037	.241	1.000	82	.7
	AFSOC	.077	.110	1.000	28	.4
	AFSPC	.050	.055	.998	13	.2
	AMC	.054	.065	.999	16	.2
	PACAF	032	.077	1.000	28	.2
	USAFE	.125	.092	.959	17	.4
	Other	.371*	.050	.000	.21	.5
AETC	ACC	128	.055	.420	30	.0
	AFGSC	.197	.117	.847	18	.5
	AFMC	084	.048	.799	24	.0
	AFRC	165	.240	1.000	94	.8
	AFSOC	051	.107	1.000	40	.2
	AFSPC	078	.049	.883	23	.0
	AMC	074	.060	.978	27	.1
	PACAF	160	.073	.504	39	.0
	USAFE	003	.088	1.000	29	.2
	Other	.244*	.043	.000	.11	.3
AFGSC	ACC	324	.120	.200	71	.0
	AETC	197	.117	.847	57	.1
	AFMC	281	.117	.364	66	.1
	AFRC	361	.263	.954	-1.21	.4
	AFSOC	247	.151	.866	73	.2
	AFSPC	274	.117	.407	65	.1
	AMC	271	.122	.495	66	.1
	PACAF	357	.129	.174	77	.0
	USAFE	199	.139	.938	65	.2
	Other	.047	.115	1.000	32	.4
AFMC	ACC	043	.054	.999	22	.1
	AETC	.084	.048	.799	07	.2
	AFGSC	.281	.117	.364	10	.6
	AFRC	080	.240	1.000	85	.6
	AFSOC	.034	.107	1.000	31	.3
	AFSPC	.007	.048	1.000	15	.1
	AMC	.010	.059	1.000	18	.2
	PACAF	076	.072	.994	31	.1
	USAFE	.082	.088	.998	20	.3
	Other	.328*	.042	.000	.19	.4



MAJCOM Category	N	Aean Difference	Std Error	Sig	Lower Bound	Upper Bound
AFRC	ACC	.037	.241	1.000	74	.82
	AETC	.165	.240	1.000	61	.94
	AFGSC	.361	.263	.954	49	1.21
	AFMC	.080	.240	1.000	69	.85
	AFSOC	.114	.258	1.000	72	.95
	AFSPC	.087	.240	1.000	69	.86
	AMC	.090	.243	1.000	69	.87
	PACAF	.005	.246	1.000	79	.80
	USAFE	.162	.251	1.000	65	.97
	Other	.408	.239	.832	36	1.18
AFSOC	ACC	077	.110	1.000	43	.28
	AETC	.051	.107	1.000	29	.40
	AFGSC	.247	.151	.866	24	.73
	AFMC	034	.107	1.000	38	.31
	AFRC	114	.258	1.000	95	.72
	AFSPC	027	.107	1.000	37	.32
	AMC	023	.113	1.000	39	.34
	PACAF	109	.120	.998	50	.28
	USAFE	.048	.130	1.000	37	.47
	Other	.294	.104	.152	04	.63
AFSPC	ACC	050	.055	.998	23	.13
	AETC	.078	.049	.883	08	.23
	AFGSC	.274	.117	.407	10	.65
	AFMC	007	.048	1.000	16	.15
	AFRC	087	.240	1.000	86	.69
	AFSOC	.027	.107	1.000	32	.37
	AMC	.004	.060	1.000	19	.20
	PACAF	082	.073	.989	32	.15
	USAFE	.075	.089	.999	21	.36
	Other	.321*	.043	.000	.18	.46
AMC	ACC	054	.065	.999	26	.16
	AETC	.074	.060	.978	12	.27
	AFGSC	.271	.122	.495	12	.66
	AFMC	010	.059	1.000	20	.18
	AFRC	090	.243	1.000	87	.69
	AFSOC	.023	.113	1.000	34	.39
	AFSPC	004	.060	1.000	20	.19
	PACAF	086	.081	.993	35	.17
	USAFE	.071	.095	1.000	24	.38
	Other	.318*	.055	.000	.14	.50



MAJCOM Category	М	ean Difference	Std Error	Sig	Lower Bound	<b>Upper Bound</b>
PACAF	ACC	.032	.077	1.000	22	.28
	AETC	.160	.073	.504	07	.39
	AFGSC	.357	.129	.174	06	.77
	AFMC	.076	.072	.994	16	.31
	AFRC	005	.246	1.000	80	.79
	AFSOC	.109	.120	.998	28	.50
	AFSPC	.082	.073	.989	15	.32
	AMC	.086	.081	.993	17	.35
	USAFE	.157	.104	.915	18	.49
	Other	.404*	.069	.000	.18	.63
USAFE	ACC	125	.092	.959	42	.17
	AETC	.003	.088	1.000	28	.29
	AFGSC	.199	.139	.938	25	.65
	AFMC	082	.088	.998	37	.20
	AFRC	162	.251	1.000	97	.65
	AFSOC	048	.130	1.000	47	.37
	AFSPC	075	.089	.999	36	.21
	AMC	071	.095	1.000	38	.24
	PACAF	157	.104	.915	49	.18
	Other	.246	.085	.129	03	.52

After noticing there was only one different variable, the ANOVA test and Tukey's multiple comparison test were conducted again, but this time excluding the 'other' category to determine if the tests would produce the same results. The ANOVA test results shown in Table 13 shows that without the DRUs and PRUs, MAJCOM fails as a significant factor in separation decisions. This means that only DRUs and PRUs significantly influence separation decisions. Senior leaders in the Air Force often handpick the officers assigned to these units because of their experience and expertise. Additionally, because of the level of knowledge required, senior officers often fill these positions; therefore, retirement probability increases when officers work in a DRU or PRU.



**Table 13: ANOVA Output for 10 MAJCOMs** 

		ANOVA			
Separated					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.312	9	.368	1.628	.103
Within Groups	209.024	925	.226		
Total	212.336	934			

### Age

The second research question is "How does age impact FM officers' separation decisions?" Undeniably, the longer someone remains in the Air Force, the older that person becomes. However, the researchers anticipated that the age range 26 – 32 would significantly relate to separation. At these ages, officers would have obtained the rank of captain, having four to ten years of service. After four years of service, most officers' initial active duty service commitment (ADSC) ends and officers have the ability to separate from the Air Force. Some officers commission into the Air Force with intentions of separating right after they complete their initial ADSC. The Air Force Personnel Center's website provides demographics about the current state of the Air Force and it states that the average total years of active federal military service is 10 years. Ten years of service is the halfway point of reaching retirement. At this point, officers contemplate whether they will remain in the Air Force until retirement or separate.

Figure 13 depicts the ages of FM officers that have separated or retired from 2003 to 2017. The data shows that a large number of officers separated at the ages of 26 - 30. On average, once officers turn 40 years of age, then they have made the decision to retire rather than separate. Seventy-two officers retired before the age of 42, because they were



prior enlisted. The five officers that did not serve prior enlisted, but retired before age 42 all retired at the 0-5 grade.



Figure 13: Age of Separated & Retired FM Officers

Hypothesis 20: Age is not related to separation Hypothesis 2: Age is related to separation

To test the relationship with age and separation, the researchers ran an ANOVA test and Tukey multiple comparisons test. The ANOVA test results in Table 14 shows age significantly relates to separation.

**Table 14: Age Relation to Separation ANOVA Test Results** 

ANOVA					
Separated					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	273.731	5	54.746	1667.730	.000
Within Groups	42.018	1280	.033		
Total	315.749	1285			



Table 15 categorizes the ages into six groups for further analysis. Table 16 displays the means of each age category. Category 1 and category 2 have means of 1, signifying that the officers in those age groups are highly likely to separate from the Air Force. In categories, 4, 5, and 6 the means fall closer to 0, signifying that separation is highly unlikely at those ages.

**Table 15: Age Category** 

Age Category			
22-25	1		
26-32	2		
33-39	3		
40-46	4		
47-53	5		
54-63	6		

**Table 16: Age Descriptives in Relation to Separation** 

Descriptives Separated										
Сераган	95% Confidence Interval for Mean									
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum		
1	63	1.00	.000	.000	1.00	1.00	1	1		
2	487	1.00	.000	.000	1.00	1.00	1	1		
3	173	.88	.321	.024	.84	.93	0	1		
4	355	.07	.251	.013	.04	.09	0	1		
5	184	.01	.074	.005	01	.02	0	1		
6	24	.04	.204	.042	04	.13	0	1		
Total	1286	.57	.496	.014	.54	.59	0	1		

The researchers utilized Tukey's Multiple Comparisons test to examine the ages under 40 in relation to separation to determine if any of the three age categories statistically differ from one another. In Table 17, category 3 is different from the other categories because the mean difference for category 3 is different when compared to categories 1 and 2. In addition, the value for category 3 is significant when compared



with the other two categories, meaning that category 3 is significantly different from categories 1 and 2. After all the tests, the results indicate that the age range of 32 and under significantly relates to FM officers' separation decisions.

**Table 17: Age Multiple Comparisons** 

Multiple Comparisons									
Separated									
Tukey HSD									
(I) AgeUnder40	(J) AgeUnder40	Mean			95% Confide	ence Interval			
		Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound			
1.00	2.00	.000	.021	1.000	05	.05			
	3.00	.116 <sup>*</sup>	.023	.000	.06	.17			
2.00	1.00	.000	.021	1.000	05	.05			
	3.00	.116 <sup>*</sup>	.014	.000	.08	.15			
3.00	1.00	116 <sup>*</sup>	.023	.000	17	06			
	2.00	116 <sup>*</sup>	.014	.000	15	08			
*. The mean difference is significant at the 0.05 level.									

### **Prior Enlisted Service**

The third research question asks, "How does prior enlisted service impact separation with FM officers?" From the data of 1,286 FM officers that have left the Air Force, about 39% (496 officers) were prior enlisted. Without categorizing as separated or retired, most officers left the Air Force at the captain rank as shown in Figure 14.



**Figure 14: Prior Enlisted FM Officers** 

Figure 15 examines whether the prior enlisted officer separated or retired and at which rank. The majority of the separations occurred at the captain rank and majority of the retirements occurred at the rank of major. The Air Force Personnel Center's statistic of the average total years of officer service being 10 years confirms the research data. Figure 16 outlines the amount of commissioned years of service each prior enlisted officer from the data set served. Data shows that ten years of service is the most a prior enlisted officer served after commissioning. The data contains 496 prior enlisted officers and 38 of them served for 10 years commissioned active duty. Title 10, U.S. Code Section 3911 mandates that prior enlisted Airmen that have commissioned must serve a minimum of 10 years as an officer in order to retire with the officer rank. After about 10 years of commissioned service, officers will be at the rank of major and thus, choose to retire.



Figure 15: Prior Enlisted FM Officers by Separation & Retirement



Figure 16: Commissioned Years of Service for Prior Enlisted Officers

Hypothesis 3<sub>0</sub>: Prior enlisted service is not related to separation Hypothesis 3: Prior enlisted service is related to separation

To test prior enlisted service influences separation with FM officers, researchers analyzed the variables using an ANOVA test, which produced significant results of prior enlisted service relating to separation as seen in Table 18. The mean values of whether an officer was prior enlisted are in Table 19 and a graphical representation is in Figure 17. Officers with prior enlisted service are 30% less likely to separate from the Air Force.

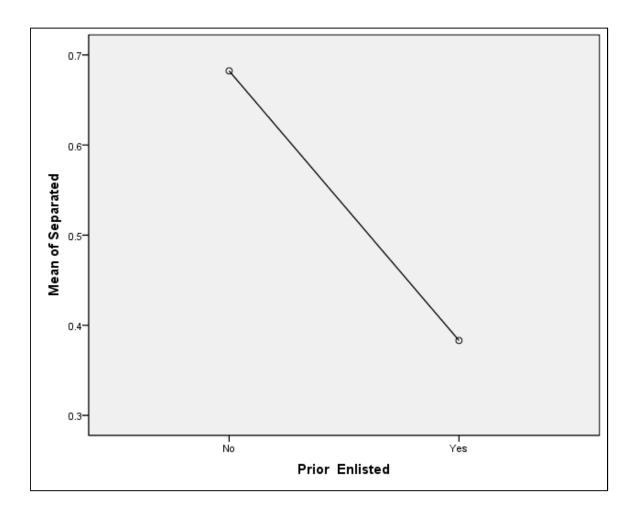
Table 18: ANOVA test Results of Prior Enlisted Relation to Separation

ANOVA										
Separated										
	Sum of Squares	df	Mean Square	F	Sig.					
Between Groups	27.279	1	27.279	121.422	.000					
Within Groups	288.470	1284	.225							
Total	315.749	1285								



**Table 19: Prior Enlisted Descriptives in Relation to Separation** 

Descriptives Separated										
	95% Confidence Interval for Mean									
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum		
0	790	.68	.466	.017	.65	.71	0	1		
1	496	.38	.487	.022	.34	.43	0	1		
Total	1286	.57	.496	.014	.54	.59	0	1		



**Figure 17: Prior Enlisted Means Plot** 



### **Spouse**

The fourth research question aims to determine the effect having a spouse has on an officer's decision to separate from the active duty Air Force. Decisions married officers make do not only affect them, but the decisions also affect their spouse. The life of an Air Force officer involves moving from location to location every few years. For someone who may not be in the Air Force, but have to live the Air Force lifestyle, the adjustment may be difficult. Consequently, the spouse may persuade the service member to separate from the Air Force. On the other hand, the fact that the service member has a spouse may be the reason why remaining in the Air Force is the chosen decision. Having a relatively secure job with the Air Force combined with the responsibility of providing for a family makes for a fair reason to select to remain in the Air Force.

Hypothesis 40: Having a spouse is not related to separation

Hypothesis 4: Having a spouse is related to separation

After conducting the tests to determine if having a spouse relates to separation, the results proved that it is a significant variable. Officers with spouses do not separate from the Air Force as often as single officers do. The scenario that officers with spouses need a secure means of providing for their family corresponds to the test results in the ANOVA output in Table 20 & Figure 18.



Table 20: ANOVA Results of Spouse's Relation to Separation

ANOVA										
Separated	Separated									
	Sum of Squares	df	Mean Square	F	Sig.					
Between Groups	18.016	1	18.016	77.696	.000					
Within Groups	297.733	1284	.232							
Total	315.749	1285								

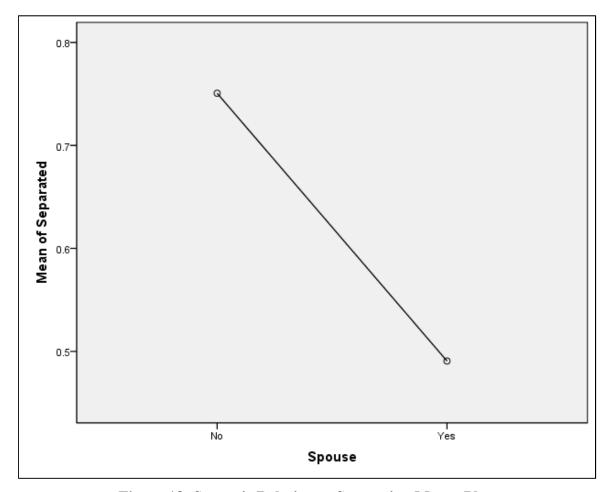


Figure 18: Spouse's Relation to Separation Means Plot



### **Commissioning Source**

The fifth research question asks, "Which commissioning source contributes most to whether an officer is more likely to separate from the Air Force?" The data presents three main commissioning sources, the United States Air Force Academy (USAFA), Reserve Officer Training Corps (ROTC), and Officer Training School (OTS).

Researchers grouped together other commissioning sources such as direct appointments and the Early Commissioning Physicians Program (ECPP as one category. Figure 19 illustrates the distribution of the FM officers' commissioning sources. Of the FM officers that left the Air Force from January 2003 - October 2017, more commissioned through ROTC than the other commissioning sources. Not taking into account the commissioning sources in the "other" category, the USAFA produces the least amount of officers. Even though this is the case, as seen in Figure 20, the USAFA had a higher percentage of officers that separated from the Air Force, 79%. ROTC only had a 60% separation rate and OTS had a 36% separation rate.

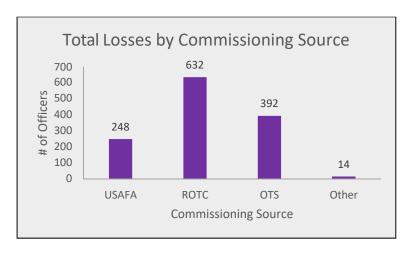


Figure 19: Commissioning Source Breakout



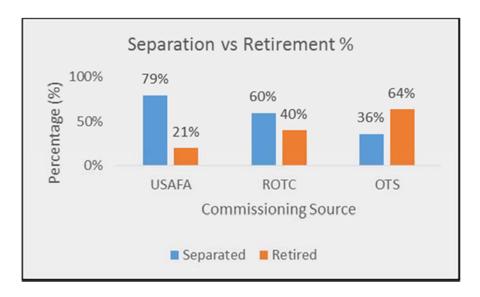


Figure 20: Separation & Retirement by Commissioning Source

Hypothesis 50: Commissioning Source is not related to separation

*Hypothesis* 5<sub>1</sub>: Air Force Academy graduates is related to separation

*Hypothesis* 5<sub>2</sub>: *ROTC* graduates is related to separation

Hypothesis 53: OTS graduates is related to separation

To test the hypotheses, researchers conducted an ANOVA test on the three main commissioning sources and found that *commissioning source* is significant in determining whether an FM officer will separate from the Air Force. According to the results, we reject the null hypothesis. The means plot in Figure 21 graphs the means of the three commissioning sources and from it, USAFA graduates are more likely to separate from the Air Force than ROTC and OTS graduates.

**Table 21: ANOVA Test Results of Commissioning Sources** 

ANOVA									
Separated									
	Sum of Squares	df	Mean Square	F	Sig.				
Between Groups	29.851	2	14.925	66.929	.000				
Within Groups	282.991	1269	.223						
Total	312.842	1271							



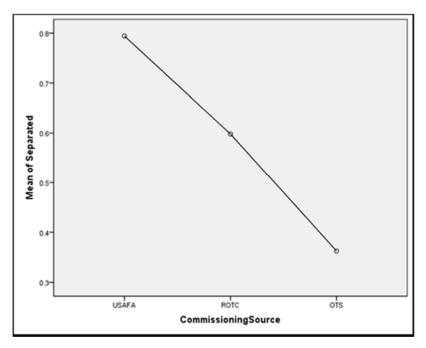


Figure 21: Commissioning Source Means Plot

# **AFIT Cost Degree**

Popular belief of AFIT graduates assumes that upon completion of the program and the payback assignment, graduates will separate from the Air Force. The collected data disproves the belief. In Figure 22, more non-AFIT graduates separate from the Air Force than AFIT graduates do. The results from the ANOVA test imply that an AFIT degree correlates with separation. As seen in Figure 22, separation occurs 20% more often with non-AFIT graduates.

Hypothesis 60: AFIT cost degrees are not related to separation Hypothesis 6: AFIT cost degrees are related to separation



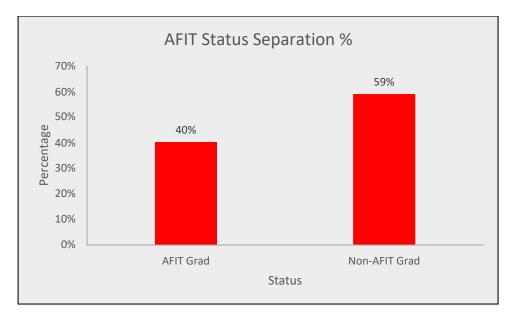


Figure 22: AFIT Status Separation Percentage

**Table 22: ANOVA Test Results of AFIT Graduates** 

ANOVA								
Separated								
	Sum of Squares	df	Mean Square	F	Sig.			
Between Groups	4.547	1	4.547	18.760	.000			
Within Groups	311.202	1284	.242					
Total	315.749	1285						

### **Engagement, Exhaustion, & Crystallization of Alternatives**

The last three research questions seek to find the relation of engagement, exhaustion, and crystallization of alternatives to separation. Engagement in the workplace refers to whether an officer is interested in her day-to-day tasks on the job or if she finds what she does to be boring and unsatisfying. Exhaustion refers to whether an officer is mentally, emotionally, or physically tired from the duties of her job. Crystallization of alternatives means having a definite job alternative available.



*Hypothesis* 7<sub>0</sub>: Engagement is not related to separation

Hypothesis 7: Engagement is related to separation

*Hypothesis* 80: Crystallization of alternatives is not related to separation

Hypothesis 8: Crystallization of alternatives is related to separation

*Hypothesis* 90: Exhaustion is not related to separation

**Hypothesis 9:** Exhaustion is related to separation

First, the researchers tested the variables separately using regression analysis to determine the significance of the variables. Testing at a significance value of 0.05, all of the variables separately resulted in a significant relationship with separation as seen in Tables 23, 24, and 25. Meaning, when assessed individually, engagement, exhaustion, and crystallization of alternatives all positively correlate to separation from the Air Force.

**Table 23: Engagement Regression Output** 

	Coefficients <sup>a</sup>									
Model  Unstandardized Coefficients			Standardized Coefficients							
		В	Std. Error	Beta	t	Sig.				
1	(Constant)	.875	.066		13.256	.000				
	Engagement Value	082	.018	268	-4.584	.000				
a. Dep	pendent Variable: Separate	a. Dependent Variable: Separate								

**Table 24: Exhaustion Regression Output** 

	Coefficients <sup>a</sup>							
Model		Unstandardize	ed Coefficients	Standardized Coefficients				
		В	Std. Error	Beta	t	Sig.		
1	(Constant)	.764	.062		12.379	.000		
	Exhaustion Value	056	.019	178	-2.978	.003		
a. Dep	a. Dependent Variable: Separate							



Table 25: Crystallization of Alternatives Regression Output

Coefficients <sup>a</sup>									
Model	Unstandardize	Unstandardized Coefficients							
	В	Std. Error	Beta	t	Sig.				
1 (Constant)	.474	.049		9.763	.000				
Crystallization of	.066	.020	.197	3.312	.001				
Alternatives									
a. Dependent Variable: Separate		a. Dependent Variable: Separate							

Next, researchers analyzed the three variables together in a multiple regression model. From that, only two of the variables proved to be significant with *separation*, *engagement* and *crystallization of alternatives*. Furthermore, Tables 27, 28, and 29 analyze the three variables together while controlling for the variables *age*, *gender*, and *time in service*. Each of the three regression tests indicate nonsignificant results for the exhaustion variable. The three additional tests confirmed that only *engagement* and *crystallization of alternatives* are significant factors of separation, possessing a positive correlation.

Table 26: Interaction between Engagement, Exhaustion, & Crystallization of Alternatives

	Coefficients <sup>a</sup>							
Model		Unstandardize	Unstandardized Coefficients					
		В	Std. Error	Beta	t	Sig.		
1	(Constant)	.763	.071		10.710	.000		
	Engagement Value	089	.023	288	-3.821	.000		
	Exhaustion Value	012	.024	037	496	.621		
	Crystallization of	.085	.019	.255	4.401	.000		
	Alternatives							



**Table 27: Age as a Control Variable** 

Age      004       .004      064      974       .33         2       (Constant)       .903       .174       5.188       .00         Age       .002       .004       .027       .439       .66         Engagement Value      126       .029      297       -4.314       .00         Exhaustion Value      020       .025      051      791       .42		Coefficients <sup>a</sup>							
1 (Constant) .728 .144 .5.058 .00 Age .004 .004 .004 .004 .974 .33 2 (Constant) .903 .174 .5.188 .00 Age .002 .004 .027 .439 .66 Engagement Value .126 .029 .297 .4.314 .00 Exhaustion Value .020 .025 .051 .791 .42	Mode	I	Unstandardize	ed Coefficients					
Age      004       .004      064      974       .33         2       (Constant)       .903       .174       5.188       .00         Age       .002       .004       .027       .439       .66         Engagement Value      126       .029      297       -4.314       .00         Exhaustion Value      020       .025      051      791       .42			В	Std. Error	Beta	t	Sig.		
2       (Constant)       .903       .174       5.188       .00         Age       .002       .004       .027       .439       .66         Engagement Value      126       .029      297       -4.314       .00         Exhaustion Value      020       .025      051      791       .42	1	(Constant)	.728	.144		5.058	.000		
Age       .002       .004       .027       .439       .66         Engagement Value      126       .029      297       -4.314       .00         Exhaustion Value      020       .025      051      791       .42		Age	004	.004	064	974	.331		
Engagement Value126 .029297 -4.314 .00 Exhaustion Value020 .025051791 .42	2	(Constant)	.903	.174		5.188	.000		
Exhaustion Value020 .025051791 .42		Age	.002	.004	.027	.439	.661		
		Engagement Value	126	.029	297	-4.314	.000		
Crystallization of .073 .023 .202 3.206 .00		Exhaustion Value	020	.025	051	791	.429		
		Crystallization of	.073	.023	.202	3.206	.002		
Alternatives		Alternatives							

Table 28: Gender as a Control Variable

	Coefficients <sup>a</sup>						
Model		Unstandardize	ed Coefficients	Standardized Coefficients			
		В	Std. Error	Beta	t	Sig.	
1	(Constant)	.562	.136		4.138	.000	
	Gender	.017	.075	.014	.220	.826	
2	(Constant)	.966	.173		5.581	.000	
	Gender	011	.070	010	161	.873	
	Engagement Value	123	.028	289	-4.362	.000	
	Exhaustion Value	020	.026	051	781	.436	
	Crystallization of	.074	.023	.205	3.213	.002	
	Alternatives						
a. Dep	endent Variable: Separate						

Table 29: Time in Service as a Control Variable

		Coef	ficients <sup>a</sup>			
Mode	I	Unstandardize	ed Coefficients	Standardized Coefficients		
		В	Std. Error	Beta	t	Sig.
1	(Constant)	.600	.058		10.317	.000
	Time in Service (Years)	001	.004	012	181	.856
2	(Constant)	.926	.140		6.622	.000
	Time in Service (Years)	.004	.004	.064	1.029	.304
	Engagement Value	131	.029	308	-4.487	.000
	Exhaustion Value	018	.025	045	705	.481
	Crystallization of	.072	.023	.200	3.173	.002
	Alternatives					

## **Summary**

This chapter tested the research hypotheses and analyzed the data to obtain results for the researchers to answer the research questions. It explained the specific tests conducted and provided interpretations of the results. The next chapter will answer each of the research questions in detail and provide recommendations for senior leads and suggestions for future research.



#### V. Conclusion

## **Chapter Overview**

This final chapter answers the research questions. The researchers discuss the limitations of the study and provide senior Air Force leaders with important findings and recommendations for future decisions. Lastly, we provide possible follow-on research opportunities.

## **Research Findings**

The researchers set out on this study to determine factors related to why a large proportion of financial management (FM) company grade officers (CGOs) separate from the Air Force. The resulting problem of CGOs separating and not choosing to retire is a shortage of field grade officers (FGOs) in the FM career field. To understand better why CGOs separate from Air Force, researchers formed nine research questions relating to reasons why CGOs may choose to separate.

The first research question asks, "Which major command (MAJCOM) contributes to financial management officers' decision to separate from the Air Force?" The related hypothesis tested whether MAJCOMs is related to separation and if so, which ones. Test results showed that the main ten MAJCOMs have no significant relationship to separation decisions, rather locations labeled as a direct reporting unit (DRU) or Personnel Reception Unit (PRU) do relate to whether an officer decides to remain in the Air Force.

The second research question asks, "How does age influence FM officers' separation decisions?" The age range 32 and under significantly influences FM officers' separation decisions. Often, the age of an officer indicates her rank as well as the amount



of time served. Less than 32 years of age puts an officer at serving less than ten years, and possibly not having committed yet to serve 20 years. The younger an officer is, the higher the chances of separation, unless the officer was prior enlisted, which leads to the third research question.

"How does prior enlisted service influence separation with FM officers?" If an officer commissions with prior enlisted service, then they are less likely to separate. Officers with prior enlisted service must serve at least ten commissioned years to be eligible for retirement with the officer rank, which is why they choose not to separate in the CGO years – they do not want to waste the time served as prior enlisted.

Research question four asks, "What impact does having a spouse have on an FM officer's decision to separate from active duty Air Force?" Test results revealed that having a spouse significantly influences separation decisions with FM officers. Officers without spouses are more likely to separate from the Air Force. Not having the responsibility of providing for a family and having the freedom to change careers at will without weighing the opinion of another makes separation a much easier decision.

The researchers also questioned whether a particular commissioning source contributes most to whether an officer is more likely to separate from the Air Force. The United States Air Force Academy (USAFA), Reserve Officer Training Corps (ROTC), and Officer Training School (OTS) were the commissioning sources that the researchers analyzed. The commissioning source with the most separations is the Air Force Academy. USAFA graduates are more likely to separate than ROTC graduates and more likely to separate than OTS graduates are.



Research question six asks, "What impact do AFIT cost analysis master's degrees have on separation?" Contrary to some belief, graduates of the Cost Analysis program do no separate at a higher rate than non-AFIT graduates do. Actually, AFIT graduates are 19% more likely to remain in the Air Force. The Air Force gains a higher return on their investment of AFIT graduates when the officers remain in the Air Force longer.

Questions 7, 8, and 9 ask how do engagement, crystallization of job alternatives, and exhaustion in the workplace influence FM officers' decisions to separate. After testing the variables, researchers found that how engaged an officer is in her work contributes to whether the officer plans to separate from the Air Force. The more an officer is engaged in her work, the less likely are her intentions to separate. Similarly, if an officer has clear and concrete job alternatives, they are more likely to separate from the Air Force. Exhaustion though, did not prove to be a significant factor of separation.

#### Limitations

To better analyze influences of separation with FM officers, the researchers needed information that was not accessible. The lack of data limited the study to only those officers in the available dataset and those who completed the survey. The researchers did not possess demographics and responses from every FM officer, nor did they acquire data regarding the career field's current authorizations and assignment, demographics and retention from other career fields, and all past force shaping board efforts. The lack of data prevented further analysis of the FM career field.



#### **Recommendations to Senior Leaders**

After finding out some influences of separation decisions with FM officers, the researchers can provide some information for Air Force leaders to use in future decision making. The first recommendation is to continue sending finance officers to AFIT to complete the Graduate of Cost Analysis (GCA) program. In addition to continue sending officers, senior leaders should increase the number of available spots in the program. Research from this thesis proved that AFIT students, specifically, the GCA graduates remain in the Air Force longer than non-AFIT graduates do. The amount of students in the GCA program has decreased over the years. The graduating class of 17M contained 15 students. Fourteen students make up the 18M graduating class and 10 students for the 19M class. By increasing the amount of finance officers to complete the GCA program at AFIT, the Air Force earns a higher return on investment because more finance officers may remain in the Air Force for a longer period.

Another recommendation for senior leaders is to increase the amount of officers coming into the financial management career field by at least 10%. With a bigger pool of officers, after separation occurs, the career field will have a sufficient amount of officers to continue in to the FGO ranks to fill senior FM positions. Air Force leaders cannot eliminate separation from the Air Force; in fact, a small percentage of separation is healthy for the state of the organization. If all officers decided to remain in the Air Force until retirement, then a surplus of officers would occur and the Air Force and FM career field would need to initiate force-shaping efforts to lower personnel numbers.



When planning for future state of the organization, Air Force leaders should take into account officers who were prior enlisted. In order to retire with the officer rank, prior enlisted officers must serve at least ten years of commissioned service. By increasing the required amount of time from ten to fifteen years of commissioned service, officers will be in the Air Force longer to fill at least lieutenant colonel and colonel positions, thus decreasing the shortage of field grade officers. Also, senior leaders should question whether the Air Force provides enough extrinsic motivation. The Air Force is currently an all-volunteer organization and those who choose to defend the United States do so willingly. Nonetheless, it is a job and people seemingly perform better when motivated, either intrinsically or extrinsically (Aldagi, 1979).

#### **Follow-On Research**

The topic of separation and retention in the financial management career field and in the Air Force has potential for other researchers with more data. The scope of this thesis did not delve deep into the possible impacts of college choice associated with active duty separation from the career field. Future research on the topic could analyze whether the choice of going to an Ivy League college, private college, or public college has a significant impact on separation. Future research could also expand into what exactly officers do once separated. Do the officers acquire a civilian job or go into the Air Force Reserves or Air National Guard?

With the recent Air Force addition of the blended retirement system and the current 100% promotion rate to major, follow-on research could analyze these impacts.



Research could determine whether separation rates change after the implementation of the blended retirement system. The 100% promotion rate to major could potentially affect retirement rates. Other topics are the effects of joint spouse regulations and voluntary separation incentives and special separation benefits. All of these influence separation in a unique way.

## **Summary**

This research identified influences of separation decisions that financial management officers encounter. Researchers found age, prior enlisted service, having a spouse, the commissioning source, an AFIT cost degree, job engagement, and crystallization of job alternatives to all be significant in determining whether an FM officer separates from the Air Force or not. The researchers recommend senior Air Force leaders to increase the number of available spots in the AFIT Graduate of Cost Analysis program and caution about the inclusion of prior enlisted officers in FGO planning because based on past data, prior enlisted officers retire at the rank of either captain or major. Lastly, leaders need to ensure officers stay engaged in their jobs, which leads to less separation and more productivity.

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#### Vita

First Lieutenant Shauna Young was born in Charleston, South Carolina and graduated from R.B. Stall High School in 2010 as Valedictorian. She entered undergraduate studies at the wonderful Clemson University in Clemson, South Carolina. In 2013, she studied abroad at the University of Oxford in Oxford, England. Lt Young graduated with honors in 2014, earning a Bachelor of Science degree in Management and was commissioned as a second lieutenant in the United States Air Force on May 8, 2014.

Her first assignment was to the Remote Sensing Systems Directorate, Space and Missiles Systems Center at Los Angeles Air Force Base, California. At this assignment, she served as an acquisition cost analyst as well as the directorate's Booster Club vice president where she took pride in enhancing the unit's morale. In August 2016, she began studies at the Air Force Institute of Technology where she pursued a Master of Science in Cost Analysis degree. Upon completion of the program, she will be stationed at Andrews Air Force Base, working at the Air Force Cost Analysis Agency.



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### 14. ABSTRACT

The purpose of this research was to analyze influences on separation decisions of active duty Air Force financial management officers. Researchers tested nine variables to determine their separation implications. The tested variables were major command, age, prior enlisted service, spouse, commissioning source, AFIT cost analysis master's degrees, engagement, crystallization of job alternatives, and exhaustion. Results proved that age, prior enlisted service, having a spouse, and being an Air Force Academy or AFIT graduate correlates to whether a financial management officer will separate from the Air Force. In addition, the engagement level or having a defined list of job alternatives readily available correlates to separation as well. Researchers recommend that Air Force leaders continue sending students to the Air Force Institute of Technology because AFIT graduates are remaining in the Air Force as long or longer than non-AFIT graduates are. Another recommendation is to increase the amount of commissioned service years that prior enlisted officers must serve from ten years to fifteen years. Requiring more years of commissioned service will help decrease the shortage of field grade officers in the financial management career field.

#### 15. SUBJECT TERMS

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