CAN A NON-RATED OFFICER EFFECTIVELY FILL THE POSITION OF AN USAF AIR LIAISON OFFICER?

by

Mark Raymond Wisher

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AIR LIAISON OFFICER?			
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This Graduate Research Project was prepared under the direction of the candidate's Research Committee Member, Mr. C.J. Percle, Adjunct Associate Professor, Extended Campus, and the candidate's Research Committee Chair, Dr. Donald W. James, Associate Professor, Extended Campus, and has been approved by the Project Review Committee. It was submitted to the Extended Campus in partial fulfillment of the requirements for the degree of Master of Aeronautical Science.			
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ABSTRACT

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An USAF Air Liaison Officer (ALO) is the senior TACP member attached to a ground unit who functions as the primary advisor to the Army ground commander on air power. The large majority of USAF officers assigned to be ALOs are Rated Officers (Fighter/Bomber Aircrew). This proposal is seeking to examine the feasibility of nonrated officers effectively filling the position of an ALO. The paper will discuss the history and origin of the USAF ALO, a review of relevant literature including John P. Olivero's 1999 research study, and data that seems to support the creation of a non-rated ALO career field. It is this author's hypothesis that a non-rated officer can effectively fill the position of an ALO and we will discuss why the USAF will benefit from that positioning. The research methodology to be used will be quantitative survey research. Data collected for this thesis indicated that the majority of Army and AF respondents felt that a non-rated officer *could* perform the duties of an ALO effectively. Likewise, the majority also felt that the creation of a non-rated ALO career field would benefit the USAF. Finally, discussion will include a recommended training program for non-rated officers to become qualified ALOs.

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CHAPTER I

INTRODUCTION

Background of the Problem

Retention of highly trained aviators has always been challenging for military services. The expensive and extensive training that military aviators receive often make them lucrative hires for commercial airline companies after they complete their initial service commitment. In the United States Air Force (USAF), an aviator often times has to fight just as hard, if not harder, to *stay in* the cockpit as they did to *get in* the cockpit. In addition to the challenge of retention, there are many "out-of-cockpit" demands, sometimes called "desk jobs", that pull operational aviators out of their weapon systems so they can fill a secondary job position.

Although times of "pilot shortages" in the USAF are sporadic and largely based on cockpit availability, the out-of-cockpit assignments put unnecessary stress on an already limited resource, which makes it difficult to fill all of the cockpits. The USAF will typically just increase the number of officers in the pilot training "pipeline" to fill the gaps in order to reduce the pilot shortages. However, this flux in pilot production usually results in an increased inexperienced-verses-experienced pilot-level at the operational units, which affects unit combat mission readiness, or in other words, their ability to go to war. One way to keep a better balance of experienced aviators in the cockpit would be to reduce the amount of out-of-cockpit assignments, thereby reducing the number of times experienced aviators are pulled from their operational cockpits. One of the many out-of-cockpit assignments that aviators face is the Air Liaison Officer (ALO) assignment, which is also called an Alpha tour. An ALO is the senior tactical air control party

member attached to a ground unit who functions as the primary advisor to the Army ground commander on the use of air power (DOD, n.d.).

Although there are many factors that affect retention of USAF aviators, when faced with a decision, out-of-cockpit assignments likely weigh heavily on the military aviator's mind when it comes time to decide whether to continue their military career or seek civilian aviation employment. Therefore, one could argue that it would be in the USAF's vested interest, without degradation of mission accomplishment, to retain their aviation investments by reducing some of the outside "pulls" that put aviators in desk jobs and therefore negatively affect pilot retention. However, there are important desk jobs, such as some staff tours and other leadership command positions, which demand a rated officer and will always require such. But, possibly due to changing times, there are those that do not necessarily require a rated officer to fill the position. Elimination of one of the many out-of-cockpit assignments, such as a non-volunteer-status ALO assignment for Rated officers, could be one step at reducing the variables that affect aviators' decisions whether to stay or leave military service.

Researcher's Work Setting and Role

This researcher has a variety of experiences, both on the ground and in the air, in the Close Air Support (CAS) environment. As an F-16 pilot, the researcher flew CAS training missions in South Korea for a year, including 15 training CAS missions in the de-militarized zone. The researcher deployed in November of 2001 in support of Operation Enduring Freedom flying the F-16CJ on 15 combat CAS missions employing JDAM and CBU103. The researcher then deployed as an Air Liaison Officer for the 1st Brigade, 101st Airborne Division for the start of Operation Iraqi Freedom. The researcher

finally deployed again to Afghanistan in support of the 10th Mountain Division,

CJTF180, serving as an Air Liaison Officer in the Air Support Operations Center

(ASOC) – the command and control center for the integration of CAS operations.

Statement of the Problem

We have already discussed some background issues that affect both the USAF and the USAF aviators who serve. This discussion has led us to explore some options for reducing one of the many out-of-cockpit assignments, in this case, the ALO assignment. That leads us to our research problem: *Can a Non-Rated Officer Effectively Fill the Position of an USAF Air Liaison Officer?* Obviously the answer to this question must go much further than yes or no. This problem goes much deeper than simply answering the question. Many who read this paper will in fact be more concerned with the "Why?" rather than the actual problem question itself. Therefore, we will first address the "Why?" or the "who cares?" of the question in further detail in Chapter II. Secondly, we will analyze the data collected to see if it supports a "yes" or a "no" to the problem question. Lastly, since it is the researcher's hypothesis that a non-rated officer *can* indeed effectively fill the position of a USAF ALO, we will discuss a possible training program for the non-rated ALO—the "How?" of the research problem.

Definition of Terms

Air Force Skill Code (AFSC) – a code assigned to every USAF person to delineate his or her military operational specialty.

AFSOC – Air Force Special Operations Command

Air Support Operations Center (ASOC) – USAF personnel consisting of an ASOC

Director (ALO), a Fighter Duty Officer (FDO—usually an ALO or SNCO), and a Fighter

Duty Technician (FDT—a Romad). The ASOC is the senior CAS command and control element that coordinates with the Corps ground scheme of maneuver and processes immediate requests from forward-deployed TACPs requesting CAS.

Air Support Operations Squadron (ASOS)— USAF unit, attached and aligned with their Army maneuver unit counterparts, consisting of conventional and/or Special Forces TACP personnel (ALOs, JTACS, ROMADS), Logistics personnel (MX, CSS), and Combat Weather personnel (unit dependant). The Air Support Operations Group (ASOG) is the higher headquarters for multiple ASOSs.

Close Air Support (CAS) – Air action by fixed- and rotary- wing aircraft against hostile targets that are in close proximity to friendly forces and that require detailed integration of each air mission with the fire and movement of those forces (DOD, 2003).

Combat Control Team (CCT) – specially trained airmen who specialize in deploying into combat areas by air, land, or sea, to set up bare-bone airfields. Specialize in air traffic control, tactical CAS control, intelligence, demolition, and weather observation.

Electronic Warfare Operator (EWO) – In multiple seat aircraft (i.e. B-1B), responsible for offensive or defensive electronic warfare systems operation.

Joint Terminal Attack Controller (JTAC) – Within the scope of this paper, an USAF TACP or STS member (typically a NCO, although Officers may be JTAC qualified) who is specially qualified to provide terminal CAS control for the purpose of employing air-to-ground munitions in close proximity of friendly forces. Also known as an Enlisted Terminal Attack Controller (ETAC).

Navigator (NAV) – In multiple seat aircraft, aircrew member who is responsible for navigation and in some airframes (i.e. B-52), responsible for radar operation.

Non-Rated Officer - Officer without an aeronautical AFSC.

Non-Volunteer Status – with regards to assignment selection, term meaning personnel are currently not volunteers for a particular assignment or type of assignment or they were selected for an assignment, regardless of their desires.

Pilot – Manipulator of aircraft controls.

Rated Officer – Officer with an aeronautical AFSC (i.e. Pilot, NAV, EWO, WSO, etc.)

Special Tactics Team (STT) – see Combat Control Team (CCT)

Tactical Air Command and Control Specialist (TACCS) – an USAF TACP member (typically an Airman--E3 or E4) who specializes in radio and vehicle operation and maintenance. Also known as a Radio Operator, Maintainer, and Driver (ROMAD) or a 1C4 (from AFSC).

Tactical Air Control Party (TACP) – USAF personnel attached to and embedded with an Army maneuver element (Division, Brigade, Battalion, etc.) for the purpose of requesting and controlling Close Air Support. The members of the team usually consist of an Air Liaison Officer, a Joint Terminal Air Controller (JTAC), and two Tactical Air Command and Control Specialists (TACCS—also known as a "ROMAD" or a "1C4" ["one-charliefour"]). Tactical employment of the TACP will typically result with the team members being geographically separated. The JTAC and one Romad will be typically forward deployed to the target area in order to provide terminal control of the aircraft. The ALO and the other Romad, located at the Brigade/Battalion TOC or TAC, will typically provide initial control of the aircraft pushing them to the JTAC after passing an updated situation report.

Volunteer Status – with regards to assignment selection, term meaning personnel

volunteered or are volunteering for a particular assignment or type of assignment.

Weapon System Operator (WSO) – In multiple seat aircraft (i.e. F15E), responsible for

delivery of air-to-air or air-to-ground weapon system employment and navigation.

Corps – Highest level of command and control of Army maneuver units.

Division (DIV) – Army maneuver unit below corps typically consisting of three Brigades.

A Division consists of approximately 18,000 soldiers.

Brigade (BDE) – Army maneuver unit below Division typically consisting of three

Battalions. A Brigade consists of approximately 3,500 soldiers.

Battalion (BN) – Army maneuver unit below Brigade typically consisting of three to four

Companies. A Battalion consists of approximately 1,000 soldiers.

Company (CO) – Army maneuver unit below Battalion typically consisting of three to

four Patoons. A company consists of approximately 300 soldiers.

Limitations and Assumptions

Author will unlikely have access to precise cost figures of training expenses so cost comparisons in training will be estimates.

Author assumes that there will be cadets or OTS graduates able and willing to attend ALO training programs.

Career progression of the ALO will be comparative to other non-rated AFSCs within the USAF.

The Army will be willing to accept non-rated officers, trained to be effective experts on air power, as their ALO and primary advisor of air power to the ground commander.

Author assumes that the USAF desires to have adequate career field representation through experienced officers at higher levels of command, including the TACP career field.

Author assumes that it is the USAF's desire to limit the out-of-cockpit assignments for aviators as much as possible so that highly trained and proficient aviators are accomplishing their primary AFSC rather than alternate ones.

Author assumes that the USAF seeks cost-effective training solutions (i.e. reducing number of aircrew re-qualification courses required).

A relatively limited number of Army personnel participated in the survey research. A total of 30 respondents participated in the survey. This is a small number (10%) compared to the USAF personnel that were surveyed. A follow-on survey of more Army personnel may be warranted in the future.

CHAPTER II

REVIEW OF RELEVANT LITERATURE AND RESEARCH

History of the Air Liaison Officer

The USAF ALO has its origins dating back to the Korean War and is closely tied to the use of Forward Air Controllers (FAC). The FACs flew "low and slow" in their T-6 Texans to search and mark targets for other aircraft to attack. Close air support was urgently needed to support the ground conflict in Korea and pilots flew "mosquito" missions to hunt for enemy troops and then mark them for attack by fighter-bomber aircraft (US, n.d.).

Newly assigned Mosquito FAC pilots were required to serve 60 days on the ground in a Tactical Air Control Party (TACP), as a Ground FAC (GFAC). The three-man team TACP consisted of a mosquito FAC pilot (or GFAC), a radio technician, and a Jeep mechanic. The TACPs original mission was designed to directly control air strikes on the front lines but later in the war turned into one of providing vital communication links between ground commanders, airborne FACs (or FAC-A), and strike aircraft (US, n.d.).

With the success of close air support in the Korean War, the role of the TACP, along with the officer GFAC, was carried over into the Vietnam War. However, the officer GFAC became known as an Air Liaison Officer and became a key member of the brigade commander's staff. The ALO attended the brigade commander's meetings, briefed on air activity in the area of operations, and advised the commander on use and capabilities of CAS aircraft (Fire, n.d.). The TACP of the time consisted of an ALO (FAC qualified), subordinate FACs (i.e. at battalion level), and ROMADs (radio operator,

maintainer, and driver). The USAF now had dedicated ALOs to serve as airpower advisors to the Army commanders while the battalion officer GFACs provided terminal air control for CAS air strikes on the front lines. Throughout the 1960's and 1970's, small Air Force detachments began to spring up at each of the army divisions in order to provide a local group of USAF Air Liaison Officers to the Army units (Pike, 2003).

Through both the Korean and the Vietnam War, it was the FAC qualified fighterpilot-ALOs that provided terminal air control for CAS air strikes. The enlisted airman, or ROMAD, was limited in their role because the officers were the only ones authorized to clear aircraft "Hot" and the Army wanted Air Force fighter pilots on the ground controlling the fighter aircraft that were providing them CAS. However, it wasn't until the mid 1980s that the Air Force realized that they would have problems maintaining pilots both in the cockpit and attached to TACP units for the purpose of controlling CAS (Pike, 2003). Air Force leadership decided it was not necessary for the GFAC to be an officer but that an enlisted man, if properly trained, could control air strikes in the close air support environment -- thus the Enlisted Terminal Air Controller (ETAC) was born. However, the TACP career field still needed leadership so the Air Liaison Officer was retained to provide officer leadership to the TACP career field and to serve as senior air power advisors to the Army ground commanders. Army leadership still felt it was important to have a pilot as an ALO to be an advisor to the commander and thus the current requirement for rated officers to fill the ALO position still stands today over twenty years later.

Today, the ALO's responsibility is much the same as it was in Vietnam; that is the ALO attends the Division/Brigade/Battalion "commander's meetings, briefs on air

activity in the area of interest, and advises on the use and capabilities of TACAIR", known today as CAS (Fire, n.d.). However, there is no requirement for ALOs to be Terminal Air Control (TAC) qualified since the ETACs are qualified to control the air. But current Air Force instructions do require that Battalion ALOs (BALOs) be TAC qualified to control air since there seems to never be enough ETACs to go around at the Battalion level. BALOs are usually not assigned permanently to the TACP squadrons, called Air Support Operation Squadrons (ASOS), but are augmented into the squadron in time of war or contingency operations and are often times A-10 pilots. The A-10 pilots maintain their BALO qualification and are on-call to serve on the ground, with their assigned Battalion, once the Army is deployed.

Statement of the Problem and Hypothesis

Recent conflicts such as Operation Enduring Freedom and Iraqi Freedom have brought CAS once again into the spotlight. It is this researcher's belief that conflicts with third world countries, which lack the military might and technological advances of the US military, will continue in the near future. Short of war with China or North Korea, the days of large force-on-force localized fighting are gone from our next decade of conflicts. The Army is already re-organizing into smaller, lighter, more mobile fighting units who will be spread over larger geographical areas. Furthermore, fighting units spread over larger geographical areas will make organic fire support, such as artillery, all the more difficult. This means more units supported by Close Air Support. The geographic CAS footprint required to support more fighting units spread out over larger geographical areas will increase the Army's TACP requirement. (NOTE: just prior to publication of this report, the 19ASOS recently discovered that they are manned at a 50%

level because of the new increased TACP requirement due to the reorganization of the 101st Airborne Division in order to support their new Army Units of Action.)

Increases in CAS requirements will mean more bodies to fill the ALO, ETAC, and ROMAD positions of today's Air Support Operation Squadrons. Increasing ETAC and ROMAD (1C4) schoolhouse training will be a relatively easy fix to plus up the TACP enlisted corps (Note: although it does take 3+ years to train up a JTAC). Increasing the number of ALOs will turn out to be an entirely more complex problem.

ALOs are still being assigned by rated officers who accomplish a two-year (one year, if remote location) assignment as an ALO and then return to their primary AFSC flying position. There are many other out-of-cockpit assignments that pull rated officers out of their war-ready operational assignments, such as Undergraduate Pilot/Nav/EWO Training Instructors (3.5 years), Unmanned Ariel Vehicle (UAV) assignments (3 years), Staff Officer Jobs (2-3 years), and Professional Military Education (PME) schooling (1 year) that put stress on the availability of rated officers for assignment manning.

Recent conflicts such as Operation Enduring Freedom (OEF) has emphasized the importance of the CAS mission and the demand for those who control the aircraft. The US Marine Corps is already seeing that their CAS requirements will increase and they will not have enough aviators to go around. The USMC is also in the process of following in the USAF shoes by allowing enlisted Marines to control CAS air strikes:

"I don't think we have enough forward air controllers overall," said Capt. Walter Lee, officer in charge of the Marine Liaison Element deployed with the 22nd Marine Expeditionary Unit aboard the amphibious assault ship Wasp.

"I believe we have to consider our ground officers and enlisted—once trained—to be qualified FACs. We will never be able to get enough aviators into the unit to handle all CAS." (Lowe, 2002)

Although the USAF set the precedent for the Marines to follow as far as allowing enlisted members to control CAS, the Marines set a new precedent in May 2003 by announcing that they will now allow non-aviator, or non-rated, officers to be ALOs:

A shortage of forward air controllers on the modern battlefield has prompted the Marine Corps to open the field to enlisted Marines and *nonaviator* [sic, italics added] officers.

Manpower officials are seeking up to 120 enlisted Marines to serve as joint terminal attack controllers and about 50 ground-combat-arms officers to be universal ground spotters...

The controllers and spotters will be authorized to control close-air support operations on the battlefield. Assigned to ground units, they will coordinate with the crews of attack aircraft to direct air strikes.

The Marine controllers will in many ways mirror the training and tactics of Air Force enlisted terminal attack controllers and air liaison officers....The Corps' move will more than double the number of forward air controllers currently in the fleet. Those billets always have been filled by aviators and naval flight officers.

....In the message announcing the change, Gen. Mike Hagee, the commandant of the Marine Corps, said that [the current] number [of JTACs] has

proved inadequate as the "modern battlefield has increased in size, complexity, and operational tempo." (Lubold, 2003)

It is obvious that future requirements for CAS will likely drive a similar manning change in the USAF in order to adequately support CAS demands for the Army.

Assuming that the USAF will strive to increase their TACP force, and that the rated officer is a limited asset, leads us to our problem question. *Can a Non-Rated Officer effectively fill the position of an USAF Air Liaison Officer?* The US Marines have already approved the training of non-aviator (or non-rated) officers to fill their ALO positions. The question is, will the USAF follow suit?

It is this researcher's hypothesis that a non-rated officer *can* effectively fill the position of an USAF Air Liaison Officer. A new AFSC should be created to support a non-rated ALO career field. Furthermore, this researcher believes that non-rated ALOs should primarily fill the position of an ALO and be augmented with *volunteer* rated officers to fill any ALO shortfalls.

Creation of a Non-Rated ALO Career Field

There has been limited research as to the creation of an ALO career field.

Raymond Knox and John Olivero have conducted the most recent notable research on the topic. To accurately address the feasibility of whether a non-rated officer could effectively fill the position of an ALO, we must first discuss what the ALO's primary responsibilities entail.

In Olivero's report he stated that the "basic [ALO] duty at all echelons is to advise the Army commander and staff on the employment of tactical air" (1999, p. 39). He

further went on to describe twelve key tasks that an ALO is responsible for. The twelve tasks are listed in Table 1.

Table 1 Key tasks of an Air Liaison Officer

- 1) Advise the Army Commander on capabilities and proper employment of USAF assets.
- 2) Assist the operations officer (G/S-3) and the fire support officer (FSO) with planning the integration of CAS and air interdiction (AI) into the operations scheme of maneuver.
- 3) Direct the control of close air support aircraft.
- 4) Submit pre-planned air request.
- 5) Submit immediate air request.
- 6) Coordinate with fire support on the deconfliction of airspace.
- 7) Coordinate with fire support on marking rounds and SEAD operations.
- 8) Provides Air Force input into the A2C2 operations.
- 9) Attend targeting meetings and assist in the targeting process.
- 10) Operates and maintains the Air Force air request net (AFARN) and the tactical air direction net (TAD).
- 11) Command the TACP element.
- 12) Pass information to the intelligence officer.

Olivero conducted a survey to a large sampling of ALOs, TACPs (ETACs and ROMADs), and Army Officers across all echelons of TACP/Army command structure. The sampling group was asked to rank order, in order of task priority, the twelve ALO tasks. The study found that there were three ALO tasks that consistently ranked as the top 5 priority ALO tasks determined by all three groups (ALOs, TACPs, and Army Officers). The three key ALO tasks were: Advise Army Commander, Assist in planning process, and Deconflict airspace.

Olivero further went on to define nine areas of *subject matter expertise* that were required of the ALO in order to be able to accomplish the twelve key tasks. The nine

areas of subject matter expertise included knowledge of 1) aircraft weapons, ordnance, weapon systems and navigation systems, 2) aircraft tactics and employment, 3) the Army targeting process, 4) the Army Military Decision-Making Planning Process (MDMPP), 5) radio systems, 6) enemy air defenses, 7) Army operations, 8) Army staff coordination, and 9) other Fire Support assets (Olivero, 1999). Olivero had the sampling group select from a list of essential ALO Skills including his nine areas of subject matter expertise (knowledge) and three other operational skills: aeronautical rated officer, experience in the fighter cockpit doing CAS, and experience in the cockpit as an FAC-A. See Table 2.

Table 2
Essential ALO Skills and Knowledge

ALO Skills and Knowledge		Percentages*		
		ALO	TACP	Army
1	Knowledge of aircraft weapons and their effects. ¹	95%	92%	92%
2	Knowledge of aircraft tactics and employment. ¹	87%	79%	86%
3	Experience in the Fighter Cockpit doing CAS. 2,3	11%	28%	37%
4	Knowledge of the targeting process.	56%	58%	80%
5	Knowledge of the MDMPP.	39%	55%	50%
6	Knowledge of the radio systems.	27%	32%	29%
7	Experience in the Cockpit as an FAC-A. ²	2%	15%	19%
8	Knowledge of enemy air defenses. ¹	83%	77%	70%
9	Knowledge of Army operations. ¹	73%	77%	56%
10	Knowledge of Army Staff coordination.	51%	81%	35%
11	Knowledge of other fire support assets.	70%	68%	53%
12	Must be an aeronautical rated officer. ^{2, 3}	28%	18%	14%

^{*} Percentages of those who felt the Skill/Knowledge was essential for the ALO. Notes:

- 1. The four skills selected in the top 5 percentages by all three subject groups.
- 2. Notice the relatively lower percentages on the importance of aeronautical experience.
- 3. Notice that the ALO's put more importance on having an aeronautically rated ALO than the Army Officers did. Conversely, notice that the Army officers put more importance on fighter pilot experience doing CAS than the ALOs did.

Note: Data gathered from Olivero, J. (1999). The professional Air Liaison Officer: Should the U.S. Air Force develop an Air Liaison Officer career field? Ft. Leavenworth, KS: Army Command and General Staff College.

When the sampling group was told to select all the skills and knowledge that were critical for an ALO to have, there were four choices that appeared in all three subject groups' top 5 choices (that is to say the choices that were selected by the large majority of the subjects). The four choices were #1) Knowledge of aircraft weapons and their

effects, #2) Knowledge of aircraft tactics and employment, #8) Knowledge of enemy air defenses, and #9) Knowledge of Army operations. Table 2 data seems to indicate the majority of ALOs, TACPs, and Army Officers put more emphasis on job/tactical *knowledge* and less on aeronautical/CAS *experience* when it comes to critical skills required of an ALO.

Olivero also found that when the subject groups were asked what the top two most important ALO Skills and Knowledge were, the majority said that *Knowledge of aircraft weapons and their effects* was #1 and *Knowledge of aircraft tactics and employment* was #2. Together with the data gathered in table 2, these findings seem to support the idea that *subject matter knowledge* may be more important than *aeronautical experience*, and the likewise hypothesis of a non-rated officer being capable of performing the ALO duties.

Furthermore, the subject groups were questioned flatly whether they believe an ALO needs to be a rated officer. Only 44 percent of the ALOs and 33 percent of the TACPs believed that ALOs should be rated officers. Conversely, the majority of the Army officers (56 percent) felt that an ALO *does* need to be a rated officer with 30 percent of those 56 percent feeling that only a rated officer has the *experience* needed for the ALO duty. However, Olivero does point out that "there are no statements in the Army publications saying the ALO needs to be a rated officer" (1999, p. 17). The Army officers' majority opinion likely has more to do with the current status quo towards ALO qualification requirements and the lack of comparative exposure to, and experiences with, non-rated ALOs since they do not exist (with the exception of the ANG and CCT officers). Likewise, it is interesting to note that the experts in the career field (and

therefore the most knowledgeable of the actual ALO qualifications required for the job), the ALOs and the TACP enlisted members, feel that it is *not* necessary for an ALO to be a rated officer.

In Olivero's 1998 report, he also described how the ANG had spun up a program to produce non-rated officers. The Illinois ANG spun up a test program to develop a non-rated ALO program in 1989. The ANG chose ten candidates for their initial test group: four prior ETACS, one intelligence officer, one supply officer, one security police officer, one F-4 crew chief, one Army Field Artillery officer, and a new hire off the street (Olivero, 1998). Each candidate was sent to the JFCC course for three weeks. The rest of the training was on-the-job-training (OJT) conducted under the supervision of a qualified ALO who supervised the candidate's instruction, terminal attack control, and Army command post exercises. The non-rated ALOs also received tactical rides in A-37s to gain experience in how the pilot viewed the target area from the air and the procedures and tactics used to conduct CAS. The training was accomplished in six to nine months and the Guard Bureau evaluated the performance of the newly non-rated ALOs at a Battle Command Training Program (BCTP) exercise at Fort Leavenworth, Kansas in 1991. The ANG determined that the non-rated ALOs accomplished the duty as well as the rated ALOs (Olivero, 1998).

We have reviewed literature that seems to support the creation of a non-rated ALO career field. However, many military minds reading this paper will question "Why should we create a separate AFSC for a non-rated ALO?—How will a non-rated ALO benefit the USAF?" Other than the reasons that have been discussed and the likelihood

of a future requirement to increase TACP manning, there are several other benefits that will meet the needs of the USAF.

How a Non-Rated ALO Can Benefit the USAF

Military leadership will not accept non-rated officers for the ALO mission unless it positively contributes to the USAF and US Army missions. There are several benefits of having a non-rated officer as an ALO in Air Support Operation Squadrons (ASOS) across the world. They include: 1) Lower USAF training costs, 2) Higher Experience Levels, 3) Better leadership in the TACP community, 4) Better unit morale, 5) Specialized ALO training, and 6) Increased retention. Many of these benefits should be thoroughly researched in and of themselves. Therefore, for the scope of this paper, we will briefly discuss some of those benefits in this section.

Lower USAF Training Costs

Training of USAF rated officers for aviator duty is extensive and usually consists of training such as initial flight screening, demanding physical screening, water survival, Survival, Evasion, Resistance, and Escape (SERE) training, life support training, flight training, and mission qualification training. The cost of taking fresh 2nd Lieutenants and making them combat ready rated officers such as pilots, navigators, WSOs, and EWOs is easily over two million dollars per aviator. There is additional costs involved with making them *experienced* aviators as well, which often takes a couple of years to accomplish after all initial training is completed.

Unless an aviator is taking the advanced tactical schooling route, such as

Weapons School, then the aviator will typically serve two operational tours (about 5

years total) in their weapon system before they are pulled for a 2-3 year Alpha tour (IP at

UPT/UNT, flying UAVs, or an ALO assignment) or a Staff tour. The point at which this Alpha tour or Staff tour occurs is usually at the peak of the aviator's proficiency and lethality. A good analogy would be a baseball player playing in the Minors for 4 years, making it into the Majors for a year, and then being pulled to play college soccer for 2-3 years. Upon completing the soccer assignment, the athlete would return to summer camp to spend a year in the minors again, re-learning the ways of baseball, before finally returning to the Majors again and "resuming where he left off".

The continuous cycle of training and re-training of aviators is an extremely expensive and wasteful process. Creating and training an USAF ALO from its own AFSC with non-rated officers would decrease overall USAF training costs of having a continuous and expensive turnover of rated officers filling the ALO position every two years. Although the non-rated ALO initial training would be expensive, it would pale in comparison to the cost of pulling experienced aviators from their cockpits, training them to be ALOs, then retraining them to be aviators again after two years. We will discuss in further detail a proposed training program for the non-rated ALO later in chapter seven. Higher Experience Levels

Having a non-rated officer fill the position of an ALO would benefit the experience levels of both the rated aviator and non-rated ALO career fields. The rated aviator community would enjoy higher experience levels because there would be one less assignment drain on their community and therefore more experienced aviators would remain in the cockpit.

A non-rated ALO community would enjoy higher experience levels as well because they could retain their ALOs in their career field indefinitely with ALOs PCSing

to other ASOS units within the career field—instead of "every two years they have to train up a new set of officers to lead them" (Knox, 1998, p. 23). Therefore, the ALO experience would only PCS within the career field and not out-of-it like the rated-officer-ALO does today. Obviously, this would not be true for the early implementation stages of the ALO career field until the career field's young Lieutenants would have time to mature into Captains. Therefore, it would be necessary to gradually implement the change with both rated and non-rated ALOs filling the ranks until there was enough experience at the non-rated ALO level.

Today's rated ALOs will tell you that it typically takes them about 6-12 months to get a good feel, or experience, of what their job as an ALO entails, how the Army works, and how they can best support the Army maneuver elements. Olivero found that 65 percent of the ALOs surveyed said that it takes them at least 6 months to become proficient in the duty and that the majority of the training (71 percent) is accomplished through on-the-job training (OJT) (1999). By the time rated ALOs gain the experience they need to be effective TACP members, it is time to get ready to PCS back to another flying assignment. Having a non-rated ALO would drastically increase the TACP experience levels needed for an increasingly CAS dependant armed services.

Better Leadership in the TACP Community

Once ALO training is complete, it will typically take the ALO another 6 months to become familiar and comfortable with the specifics that the ALO position entails (such as gaining familiarity with Army organization, staff coordination & rapport, Army maneuver tactics, equipment use, physical training, TACP command relationships, and TACP training). In order for an ALO to really become "experienced", they would have

to serve another 6 months (total of 1 year) in the ALO position. By the time this occurs for the typical rated officer ALO, they have less than 1 year remaining in the ALO assignment before they PCS back to a flying assignment. This continuous flux of "ALO-training-and-then-departing" results in poor continuity of experienced leadership within the TACP community. Likewise, with the 1-year remote ALO assignments, the leadership problem would obviously be more severe.

Non-rated ALOs could be recruited and trained to be dedicated professionals to their TACP career field. Establishing non-rated ALO officers would increase the quality of leadership within the TACP communities by providing leadership who serve longer assignments, are familiar and experienced with TACP operations, and would therefore provide better leadership continuity. Longer assignments would result in non-rated ALO officers having a better working relationship and level of trust with their Army unit staff officers, more familiarity of the Army organization, higher qualified and more experienced ALOs, and most importantly, leaders dedicated to the *future* of the TACP community. Much like Air Force Special Operations Command (AFSOC) CCTs, ANG TACPs, and now Marine Liaison Elements, it is time for the USAF TACP community to have their own dedicated officer leadership (Callander, 2003). Not only would non-rated ALOs provide the TACP community with better leadership, but it would also contribute significantly to better overall unit morale.

Better Unit Morale

The USAF officer corps are dedicated and highly professional servicemen. The majority accepts any challenging tasks that are presented to them and perform at the highest quality of professionalism. However, many will agree that you will likely get

better work performance, dedication, and motivation from a person who volunteers to perform a task verses one who is a non-volunteer. Everyone knows that if you enjoy your job, you are likely to perform it better than someone who does not.

The TACP enlisted members realize that their rated officers filling the ALO position fall into two categories: non-volunteers or volunteers. The volunteers are typically those who are close to retirement, medically disqualified from flying, searching for a command billet possibly not otherwise available in the operational flying units, or using the ALO assignment as an "Alpha-tour-square-filler" and a stepping stone to a flying assignment of their choice once "ALO complete". So, most of the rated "volunteers" for the ALO assignment are a process of coercion and not honest assignment desires. The non-volunteers for the ALO assignments are those, because of shortfalls in ALO manning requirements, who are forced to leave the cockpit to fill the ALO assignment. The author believes that the majority of ALOs are, and will continue to be, non-volunteers (in the truest sense)--unless a non-rated ALO position is developed.

Although nearly all ALO officers are constant professionals, the enlisted members know that their ALO's hearts and minds might not be entirely dedicated to the TACP mission. This part-time, "two-year-wonder" ALO leadership affects unit morale and cohesion. The TACP community requires, and more importantly deserves, a dedicated, full-time, professional, non-rated ALO with specialized training.

Specialized ALO Training

Another way that a non-rated ALO could benefit the USAF would be that it would have to have a specialized training curriculum that would ultimately provide highly qualified and well-trained professional ALOs. The specialized training would

produce more well-rounded and better suited officers for the ALO requirements of today's missions rather than the Vietnam-era attitude of "just stick a pilot in the job and that should cover it."

Specialized ALO training could better prepare ALOs for the types of urban guerilla warfare that the ALO, and more importantly their TACP troops, would be likely to support in the future. Close Air Support will continue to become 1) more in demand and 2) complex in nature. Both of these future requirements require specialized ALO training and dedicated non-rated ALO leadership to support the growth of TACP operations. We will discuss the non-rated specialized training further in detail in chapter seven.

Increased Retention

An indirect benefit of having a non-rated ALO would be an overall increase in retention rates of rated officers, proposed non-rated ALOs, and TACP enlisted members. Although there are many variables that affect retention of rated officers, elimination of the non-volunteer ALO assignment would likely increase an officers decision to stay in service if they knew there was one less undesirable assignment out there.

The Air Force has no problems attracting enlisted service members to participate in the TACP mission. According to Callander (2003), "despite the rigorous training and long apprenticeship, the Air Force has no shortage of volunteers for enlisted terminal attack controller duty." Likewise, if the ALO position were opened up to non-rated officers, it would likely have no problem recruiting the officers to fill the new AFSC positions for the same reasons the TACP career field is attractive to enlisted recruits. Since the non-rated ALO position would be filled with officer volunteers who were

motivated and hand selected to serve, retention of these officers would likely be high.

More importantly, the leadership of these highly motivated and trained non-rated officers would likely affect the retention rates of the enlisted TACP service members as well.

Retention rates of the enlisted TACP members would likely increase due to better overall leadership and continuity introduced into their career field for the first time with the addition of a dedicated non-rated ALO. Leadership plays a very important part in the military member's decision to stay in the service or separate. Dedicated ALO leadership would surely increase the retention rates within the TACP enlisted career field.

We have discussed the history of the ALO, the author's hypothesis that a nonrated officer can effectively fill the position of an ALO, previous research that seems to support the feasibility of a non-rated ALO, and why the USAF would benefit from having such a non-rated officer as an ALO. In the following chapter, we will discuss the research methods that were conducted in order to collect data and then later analyze that data to see if it indicates the hypothesis was supported or not.

CHAPTER III

RESEARCH METHODOLOGY

Research Design

The previous chapter's discussion has covered the historical aspect of the ALO showing how the position evolved from initially requiring a fighter pilot rated officer to fill the position of an ALO to today's status quo of requiring a rated officer to fill the position. We will attempt to measure the current attitudes of military members to see if the data appears to indicate whether or not the USAF and USA services will accept a non-rated officer to fill the position of an ALO. Research was conducted using descriptive quantitative research through the use of a survey instrument administered to various military categories.

Research Model

We have seen that through the Korean and Vietnam War that the ALO was required to be a fighter pilot rated officer in order to conduct terminal air control (TAC). During the cold war the USAF realized that it was not necessary to have an officer to conduct the TAC mission and that an ETAC could accomplish the mission. Furthermore, the USAF relaxed its restriction of having a fighter pilot ALO and made the requirement to just be rated officers and not necessarily fighter pilots. Therefore a shift in the status quo for both TAC and ALO qualifications occurred sometime in the 1980s to allow enlisted men to control CAS air strikes and non-fighter-pilot rated officers to be ALOs.

Since there was no current quantifiable data available in the USAF concerning the effectiveness of having a non-rated officer accomplish the ALO mission, a survey was administered in an attempt to measure the *current* status quo concerning the perceived

qualification requirements (rated vs. non-rated officers) of today's ALO. A measurement of the current status quo towards the idea of a non-rated officer will be the only effective measurement at assessing the ability of a non-rated officer to conduct the ALO mission. Therefore, the objective of this research was to measure the subject groups' current attitude towards having non-rated officers be ALOs.

The survey questionnaire sought to gather information on four primary *subject* groups: 1) TACP personnel, 2) Army personnel, 3) USAF Aircrew, and 4) USAF Cadets. The TACP personnel were primarily being surveyed because they are the experts on their own career field and will provide critical information on the affects of current ALO manning practices and an honest assessment of the feasibility of a non-rated officer filling the ALO position. The Army personnel and USAF aircrew were surveyed primarily to test the current status quo towards ALOs since they have the majority influence within service leadership and their doctrine/command decisions. The final group, USAF Cadets, were surveyed primarily to measure interest and desire to serve as a non-rated ALO. The author hypothesized that the TACP subject group would predominantly favor the creation of a non-rated ALO because of their expertise and experience with TACP operations. Furthermore, the author hypothesized that the Army and Aircrew subject groups (except those who were previous ALOs) would likely *not* favor the creation of a Non-Rated ALO because of their lack of knowledge and direct experience with TACP operations.

There are three primary *variables* that the author hypothesized could affect the subject groups' attitude and opinions toward the thought of a non-rated officer being an ALO. The variables are: 1) Operational Experience, 2) Scholastic Knowledge, and 3)

Armed Service Branch. The survey also sought to measure these three variables in an attempt to measure how they might affect the subject's attitude towards the research problem.

The survey also attempted to measure six major *attitudes*, or opinions, towards the research problem question of an ALO being a non-rated officer. The attitudes being measured are: 1) Importance of ALO, 2) Necessity of Rated Officer ALO, 3) Feasibility of a Non-Rated ALO, 4) Non-Rated ALO Beneficial to USAF?, 5) Non-Rated ALO Beneficial to USAF, and 6) USAF Aircrew/Cadets' Desire to Serve as an ALO.

Analysis of all data gathered, including assessment of the subject groups, variables, and attitudes, should depict an accurate assessment of the current status quo towards the ALO assignment and thus the perceived ability, or lack there of, of a non-rated officer to perform the duties of an ALO effectively. A "thought process map" of the research model discussed above is graphically depicted below in Figure 1.

SUBJECT GROUPS **VARIABLES ATTITUDES TACP** - OPERATIONAL Importance of ALO? **EXPERIENCE** Rated Officer ALO? - SCHOLASTIC **ARMY** KNOWLEDGE Non-Rated Officer ALO? - ARMED Beneficial to USAF? **SERVICE AIRCREW BRANCH** Beneficial to US Army? Desire to Serve as ALO? **CADETS**

Figure 1
ALO Research Model Thought Process Map

Survey Population

The survey research sought to solicit responses from as many USA, USAF, and ANG organizations as time and money would allow. The survey used stratified random sampling to collect data from four subject groups: TACP, Army, USAF Fighter/Bomber Aircrews, and USAF Cadets. The four groups sampled were chosen because of their CAS experience, expertise, and operational dependency on the TACP mission success. The units to sample were selected based on convenience of location and the researcher's ability to reach a point of contact to administer the survey. Within the units themselves, random sampling was accomplished. EXCEPTION: Within the Army units: the commander, the executive officer, the operations officer (S3), and the BDE/BN Fire Support Element (FSE) officers and NCOs, were surveyed because of their familiarity with CAS and the TACP mission. See Table 3 below for a summary of the units that were solicited to be a part of the survey population.

Table 3
Survey population

GROUP	UNIT SOLICITED	AIRFRAME	LOCATION	RESPONDENTS	
ARMY	1BDE/101AD	N/A	Ft Campbell	6	
ARMY	2BDE/101AD	N/A	Ft Campbell	0	
ARMY	3BDE/101AD	N/A	Ft Campbell	0	
ARMY	DIVARTY/101AD	N/A	Ft Campbell	14	
USAF TACP	18ASOG	N/A	Pope AFB	17	
USAF TACP	14ASOS	N/A	Ft Bragg	49	
USAF TACP	15ASOS	N/A	Ft Stewart	15	
USAF TACP	19ASOS	N/A	Ft Campbell	31	
USAF TACP	USAF AGOS	N/A	Nellis AFB	32	
AIRCREW	9 th BS	B-1B	Dyess AFB	0	
AIRCREW	23 rd BS	B-52	Minot AFB	43	
AIRCREW	36FS	F-16CG	Osan AB	17	
AIRCREW	75 th FS	A-10	Pope AFB	22	
AIRCREW	31 ST FW	F-16CG	Aviano AB	17	
AIRCREW	52 ND FW	F-16CJ	Spangdahlem AB	0	
CADETS	UK ROTC	N/A	Lexington, KY	24	
ANG TACP	124 TH WING	N/A	Boise, ID	12	
TOTAL SURVEY RESPONDENTS: 299					
Note: The surv	eys from the USAF AGOS	S included 10 from	Army personnel.		

Sources of Data

The primary source of data was through the use of a survey instrument in the form of a questionnaire. Data collected through previous research on the same topic by John P. Olivero and Raymond Knox was also referenced in the research.

The Data Gathering Device

A twelve-question survey was administered to the subject groups to gather the data (see Appendix C). The questionnaire was designed to identify different *variables* that affect the subject group's opinions and what their *attitudes* are towards the ALO position. Quantification of the data was accomplished through the use of checklist questions and statement ratings using Likert scales.

The subject variables were assessed through the use of eight questions. Questions 2, 3, and 4 were used to establish which subject group the participant would fall into.

Questions 1, 6, and 12 assessed the Operational Experience of the subject. Question 2 assessed the Branch of Armed Service of the subject. Question 5 sampled the subjects Scholastic Knowledge.

The subject attitudes were assessed through the use of six questions. Question 7 rated the importance of an ALO. Question 8 measured the necessity of an ALO to be a rated officer. Question 9 measured attitudes towards the feasibility of having non-rated ALOs. Question 10 measured benefits of a non-rated ALO to the USAF. Question 11 measured benefits of a non-rated ALO to the US Army. Finally, question 12 measured interest in the ALO job from the officer and cadet subjects.

Pilot Study

A pilot study was not conducted for this research project.

Instrument Pretest

A pretest of the survey instrument was conducted to ensure accuracy and comprehensiveness of the data collection device being used. The questionnaire was administered to one subject from the TACP subject group to seek feedback on improving the questionnaire.

Distribution Method

The questionnaire was mailed in bulk to a point of contact (POC) at each of the units listed above. Approximately 30 questionnaires were mailed to each of the units and the unit point of contact (POC) administered the questionnaire to as many personnel as possible. A letter providing detailed instructions on administering the survey was provided to the proctor. The unit POC (survey proctor) then collected the questionnaires and mailed them back to the researcher with the provided postage paid envelope. Some of the local units, such as those located at Ft. Campbell, were administered the survey by the researcher personally or through a unit POC.

Instrument Reliability

The reliability of the survey instrument could not accurately be tested. However, a sample of reliability was tested simultaneously through the use of a small three-person test-retest with the retest being administered 30 days after the original test to check for consistency of results. The test-retest of the 3 persons seemed to indicate that the reliability of the Likert scale questions, particularly questions 5 through 7, to be only reliable to within plus or minus 1.2 points on a 9-point scale. Questions 8 and 9 yielded consistent results from all three persons with an average differential of .2 points on a 9-point scale. Questions 10 and 11 retested identical as far as the "yes/no" response.

However, the list type questions for "yes" responses yielded more variance in their answers with as much as 3 benefits being omitted from their answers on the retest. Therefore, it would appear that although questions 10 and 11 retested 100% identical in the Yes/No, the list portion of the questions are more subject to how a person is feeling that day and therefore introduces some margin of error in the reliability of the benefits. Reliability was also marginally improved through the use of the instrument pretest.

Instrument Validity

All questions on the survey instrument were created to assess the four subject groups' attitudes towards the problem question: Can a non-rated officer effectively fill the position of an USAF Air Liaison Officer? The answer to the problem question is largely dependant on the current status quo towards the idea of a non-rated ALO since there are currently no significant numbers of non-rated ALOs (such as CCT officers) to accurately assess their effectiveness in the position. The Research Project committee also assessed instrument validity and no recommendations to increase instrument validity were made.

Treatment of Data and Procedures

The data was organized through the use of electronic Excel spreadsheets in order to analyze for categorical relationships between the *subject groups*, *variables* (i.e. operational experience), and their *attitudes* towards the ALO position. Descriptive and inferential statistics were used to interpret, analyze, and formulate conclusions about the data gathered. To aid in descriptive statistical analysis, the Likert scales were assigned a numerical scale from one to nine. Where Likert scales were used (questions 5-9), the subjects rating on the scale was converted to a numeric value, to the nearest .5

measurement, from 1 (Poor/Strongly Disagree) to 9 (Excellent/Strongly Agree). The numeric value was then input into a spreadsheet and subject group average response was taken by summing the numeric values and then dividing by the total number of respondents for that subject group. Then an overall average response for that question was assigned using the following scale range depicted in Table 4.

Table 4
Likert Scale Subject Group Average and Assigned Group Response

LIKERT SCALE AVERAGE	ASSIGNED SUBJECT GROUP RESPONSE			
0.5 - 1.9	Poor	Strongly Disagree		
2.0 - 3.9	Fair	Disagree		
4.0 – 5.9	Good	Neutral		
6.0 - 7.9	Very Good	Agree		
8.0 - 9.5	Excellent	Strongly Agree		

Example: If the TACP subject group average response to question #5 is 6.3, then the TACP group would receive a Very Good rating for that question.

Answers to questions 10 and 11 were straight forward and respondents had to choose either yes or no. If the respondent answered yes, then the subject was asked to select what benefits he/she felt would be gained by having a non-rated ALO career field. Percentages were calculated by summing all the yes responses and the total number of times a benefit was selected by a subject. The sum of the particular benefit was then divided by the sum of the Yes respondents. Therefore the following could be said as an example, "75% of all respondents said yes to question 10. Of those 75%, 50% thought that better ALO training was one of the benefits of a non-rated career ALO."

CHAPTER IV

RESEARCH RESULTS

This chapter will provide the data that was collected during the research for this project by the means of a survey instrument. This chapter provides the facts only. The survey that was administered was designed to measure the overall attitude, or *status quo*, towards a non-rated ALO career field by attempting to measure the subject's attitude towards several ALO questions and also assess three primary variables that the author hypothesized could affect those attitudes. The three primary variables that were being measured were: 1) *Operational Experience*, 2) *Scholastic Knowledge*, and 3) *Armed Service Branch*.

Survey Questions

Question #1 sought to measure operational experience level by querying for the subjects years of military service: *How long have you served in the military?* (See Table 5).

Table 5
Subject Group Years of Service

SUBJECT GROUP	AVERAGE YEARS OF SERVICE
ARMY	9.5 YEARS
TACP	9.0 YEARS
AIRCREW	7.9 YEARS
Note: Cadet years of service is their time spent in RC CADETS	2.4 YEARS

Question #2, 3, and 4 sought to establish which branch of service the subject was in and what their rank and current job position was. Those questions were primarily asked to establish which subject group category the subject would fall into.

Question #5 sought to measure scholastic knowledge by asking the subject to rate their subject matter expertise: *How would you rate (mark) your subject matter expertise on Close Air Support (CAS)?* (See Table 6).

Table 6
Perceived Subject Matter Expertise (scholastic knowledge) on CAS (Question #5)

SUBJECT GROUP	AVERAGE LIKERT SCALE	CORRESPONDING RATING
ARMY	5.5	GOOD
TACP	6.5	VERY GOOD
ALO	7.7	VERY GOOD
1C4	6.2	VERY GOOD
AIRCREW	6.4	VERY GOOD
CADETS	2.4	FAIR

Question #6 was asked to assess operational experience: What would you consider your operational experience level on CAS (doctrine, requesting, flying, command, or control) (See Table 7)?

Table 7
Perceived Operational Experience Levels on CAS (Question #6)

SUBJECT GROUP	AVERAGE LIKERT SCALE	CORRESPONDING RATING
ARMY	4.7	GOOD
TACP	6.0	VERY GOOD
ALO	7.4	VERY GOOD
1C4	5.7	GOOD
AIRCREW	6.0	VERY GOOD
CADETS	1.6	POOR

Question #7 was asked to assess the subject groups' status quo towards the importance of having an ALO assigned to an Army unit: *It is important to have an ALO assigned to an Army ground maneuver unit* (See Table 8).

Table 8
Importance of Having an ALO Assigned to an Army Unit (Question #7)

SUBJECT GROUP	AVERAGE LIKERT SCALE	CORRESPONDING RATING
ARMY	7.9	AGREE
TACP	7.4	AGREE
ALO	7.7	AGREE
1C4	7.3	AGREE
AIRCREW	7.6	AGREE
CADETS	6.9	AGREE

Question #8 was asked to assess the subject groups' status quo towards the necessity of having an ALO who is a rated officer: *It is necessary to have an ALO be a Rated Officer (i.e. Pilot, Navigator, EWO, or WSO).* (See Table 9).

Table 9
Necessity of Having an ALO be a Rated Officer (Question #8)

SUBJECT GROUP	AVERAGE LIKERT SCALE	CORRESPONDING RATING
ARMY	6.0	AGREE
TACP	5.4	NEUTRAL
ALO	5.3	NEUTRAL
1C4	5.5	NEUTRAL
AIRCREW	5.7	NEUTRAL
CADETS	5.8	NEUTRAL

Question #9 was asked to assess the subject groups' status quo towards the idea of training non-rated officers to be effective ALOs: *It is feasible to train Non-rated officers to be effective Air Liaison Officers* (See Table 10).

Table 10 Feasibility of training non-rated officers to be effective ALOs (Question #9)

SUBJECT GROUP	AVERAGE LIKERT SCALE	CORRESPONDING RATING
ARMY	6.7	AGREE
TACP	6.9	AGREE
ALO	6.8	AGREE
1C4	6.9	AGREE
AIRCREW	6.2	AGREE
CADETS	6.5	AGREE

Question #10 was asked to assess whether the subject group thought it would be beneficial for the USAF to have its own AFSC career field ALOs: Do you believe that it would be beneficial for the USAF to have its own career field ALOs (with a separate AFSC) rather than Rated Officers filling the ALO position for a two-year assignment (one-year assignment if Overseas Remote)? (See Table 11).

Table 11 Would Career Field ALOs be Beneficial to the USAF? (Question #10)

RESPONSE	PERCENTAGES (%) *				
	ARMY	TACP	AIRCREW	CADETS	
NO	29%	12%	27%	25%	
YES	71%	88%	71%	75%	
Better TACP Leadership	32%	68%	49%	39%	
Better Continuity of Leadership	73%	85%	70%	50%	
Better TACP Morale	36%	55%	38%	44%	
Free Rated Officers for Manning Shortages	55%	51%	93%	67%	
Better Liaison Relationship w/ Army Staff	59%	68%	58%	44%	
Better Training of ALOs	68%	71%	68%	72%	
More Familiarity w/ Army Tactics & Cmd	82%	74%	70%	56%	
Other	5%	25%	15%	0%	

^{*}Note: Not all percentages add up to 100% due to respondents not completing all answers or being undecided. Respondents who answered yes only, also marked the benefits; therefore the benefit percentages are a sub-percentage of those total respondents who said yes. I.e. eighty-eight percent (115/131) of the TACPs said yes. Of those 115 "yes" respondents, 68% (78/115) said Better TACP Leadership.

Question #11 was asked to assess whether the subject group thought it would be beneficial for the US Army if the USAF had non-rated career field ALOs: *Do you believe that the CAS customer, the US Army, would benefit from the US Air Force having career field ALOs who are non-rated Officers?* (See Table 12).

Table 12
Would Career Field ALOs be Beneficial to the US Army? (Question #11)

RESPONSE	PERCENTAGES (%) *				
	ARMY	TACP	AIRCREW	CADETS	
NO	39%	21%	29%	50%	
YES	61%	79%	67%	50%	
Better TACP Leadership	47%	43%	48%	50%	
Better Continuity of Leadership	63%	71%	63%	67%	
Better TACP Morale	37%	36%	41%	58%	
Free Rated Officers for Manning Shortages	47%	37%	55%	58%	
Better Liaison Relationship w/ Army Staff	68%	83%	65%	75%	
Better Training of ALOs	63%	60%	68%	83%	
More Familiarity w/ Army Tactics & Cmd	63%	83%	79%	83%	
Other	11%	7%	5%	0%	

^{*}Note: Not all percentages add up to 100% due to respondents not completing all answers or being undecided. Respondents who answered yes only, also marked the benefits; therefore the benefit percentages are a sub-percentage of those total respondents who said yes. I.e. seventy-nine percent (103/131) of the TACPs said yes. Of those 103 "yes" respondents, 43% (44/103) said Better TACP Leadership.

Question #12 was asked to assess three things: 1) It was asked to assess the operational experience of the USAF officers to see if they have done an ALO assignment, 2) to assess whether the ALOs were volunteers or non-volunteers for their ALO assignments in order to gauge assignment desirability among rated AF officers, and 3) to assess the AF cadets interest in the ALO career field. Question #12 was: *Are you now or have you ever been an Air Liaison Officer?* (See Table 13).

Table 13 Have you ever been an Air Liaison Officer? (Question #12)

RESPONSE	PERCENTAGES (%) *		
	ALO	AIRCREW	CADETS
NO, and I'm not interested	N/A	55%	46%
NO, but I'm interested	N/A	17%	54%
NO, but I'm on my way	N/A	4%	N/A
YES, I'm an ALO now	100%	4%	N/A
YES, ALO on a previous assignment	N/A	13%	N/A
Volunteered	79%	29%	N/A
Non-Volunteered	21%	71%	N/A

^{*}Note: Not all percentages add up to 100% due to respondents not completing all answers or being undecided. Aircrew numbers for "I'm an ALO now" are those members who are currently serving as BALO's. Volunteer / Non-Volunteer numbers include responses from BALOs.

CHAPTER V

DISCUSSION

This chapter will discuss the six different hypotheses that were made by the author throughout the previous chapters and will attempt to analyze the data to see if it supports or does not support the hypotheses made. The six different hypotheses that were proposed by the author were:

- The subject's operational experience, scholastic knowledge, and branch of service will affect the subject's attitude towards the thought of a non-rated ALO.
- 2) The TACP subject group will predominantly favor the creation of a non-rated ALO career field.
- The Army and Aircrew subject groups likely will NOT favor the creation of a non-rated ALO career field.
- 4) If an ALO position is opened up to non-rated officers, it would have no problem recruiting officers for the position.
- 5) The majority of ALOs are non-volunteered into the position.
- 6) A non-rated officer CAN effectively fulfill the position of an ALO.

Variables Affected the Subject's Attitude?

The author hypothesized that the subject's attitude towards the creation of a non-rated ALO would be affected by three primary variables: 1) Operational Experience, 2) Scholastic Knowledge, and 3) Armed Service Branch. Although this hypothesis proved difficult to analyze, it does appear that the data seems to indicate that the lower the CAS operational experience and scholastic knowledge level of the subject, then the more likely

the subject was to feel that the ALO needed to be a rated officer. All of the subject groups felt that the ALO was an important position to have manned, with the Army and Aircrew subject groups feeling the most strongly about it.

The Army and Cadet subject groups both had the lowest average perceived CAS scholastic knowledge (5.5 and 2.4 respectively). Both subject groups also had the lowest average perceived CAS operational experience (4.7 and 1.6 respectively). Both subject groups rated the highest on the Likert scale when asked if it was necessary to have the ALO be a rated officer (6.0 and 5.8 respectively). Therefore, it appears that the subjects were more prone to err towards the side of conservatism (that is that the ALO should be rated) the lower their CAS scholastic knowledge and operational experience was. This is important to note because senior USAF leadership, the ones who will decide whether to approve or disapprove the non-rated ALO career field, will also be prone to err to the side of conservatism because the majority lack the scholastic knowledge and operational experience of TACP operations needed to make a detailed and informed decision.

Likewise, the opposite appeared to be true for the TACP and Aircrew subject groups. Both the TACP and Aircrew subject groups had the highest perceived CAS scholastic knowledge (6.5 and 6.4 respectively). Both subject groups also had the highest perceived CAS operational experience (6.0 and 6.0). Both subject groups rated the lowest on the Likert scale when asked if it was necessary to have the ALO be a rated officer (5.4 and 5.7 respectively). Therefore, it appears that the more experience and knowledge that the subject groups had on CAS and the role of the ALO, the more apt they were to feel that the ALO did not have to necessarily be a rated officer. It is interesting to note that the subject group that is the most familiar with the ALO position

and what the job entails, the TACPs, were the least likely to feel that the job needed to be filled by a rated officer.

The above data appears to indicate that it does *support* the author's hypothesis that operational experience and scholastic knowledge does affect how the subject groups felt about the idea of a non-rated officer filling the position of an ALO. However, there was not any significant difference between the USAF and USA attitudes towards a non-rated ALO to come to any conclusion about the subject's branch of service affecting their responses. Therefore, the data *does not* appear to support the hypothesis that the branch of service affects the subject's attitude towards a non-rated ALO.

It is interesting to note the difference of the subject groups' responses between questions number 8 (necessity of ALO being rated) and number 9 (feasibility of ALO being non-rated). The TACP, Aircrew, and Cadet subject groups average response was "neutral" to the statement that an ALO must be a rated officer. However, after reading the introduction to question number nine that described a possible training program for a non-rated ALO, all three subject groups agreed that it was feasible to train a non-rated officer to be an effective ALO. The Army subject group's response change was even more drastic. The Army's response to question number 8 was similar to Olivero's 1998 results, discussed in chapter 2, where he found that the majority of the Army respondents felt that the ALO needed to be a rated officer. Six years later, the Army subject group still agreed that the ALO needed to be rated but then also agreed that it was feasible to train a non-rated officer to be an ALO. Both of these findings appear to indicate that all subject groups feel that proper training of an ALO is more important than the operational flying experience of a rated officer.

TACP Subject Group Predominantly Favors a Non-rated ALO Career Field?

The TACP subject group felt the most strongly (6.9) out of all the groups about the feasibility of having a non-rated officer be an ALO. The TACP subject group also felt the most strongly of all the groups about whether the career ALO would be beneficial to the USAF and Army. The TACPs predominantly thought that a dedicated ALO career field would be beneficial to the USAF (88%) as well as to the Army (79%). It appears that the data does *support* the hypothesis that the TACP subject group would predominantly favor a non-rated ALO career field. This is most likely the case because only the TACP community truly knows the requirements of an ALO and how badly a dedicated ALO career field is needed in the community.

Army and Aircrew will NOT Favor Creation of Non-rated ALO Career Field?

The data *did not* support the author's hypothesis that the Army and Aircrew subject groups would not favor the creation of a non-rated ALO career field. All four subject groups agreed that it was feasible to train non-rated officers to be effective ALOs. However, both the Army and the Aircrew subject groups did not feel as strongly about the feasibility of training non-rated officers to be ALOs as the TACP subject group did. All four subject groups did feel that it would be beneficial to the USAF to have a dedicated ALO career field. The TACP subject group felt the strongest (88%) about the ALO career field being beneficial to the USAF while the Army and Aircrew subject groups felt the least strongest about the idea (both 71%).

Three of the four subject groups felt that a non-rated ALO career field would be beneficial to the US Army. Again, the TACP subject group felt most strongly (79%) about the ALO career field being beneficial to the Army. The Aircrew and Army subject

groups felt less strongly about the idea (67% and 61% respectively). The Cadet subject group was split 50/50 on whether a non-rated ALO career field would be beneficial to the Army. All four subject groups felt that a non-rated ALO career field would be more beneficial to the USAF than it would be to the Army.

USAF would have no problem recruiting non-rated officers for the ALO position?

This hypothesis was tested through questioning of AF officers and cadets to query their interest in the ALO job position. The data seems to *support* the hypothesis since the majority (54%) of the AF cadets surveyed said they were interested in the ALO career field. Creation of a non-rated ALO career field would open up opportunities to many hard charging officers who would enjoy the challenge of a career field that is more "green" than it is "blue."

An interesting thing occurred while collecting information for this hypothesis question. Question number 12 was intended to be answered by AF officers and cadets only. However, a significant amount (approximately 20%) of TACP 1C4's answered the question saying that they were interested in the ALO position. This seems to indicate that a significant number of the TACP enlisted community would be interested in competing for Officer Training School (OTS) with the intent of becoming non-rated Air Liaison Officers. Since the question specifically stated "(USAF Officer/Cadet only)", it is likely that the true number of TACP enlisted who would be interested in the ALO position is likely higher than 20%.

One of the subjects surveyed was a unique Air Force officer. He was a ROMAD for 6 years, went to OTS, and is now an EWO for a B-52 unit. He had some interesting comments about the idea of the non-rated officer:

I served as a ROMAD for 6 years and have seen first hand the benefits of having a non-rated ALO verses a rated guy who got pulled out of the cockpit. When they experimented with the non-rated ALO program, the ALOs produced compared to rated ALOs was night and day. The non-rated guys were former ROMAD's who had the experience level necessary, the motivation, and the leadership skills to get the job done. The TACP's were more receptive, followed orders better, and worked more fluently with them. The first year of ALO is more of a training mode for rated guys. They are pretty much useless to the organization. It takes months just to understand how the Army works. The rated guys, for the most part, do not want to be there and their motivation and training suffers due to that fact. Many of them don't understand the enlisted mentality and the Army-Air Force relationship when it comes to CAS....If the Air Force had some type of full time ALO position, I would have jumped at the chance....If there was a separate AFSC for full time ALO, I doubt that they would have a hard time finding people to do it. I believe that the rated ALO program is a waste of assets and taxpayer dollars. There is truly a better solution—non-rated ALOs.

Majority of ALOs are Non-Volunteered into the Position?

Of the 24 ALOs that were surveyed, 79% said that they volunteered for the position while 21% were non-volunteered for the position. Interestingly enough, quite the opposite was true of the Aircrew subject group. Twenty-four out of the 110 aircrew subjects surveyed said that they were either on-their-way to an ALO assignment, were currently ALOs (i.e. BALOs), or were ALOs on a previous assignment. Of those 24

aircrew subjects, 71% (17) said that they were non-volunteered while 29% (7) said they volunteered for their ALO assignments.

This discrepancy between the numbers of the Non-Vol's of current ALOs and past/future ALOs is likely caused for several possible reasons. First, it is important to note that the majority of aircrew members (55%) said that they were not interested in the ALO position so they would obviously not volunteer for the job. Only 17% of the aircrew subjects expressed interest in performing the ALO job.

Second, the aircrew Vol/Non-vol numbers are slightly inflated due to the number of BALOs surveyed. BALOs are like "part-time" ALOs since they still continue flying with their units at the Mission Ready rate. They cannot be truly compared to a full-time ALO position because the ALO spends a full two years in a non-flying job at an Army post. The BALO duty is often times a non-volunteer "right-of-passage" of many of the A-10 1st Lieutenants and young Captains. Thirteen of the 110 Aircrew subjects surveyed were A-10 BALOs. Twelve of those 13 (92%) were non-volunteered into their BALO duty.

Third, the ALO Volunteer numbers are likely inflated for a couple of reasons. The ALO community is saturated with a reasonable amount of "second term" ALOs. A lot of the field grade officers in the rank of Major and Lt Colonel who become ALOs extend their tours by volunteering to remain an ALO for an additional two years. Many of the officers do this because they cannot return to flying (i.e. medical problems), they are pursuing command positions within the TACP community, or they enjoy performing their ALO job and prefer to remain an ALO. Therefore, the number of ALO's who are non-volunteered for their initial ALO assignment is likely higher than 21%.

Finally, the definition of "Volunteer" is a little distorted due to the "cheese" that is dangled in front of Aircrew members to get them to volunteer for ALO assignments. The large flop between Aircrew-ALO volunteers and ALO-ALO volunteers has likely been increased due to Air Force Personnel Center's (AFPC) aggressive methods, such as offering "choice" follow-on assignments after the ALO assignment, that have been used over the last decade to entice a shift from non-vol assignments to volunteer assignments to the position of ALO. Therefore, the coercion of aircrew to volunteer for the ALO assignment has likely increased the volunteer rate however insincere the aircrew member's desires are to honestly serve the TACP community.

With the above mentioned results and observations, especially the fact that only 17% of the aircrew surveyed expressed honest interest in the ALO job position, the actual volunteer-to-non-volunteer rate is more likely around 40/60. However, due to the conflicting data of volunteer vs. non-volunteer, the hypothesis of the majority of ALOs being non-volunteered to their assignments is *inconclusive*.

A Non-rated Officer Can Effectively Fulfill the Position of an ALO?

ALL of the subject groups, on average, *agreed* (6.6 on the Likert scale) that it was feasible to train a non-rated officer to effectively fill the position of an Air Liaison Officer. Furthermore, the large majority (>70%) of each of the subject groups felt that it would be beneficial for the USAF to have career field ALOs.

The Army subject group selected the three following benefits to the AF the most out of all the benefits listed: 1) More Familiarity w/ Army Ground Maneuver Tactics and Command, 2) Better Continuity of Leadership, and 3) Better Training of ALOs.

The TACP subject group selected the three following benefits to the AF the most out of all the benefits listed: 1) Better Continuity of Leadership, 2) More Familiarity w/ Army Ground Maneuver Tactics and Command, and 3) Better Training of ALOs.

The Aircrew subject group selected the three following benefits to the AF the most out of all the benefits listed: 1) Free up Rated Officers for Other Manning Shortages (93%!!), 2) Better Continuity of Leadership, and 3) More Familiarity w/ Army Ground Maneuver Tactics and Command.

The Cadet subject group selected the three following benefits to the AF the most out of all the benefits listed: 1) Better Training of ALOs, 2) Free up Rated Officers for Other Manning Shortages, and 3) More Familiarity w/ Army Ground Maneuver Tactics and Command.

The following five benefits were selected the most (>50%) by the subjects from all four subject groups and therefore can be deemed the most important benefits that the USAF will gain from an ALO career field: 1) More familiarity w/ Army Ground Maneuver Tactics and Command, 2) Better Training of ALOs, 3) Better Continuity of Leadership, 4) Free up Rated Officers for Other Manning Shortages, and 5) Better Liaison Relationship with the Army Staff. See *Table 14*.

Table 14
Would Career Field ALOs be Beneficial to the USAF? (Question #10)

RESPONSE	PERCENTAGES (%) *					
	ARMY	TACP	AIRCREW	CADETS	AVG	
NO	29%	12%	27%	25%	23%	
YES	71%	88%	71%	75%	76%	
Better TACP Leadership	32%	68%	49%	39%	37%	
Better Continuity of Leadership	73%	(85%)	70%	50%	70%	
Better TACP Morale	36%	55%	38%	44%	43%	
Free Rated Officers for Manning Shortages	55%	51%	93%)	67%	67%	
Better Liaison Relationship w/ Army Staff	59%	68%	58%	44%	57%	
Better Training of ALOs	68%	71%	68%	72%	70%	
More Familiarity w/ Army Tactics & Cmd	(82%)	74%	70%	56%	71%	
Other	5%	25%	15%	0%	11%	

*Note: Not all percentages add up to 100% due to respondents not completing all answers or being undecided. Respondents who answered yes only also marked the benefits; therefore the benefit percentages are a sub-percentage of those total respondents who said yes. I.e. Eighty-eight percent (115/131) of the TACPs said yes. Of those 115 "yes" respondents, 68% (78/115) said Better TACP Leadership.

Referencing Table 14, it is also interesting to note how overwhelmingly high the TACP subject group's percentage is for the "Better Continuity of Leadership" (85%) which seems to indicate their starving desire for permanent leadership within the TACP community which will give them more continuity and a voice for their career field at AF command level. The Army Subject group's high rating (82%) for "More Familiarity with Army Ground Maneuver Tactics and Command" seems to indicate that they desire an ALO who sticks around longer than 2 years so they don't have to continuously explain or train the new ALOs on their maneuver tactics and command structure. The Aircrews' high rating (93%) for "Free up Rated Officers for Other Manning Shortages" appears to indicate that they are frustrated with the additional assignments that are draining their

community and their honest desire to perform their primary aircrew tasks where their skills as tactical aviators are more efficiently utilized and in demand.

The Army, TACP, and Aircrew subject groups also agreed that the non-rated career field ALO would benefit the Army, but to a lesser degree than the benefit to the USAF. With the exception of the AF cadets, the majority (>60%) of each of the subject groups felt that the Army would also benefit from a dedicated ALO career field. The cadets were split 50/50 on whether the Army would benefit from the ALO career field or not.

The Army subject group selected the four following benefits to the Army the most out of all the benefits listed: 1) Better Liaison Relationship w/ Army Staff, 2) Better Training of ALOs, 3) More Familiarity w/ Army Ground Maneuver Tactics and Command, and 4) Better Continuity of Leadership.

The TACP subject group selected the three following benefits to the Army the most out of all the benefits listed: 1) Better Liaison Relationship w/ Army Staff, 2) More Familiarity w/ Army Ground Maneuver Tactics and Command, and 3) Better Continuity of Leadership.

The Aircrew subject group selected the three following benefits to the Army the most out of all the benefits listed: 1) More Familiarity w/ Army Ground Maneuver Tactics and Command, 2) Better Training of ALOs, and 3) Better Liaison Relationship w/ Army Staff.

The Cadet subject group selected the three following benefits to the Army the most out of all the benefits listed: 1) Better Training of ALOs, 2) More Familiarity w/ Army Ground Maneuver Tactics and Command, and 3) Better Liaison Relationship w/ Army Staff. See *Table 15*.

Table 15
Would Career Field ALOs be Beneficial to the US Army? (Question #11)

RESPONSE	PERCENTAGES (%) *				
	ARMY	TACP	AIRCREW	CADETS	AVG
NO	39%	21%	29%	50%	35%
YES	61%	79%	67%	50%	64%
Better TACP Leadership	47%	43%	48%	50%	47%
Better Continuity of Leadership	63%	71%	63%	67%	66%
Better TACP Morale	37%	36%	41%	58%	43%
Free Rated Officers for Manning Shortages	47%	37%	55%	58%	49%
Better Liaison Relationship w/ Army Staff	(68%)	83%	65%	75%	73%
Better Training of ALOs	63%	60%	68%	83%	69%
More Familiarity w/ Army Tactics & Cmd	63%	(83%)	(79%)	(83%)	77%
Other	11%	7%	5%	0%	6%

*Note: Not all percentages add up to 100% due to respondents not completing all answers or being undecided. Respondents who answered yes only, also marked the benefits; therefore the benefit percentages are a sub-percentage of those total respondents who said yes. I.e. seventy-nine percent (103/131) of the TACPs said yes. Of those 103 "yes" respondents, 43% (44/103) said Better TACP Leadership.

The following benefits were selected the most (>50%) by the subjects from all four subject groups and therefore can be deemed the most important benefits that the US Army will gain from the creation of an ALO career field: 1) More familiarity w/ Army Ground Maneuver Tactics and Command, 2) Better Liaison Relationship w/ Army Staff, 3) Better Training of ALOs, and 4) Better Continuity of Leadership.

Referencing Table 15, it is interesting to note that all four subject groups think that the Army would best benefit from the creation of a non-rated ALO career field

because it would result in either a "Better Liaison Relationship with the Army Staff" or "More Familiarity with the Army Ground Maneuver Tactics and Command".

Overall, comparing the data in Table 14 with the data in Table 15, it appears that the majority of the subjects surveyed that *did* believe the ALO career field would be beneficial to both services (209), indicated that *both* services would likely benefit from the creation of a non-rated ALO career field by 1) More Familiarity with Army Ground Maneuver Tactics and Command, 2) Better Training of ALOs, 3) Better Continuity of Leadership, and 4) Better Liaison Relationship with Army Staff.

It would appear that not only do all the subject groups agree that it is feasible to train a non-rated officer to be an effective ALO, the majority (70%) of all subjects surveyed (299) also agree that it would be beneficial to both services to have a non-rated ALO career field. Therefore, the data does seem to *support* the hypothesis that a non-rated officer can effectively fulfill the position of an Air Liaison Officer.

CHAPTER VI

CONCLUSIONS

We have examined and discussed the data that was collected in an effort to analyze the status quo of four subject groups towards the thought of having a non-rated officer fulfill the position of an ALO and therefore create a dedicated ALO AFSC career field. This research has allowed us to come to the following five conclusions:

- 1) CAS Operational Experience and Scholastic Knowledge of a person does affect their attitude towards the thought of having a non-rated ALO. Branch of Service does not appear to affect their attitude. This is significant because many of the command decisions that affect the TACP career field are made by those that do not have the corporate knowledge of what the TACP community needs. Unfortunately, the idea of having a non-rated ALO career field will likely be disapproved by higher headquarters because of the lack of experience with TACP operations, and for the lack of a better term, lack of a TACP "voice" with rank behind it. Many of the TACP subjects commented on this issue:
 - "A career ALO would have a vested interest in the TACP career field making him apt to effect changes for the better."
 - [We need an] "ALO with a vested interest in the TACP community."
 - [Career ALOs would provide] "Higher Headquarter help."
 - "Full time ALOs would provide better top cover for Romads. It would be a great benefit for all 1C4s."
 - "Every other career field in the AF has officers full time; we need them....We have great people (officers) that come to our career for 2-4 years then they are

gone and we have lost all of the continuity we have just gained with both us and the Army. We also have a CMSgt as the head of all TACPs in the pentagon instead of a General that is a TACP like all other career fields in the AF."

- 2) The majority of the Army, TACP, Aircrew, and Cadet subject groups all felt that creation of a non-rated ALO was feasible provided they receive the right training.

 The majority of the subject groups as a whole felt that the USAF and USA would benefit from having a non-rated ALO career field. Several people commented on the creation of a non-rated ALO career field:
 - One Army COLT team member commented, "When a person becomes the subject matter expert, it is beneficial to all involved. It allows the individual to focus on one job and not when they will be returning to flying status."
 - "Allowing a permanent officer billet would greatly benefit the Army and the TACP community this is the #1 request of senior JTACs at 1st ID."
 - "Dedicated ALOs would mean someone who cared about the TACP career field."
 - Non-rated career ALOs would be "stronger advocates for 1C4 equipment and manpower issues."
 - "Plenty of ALOs have never been introduced to CAS or surface attack (i.e. B-52 EWOs or F-15C pilots) but qualify for ALO just because they are rated.
 This in itself lends itself to the argument that a non-rated officer with no experience could do the job with proper training (recurring and initial)."

- "There are a substantial amount of non-rated officers out there who strongly desire to be 'operational' but are not medically qualified to fly. An officer TACP AFSC would be perfect for them. They would be more motivated, better trained, and more respected by their subordinates than ALOs under the current system."

However, there were still some interesting comments from the minority of the subjects who did not favor the creation of the non-rated ALO:

- "Rated officers have an advantage to see the big picture over the battlespace.

 [A] possible solution could be a mix of rated/non-rated officers."
- "Stovepiping is an institutional problem in the USAF, why would we create another stovepipe? Our mission is the application of airpower. The best way to ensure that airpower is advocated and employed correctly with regard to ground units is to have active flyers as liaisons."
- "Rated pilots in ALO positions are invaluable to the Army....It's good for pilots to get some 'green' experience to understand the fight on the ground. A separate ALO career field is not a good idea, as it would short both services of these critical opportunities to develop. If cockpits are empty, get more pilots!"
- "I want an experienced, very qualified person that has actually performed CAS on their own many times."
- "A non-rated officer simply cannot develop the situational awareness of a rated officer. There are exceptions to this rule but they are rare."

- 3) The USAF would have no problem recruiting non-rated officers into the ALO career field. Fifty-four percent of cadets surveyed expressed interest in the ALO career field. Approximately 20% of the TACP 1C4s surve yed expressed interest in the ALO career field. Also, 17% of the USAF aircrew surveyed expressed interest in the ALO career field. Therefore, if all ALO manning requirements are not filled with non-rated officers, there should be ample volunteers from the rated officer side of the house to fill any shortfalls.
- 4) The majority of USAF rated officers are not interested in becoming Air Liaison officers. Fifty-five percent of the aircrews surveyed expressed no interest in becoming ALOs. Only 17% said they would be interested in being an ALO. This conclusion lends to the importance of only placing individuals with honest desires to be ALOs in the TACP community to ensure that the highest caliber officers are recruited and that the officers work hard to make the TACP community a better place. Several TACPs commented on the importance of only assigning ALOs who honestly want to be in the TACP community:
 - "Fill the slots with those who CHOSE to be there, rather than are forced."
 - Non-rated Career ALOs "would have a better attitude about being here!"
 - Career ALOs would mean "higher motivation levels for ALOs."
 - "If it's their own career field, some might take it more seriously."
- 5) A non-rated officer can effectively fill the position of an ALO. The current research seems to indicate that the current status quo has shifted and that most service members feel that a non-rated officer could do a fine job in the ALO position. The USMC is already adapting the non-rated officer approach for their liaison element. The

Air National Guard has had non-rated ALOs since 1989 and has been a proven success. The non-rated career field ALO is about 20 years long overdue for the USAF. Many survey respondents proposed the idea of a mix of rated and non-rated officers:

- [We] "really need a mix (of rated and non-rated)."
- "As a member of an earlier TACP Tiger Team...our recommendation was a split of career ALOs and rated officers, but I would prefer if it evolved to career ALO's (non-rated or rated volunteers)."
- "I believe the career field needs at least some rated ALOs, but a mix of rated officers/career ALOs may work."

We have discussed several conclusions that were made from the research conducted on the idea of an ALO career field. In chapter 7 we will discuss several recommendations for the USAF to pursue in order to reap the benefits that a career field for the ALO position will offer.

CHAPTER VII

RECOMMENDATIONS

The research on this project has led the author to make five recommendations for the USAF to act on. They are listed below and will be discussed in detail:

- 1) Approve the development of a non-rated ALO career program.
- Research an appropriate ALO career progression through the ranks comparative to other non-rated career fields.
- 3) Develop a detailed ALO training program and syllabus.
- 4) Establish a Tiger Team to review the non-rated ALO initial training program and its effectiveness after one year.
- Accomplish a detailed cost comparison analysis between the costs of a rated ALO verses a non-rated ALO.

Approve the Development of a Non-rated ALO Career Program

The author recommends that the non-rated ALO career program be approved. The program should primarily consist of manning requirements that put non-rated officers in ALO positions from Company up to and including the Division level. These echelons of Army command require the ALO to primarily act as an airpower advisor to their respective ground commander. Volunteer rated officers should fill any shortfalls and be primarily assigned at the Division level. Current manning documents assign ALOs to Brigade level, BALOs or EBALOs to Battion level, and no ALO is assigned at the company level. This will likely change in the near future due to the Army's increased requirement for CAS due to more units who will be operating in smaller formations over more geographical areas. If there is no requirement to have an ALO at Company level,

then a 2LT could also perform the duties of a BALO which he would likely only be a 2LT as a BALO for only about 6 months since most of the year-and-a-half on active duty will be spent in training to make him a qualified ALO. Therefore, it is recommended that the following ALO manning assignment be used by AFPC which will adequately support the Army and provide adequate officer progression and professional development (See *Table 16*).

Table 16 Recommended ALO assignment

Assigned Army Echelon	USAF Rank	Rated or Non-Rated?
Company	2LT	Non-Rated
Battalion	2LT/1LT / Capt	Non-Rated
Brigade	Capt	Non-Rated
Division	Major / Lt Col	Non-Rated or Rated
Corps / ASOC	Capt thru Col	Rated (FDO)

Rated officers, primarily from fighter aircraft, should fill the duties as a Fighter

Duty Officer at the ASOC or Corp level. The ASOC operations do require a greater need

for command and control experts on CAS who are well versed on the fighter/bomber

planning details as well as tactics from the air and on the ground.

Initial implementation of the non-rated ALO program would require a phase-in time where rated ALOs continued to man the majority of the positions until enough non-rated ALOs were trained and had time to mature through the ranks to fill the higher echelon levels of command. Since the ANG has had a non-rated ALO career field since 1989, they should be able to provide helpful information concerning the more detailed requirements of establishing a non-rated ALO career field.

Research an Appropriate ALO Career Progression Through the Ranks

The USMC, ANG, and CCT career field all have a career progression model that supports a dedicated Air Liaison Officer career field. CCT officers (AFSC 13DXX) number less than 100 individuals but yet the USAF was able to have a career field that supports their progression through the ranks. If the USMC, ANG, and CCT can all have career liaison officers, then so can the USAF. The research just needs to be completed to make it happen using a group of experienced TACP officers to model the career progression out. One survey respondent said it well when he said "a career progression model would have to be scrutinized to make sure there is opportunity for advancement to GO [General Officer] leadership levels commensurate with CCT officers."

With the increase in aircraft that are performing the CAS mission, it should require dedicated officers in the TACP career field who oversee the TACP operations from the highest levels (O-6 and above) to ensure the USAF is meeting all CAS liaison demands that the Army needs. The TACP community will inevitably increase in size due to increased future requirements, therefore now is the time to provide career ALOs along with a career progression that will put them at the Air Staff level for General Officers.

Olivero sighted an ALO Career Field IDEA report by Knox that was disapproved by the Air Staff (1998). One of the reasons sighted for the disapproval of the ALO career field idea was that the USAF and Army Chief of Staffs agreed to manpower realignment in 1997 that resulted in the reduction of the ALO assignments by 22 percent. Therefore, the disapproval stated that a career field could not be warranted due to the reduction in ALO manpower. However, "times are a changing" and the time is right to approve the

ALO Career Field due to today's *increased* TACP requirements. Give the TACP community what they've been waiting for over the last 25 years.

The disapproval of the IDEA report also stated "There are no ALO positions for officers in grades O-1, O-2, and only a few O-3 positions. The lack of company grade officers would require feeder AFSCs to create a career path" (Knox, 1998, p. 4). We've already discussed where the O-1 and O-2 officers would be placed in a TACP community. If a feeder AFSC would be required, then an excellent feeder AFSC would be the Intelligence Officer. Officers could be sent through Intel school and then either "tracked" to continue the AF Intelligence Officer AFSC track or track over to the Career ALO AFSC. The foundation of knowledge that is taught to Intelligence officers would be an outstanding source of knowledge to be utilized by the Army Ground Commander. As discussed earlier in chapter two, we found that one of the key tasks of the ALO is to advise the Army commander at all echelons of command. The intelligence officer would have extensive knowledge about USAF aircraft capabilities and limitations as well as enemy threat systems (Surface-to-Surface, Surface-to-Air, Air-to-Air, and Air-to-Ground), capabilities, and limitations. There is no smarter officer in the AF about "blue" and "red" threat systems and their capabilities. That is what the Army Commander is concerned about and needs.

Develop a Detailed ALO Training Program and Syllabus

A detailed ALO training program would need to be developed to groom a nonrated officer to fill the ALO position. The ANG should be consulted to seek their advice about an appropriate program since the y have been training non-rated ALOs since 1989. However, the author does have a recommended training program that could be a good starting point for training a non-rated ALO. Table 17 lists the recommended training courses that a non-rated ALO should attend and why those courses are important to his training.

Table 17
Recommended Non-rated ALO Training

Training	Duration	Purpose
Aerospace Basic Course	4 weeks	This course is the PME course required for all 2Lts and provides them with basic knowledge of the Airman's mission.
Intelligence Officer School	31 weeks	This course would provide the ALO thorough knowledge on Friendly and Enemy threat systems. This knowledge would aid in advising the Army Commander on how to effectively employ CAS while mitigating enemy S-A threats in the battlespace.
Joint Firepower Course	4 weeks	This course teaches Techniques, Tactics, and Procedures (TTP) as well as doctrine for the request, coordination, and control of joint firepower. Also teaches integration and application of CAS. Used as the ALO qualification course.
Adversary Tactics Course	3 weeks	This course at Nellis AFB teaches adversary tactics and capabilities of enemy built S-A, S-S, A-A, and A-G threat systems. This course would be N/A for those officers coming from the Intel School.
Fighter/Bomber Familiarization Course	2 weeks	This course could be combined with the Adversary Tactics Course and would cover CAS platforms, their TTPs, cockpit instrumentation, munitions, and strike employment.
Battlefield Airmans Course	TBD 6 weeks?	This course should teach our Battlefield Airman, those who are often forward deployed with the Army, basic instruction in ground warfare, close arms combat, self aid buddy care, ground assault convoy operations, and urban combat operations. This course should include the Basic Combat Convoy Course.
Basic Combat Convoy Course	3 weeks	This newly developed course, taught at Lackland AFB, prepares battlefield airman for convoy operations in combat AORs, to include Improvised Explosive Device (IED) avoidance, urban operations, and advanced tactical driving.
ALO On-the-Job Training (OJT)	24-36 weeks	This training would be conducted under the supervision and mentoring of a qualified ALO. Upon completion of OJT, the ALO would be a Mission Ready (MR) ALO.
Total Training for Non-Rated MR ALO	83 weeks 55 weeks	Number on top is the total training for the MR Non-Rated ALO who does track through Intel School. Bottom number is the ALO who does not track through Intel School. Both numbers assume 36 weeks (worse case) of ALO OJT.
Semi-Annual CAS Familiarization Rides	2 weeks	This continuation training would be a week long TDY to a CAS platform fighter/bomber unit where the ALO would receive FAM rides to gain the "air viewpoint". This program would be similar to that of the ANG.

As you can see from Table 17, the training of the ALO is a rather extensive program and could take anywhere from 14 months to 21 months depending on whether the non-rated ALO is tracked through Intel school, or some abbreviated version of it. With this training program, it would result in the non-rated ALO reporting to his unit between 16 (non-intel)-47 (intel) weeks of time on active duty. The ALO would arrive as a 2LT and would be inside of a year from being promoted to a 1LT by the time he finished his ALO OJT. This would lend itself to the ALO being at the Company or Battalion level, being trained by the full-time non-rated Battalion ALO, and then being qualified as a MR Company or Secondary Battalion ALO. The 2LT ALO could serve as a Company ALO or Secondary BALO for 4-10 months until he is promoted to a 1LT, at which time he would be eligible for the Primary BALO position. He would then serve as the BALO for 2 years until he pins on Captain at which time he would be eligible for the Brigade ALO position. The training listed in Table 17 is designed to give the ALO all the skills and tools required to meet the changing TACP environment with increased CAS emphasis in today's conflicts.

Fighter/Bomber FAM rides

It is important to comment on the training benefit of the semi-annual Fighter/Bomber Familiarization (FAM) rides. As we mentioned in Chapter two, the ANG has successfully used fighter FAM rides in the past to provide their non-rated ALOs the air perspective of the target area and how the pilots employs their aircraft to conduct an air strike. This is really the most important aspect of the FAM ride training, letting the ALO see the air perspective which can then be transferred to the rest of the TACP community to stress techniques (such as a target talk-on). The non-rated ALO

would also have to be certified in the Altitude Chamber to best capitalize and avoid hindering the Fighter/Bomber units.

The ALO would need to go TDY to a CAS doctrine Fighter/Bomber unit. This CAS trip would be an excellent time to bring JTACs and Romads with him to solicit extra FAM rides to share the air experience. This week would also allow the TACP members to brief and de-brief with the units and maximize their cross-talk of tactics. The TACPs that visit the unit would not necessarily be from the same unit that would provide the fighters/bombers their terminal control (due to the limitations of ranges and their proximity to the flying units). However, if planned and scheduled properly, the ALO and his TACPs would sit in on the briefs and debriefs, fly their FAM ride (s), while another TACP unit provided JTACs at the range to control the aircraft. A great possibility exist to bring TACP and Fighter/Bomber units together, for example at Smokey Hill ANG range, KS, where the TACP and Aircraft units could operate from Salina airport all week long which would allow maximum training benefits for all CAS players involved. It would be similar to a RED FLAG in concept, but just focused on CAS, Urban CAS, and cross-talk of tactics between ground and air personnel.

Another reason that the Air Staff disapproved Knox's 1998 IDEA report to establish a non-rated ALO career field was that "the transient nature of ALOs brings an inflow of current operational flying into TACP/ASOCs and provides an outflow of current Army Tactics, Techniques, and Procedures (TTP) back to the Air Force flying community....The cross-flow of TTP and this valuable understanding of our sister service would not be possible with a separate ALO career field" (Knox, 1998, p. 2). The FAM program described above would eliminate this problem by ensuring that TACP members

go TDY to Fighter/Bomber Squadrons on at least a semi-annual basis to teach each other about the blue and green aspects of CAS. CAS missions are becoming more frequent and in high demand. We need to have better than a "two year cross-flow update" of TTP information between the TACP and Aircrew worlds.

Some of the survey respondents commented on the thought of the FAM rides as part of the training program for the non-rated ALO. Some of those that did not think a non-rated officer could perform the functions of the ALO listed the lack of air experience often times as their primary concern. Comments are listed below:

- "ALOs must have experience training and flying CAS this perspective can not be taught in a class, even with FAM rides thrown in."
- Non-rated ALOs can perform the job "only if they are given the proper training to understand weapons capes, i.e. F16/A10."
- "If non-rated, ALOs need to experience CAS from the air!"
- "I think the non-rated thing could work well as long as they get good exposure to strike aircraft ops (i.e. FAM rides, briefs/debriefs)."
- "It is vitally important that the non-rated ALO establish credibility as savvy in airframe doctrine, capabilities, and weapon delivery techniques."

Establish Tiger Team to Review the Non-rated ALO Initial Training Program

The above listed initial training program for the non-rated officer is by no means a finished program to train new non-rated ALOs. It is an initial recommendation only.

The USAF should develop a Tiger Team made up of TACP experienced officers (rated USAF ALOs and non-rated ANG ALOs) to review and establish the detailed training program of the non-rated ALO. Once the Tiger Team has recommended a program and it

is approved, they should conduct a follow-up review of the program to test for training effectiveness approximately one year later.

Accomplish a Detailed Cost Comparison Analysis

A detailed cost comparison analysis should be conducted to research the cost differences between producing a non-rated ALO verses pulling one from the rated officer community. Once this is accomplished, it will be clearly evident that there is one more good reason to establish a non-rated ALO career field. Initial qualification of a rated officer is a very expensive process that costs a lot of taxpayer dollars. For example, the cost of training an officer to be a combat ready F-16 pilot is over 2.7 million dollars (About, 2004). To take an F-16 pilot out of the cockpit for two years and then send them back through a F-16 re-qualification course cost approximately another \$625,000. Total cost to pull them out of the cockpit for a two year ALO assignment, because the USAF requires the position to be filled by a rated officer, is over approximately 3.3 million FY02 dollars per rated ALO. If the USAF still feels that the only qualification an officer needs in order to be an ALO is to be rated, then it can be said that they are spending an average of 3.3 million FY02 dollars per ALO to man a two-year ALO assignment. We can do better than that!

A detailed cost comparison of the training recommended for a non-rated ALO has not been accomplished but it is obviously well below the cost of pulling aviators from cockpits. The most expensive training recommended is the Intel Officer course, which is a little more than \$43,000 FY00 dollars (About, 2004).

Summary

The USAF TACP has come a long ways since the Korean War and its career field has seen many changes. The TACP has evolved from Fighter pilot GFACs to enlisted ETACs, from FAC qualified ALOs to fighter pilot ALOs, from fighter pilot ALOs to fighter/bomber rated officer ALOs. Now is the time for the next evolution to occur and establish the non-rated ALO.

This research as well as past research conducted by Knox and Olivero have come to the same conclusions: that the tasks that an ALO accomplishes by no means requires the skills of a rated officer only. With the right training, any motivated officer can perform the duties of an Air Liaison Officer and provide the Army and TACP communities with outstanding long-term service. Creation of the non-rated ALO career field will drastically benefit both the USAF and US Army in the long run by providing better continuity of leadership, better ALO training, better liaison relationships, and more familiarity with the Army way of doing business. The non-rated ALO will also save the USAF hundreds of thousands of dollars in training costs per ALO.

Air Force Chief of Staff, General John Jumper, said it best when he said in April of 2004, "We're going to create a more disciplined process for growing a career path for our battlefield Airmen. These are the Airmen that live with the Army or Marine Corps on the ground in times of conflict who are dedicated to the mission of close air support, that are schooled in airspace control and deconfliction,...the combat controllers and the ETACs that are with the Army all the time" (Jumper, 2004). The AF established a career path for the ETAC back in the 1980s, however it omitted the "disciplined process for growing a career path" for the ALO. The TACP community has been in dire need of a

career ALO for the last 20 years but has obviously been lost in the bureaucratic shuffle of a large organization due to little TACP representation. It is time for that to change. It is time to give the TACP community the non-rated career ALO warrior that it deserves, so that he may lead our battlefield Airmen well into the future conflicts of our country, where CAS will be show center.

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APPENDIX A

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APPENDIX B

PERMISSION TO CONDUCT RESEARCH

MEMORANDUM FOR UNIT/CC

FROM: 19 ASOS/DOV

SUBJECT: Request for Permission to Conduct Research Survey

- 1. I am currently working on my Graduate Degree with Embry-Riddle Aeronautical University-Extended Campus. Conducting a Graduate Research Project helps me fulfill the requirements of my Masters degree. I am requesting your permission to allow myself, or a unit POC, to administer a one page questionnaire to members of your unit at their convenience.
- 2. The purpose of my research is to study the feasibility of a non-rated officer filling the position of an Air Liaison Officer (ALO). The units that I solicit data from will be mentioned in my report (i.e. 19ASOS, Ft Campbell) but individual names will NOT be collected or referenced in the report.
- 3. Your unit's inputs towards my research could greatly impact the findings and contribute to the recommendations made to improve our US Air Force. If you concur with allowing the surveys to be administered, the unit POC that I have made contact with will find a convenient time to administer the questionnaire with no adverse affects to your operations. If not, please return the unused surveys in the postage paid envelope that was provided.
- 4. If you are interested in the results of the survey, or have any questions or concerns, you can email me at mark.wisher@campbell.army.mil and I will be happy to provide you with my research results. Thanks for your time.

MARK R. WISHER, Capt, USAF Chief, Stan/Eval

APPENDIX C

INSTRUCTIONS TO SURVEY PROCTOR

MEMORANDUM FOR SURVEY PROCTOR

FROM: 19 ASOS

SUBJECT: Instructions for Administering the ALO Survey

- 1. This letter provides instructions for those of you who have agreed to help me administer a one-page survey concerning the USAF Air Liaison Officer. Let me first tell you "thanks" for your help and for taking time out of your busy schedule to help me complete my research.
- 2. The package that you received contains 30 one-page questionnaires to be administered to persons who fall into one of four categories: Aircrew, TACP, Army, or USAF Cadets. Please do not let anyone who does not fall into that category complete the survey. Make sure you find a convenient time (pilot meeting, bay meeting, staff meeting, LLAB, etc) where as many persons can take the survey as possible. The survey will take approximately 5 minutes to complete.
- 3. You will also find a memorandum addressed to your commander should you feel it is necessary to seek his/her approval prior to administering the survey to the unit personnel. When administering the survey, please refrain from biasing the subject group with any opinionated comments (I would prefer that the subject group not know whom the data is being collected for or my background); a brief introduction about the topic should suffice.
- 4. Once the surveys are complete, please mail them back to me, along with any unused surveys, in the self-addressed postage-paid envelope that is provided. I have to have my research project complete and turned in to Embry Riddle NLT Sept 17th so please try to have them mailed back to me **one week** after you receive them so I have time to analyze the data.
- 5. If you are interested in the results of the survey, or have any questions or concerns, you can email me at mark.wisher@campbell.army.mil or by phone at DSN363-1317/Comm 270-956-1317 or 931-645-1495(H). Again, thanks for your help, and more importantly, thanks for your time.

MARK R. WISHER, Capt, USAF 19ASOS

APPENDIX D

DATA COLLECTION DEVICE

INTRODUCTION: This 12 question survey is used to conduct graduate research about the possibility of having non-rated officers fill the position of an USAF Air Liaison Officer (ALO), essentially creating a new USAF Specialty Code (AFSC), which is comparative to other services' MOS. An ALO serves as the senior member of a Tactical Air Control Party (TACP) and his primary duties consist of calling in or coordinating air strikes, advising Army commanders on use of airpower, and deconflicting Army and USAF fires. Current USAF assignment procedures are to assign Rated Officers (such as Pilots, Navigators, Electronic Warfare Officers, or Weapon System Officers) to serve as an ALO for a two year assignment and then return them to the cockpit. Questions about this survey can be directed to Capt Wisher at *mark.wisher@campbell.army.mil*.

	z.wisher@campl	•	can be uncered	to Capt Wisher t		
1. H	low long have y	ou served in the	military?	Year(s)	
2. W	What Armed Sei	rvice are you cu	rrently in (che	ck one)?U	SA,USAF,	ANG
3. W	hat is your cur	rent pay grade	(check one)?			
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				E-5E-6		
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6. W	That would you	consider vour	perational exp	erience level on	CAS (doctrine,	
	esting, flying, c	ommand, or co	ntrol)?			
						
	Poor	Fair	Good	Very Good	Excellent	
7. It	is important to	have an ALO	assigned to an	Army ground m	aneuver unit.	
						
				Agree		
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9. Consideration has been given to the possibility of creating a separate USAF career field (own AFSC) dedicated to being Air Liaison Officers. Initial AFSC-ALO training could consist of a Joint Firepower Course (JFC), Battlefield Airman's Course, Adversary Tactics Course, Fighter/Bomber FAM Course, Semi-Annual CAS FAM rides (1 week TDY to CAS doctrine

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