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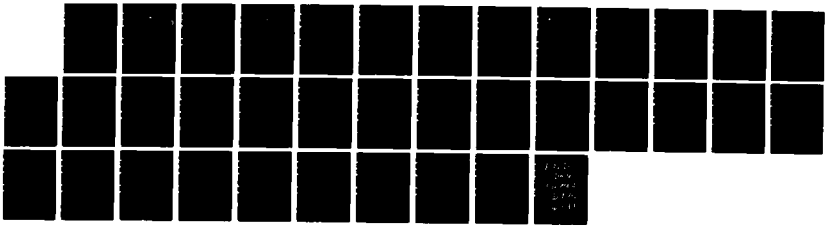

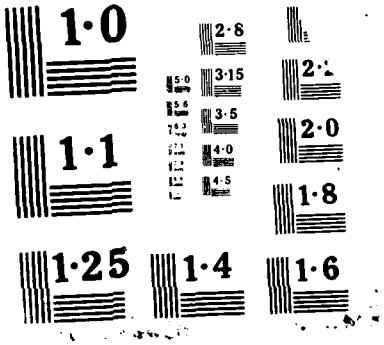
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STUDENT REPORT

INITIATIVE-25
AND THE NEED FOR TERMINAL AIRSTRIKE CONTROL
AT THE COMPANY LEVEL

MAJOR JOHN A. BOGGS 88-0320

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TITLE INITIATIVE-25 AND THE NEED FOR TERMINAL AIRSTRIKE CONTROL AT THE COMPANY LEVEL

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Submitted to the faculty in partial fulfillment of requirements for graduation.

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Close air support (CAS) is critical to the Army company commander. Terminal airstrike control of CAS assets is currently an Air Force responsibility. Initiative-25 tasked the Air Force and Army to review this command and control system. The study reviews the problem areas that evolved from Initiative-25 and evaluates the possibility of using USAF enlisted personnel and indigenous Army personnel to control CAS on a routine basis. The study concludes that the USAF enlisted Tactical Air Command and Control Specialist and the Army Fire Support Team personnel are capable of terminal strike control at the company level. The study further concludes that parochial attitudes must be eliminated and that command and control of air assets should become a joint Air Force/Army responsibility at echelons below battalion.

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PREFACE

Close air support (CAS) at the proper time, at the proper place, and with the proper results is critical to the individual company commander. In future wars, the maneuver commander will have to depend upon a CAS command and control system that will complement his agility, initiative, depth, and synchronization on the battlefield. However, Initiative-25, directed by the Air Force and Army Chiefs of Staff, resulted in changes to forward air control operations that detract from these tenets. The current concept of terminal airstrike control and Tactical Air Control Party force structure has compounded problems for the company commander. The purpose of this study is to investigate the deficiencies identified by Initiative-25 and to make recommendations to provide the Army company commander with timely and positive terminal airstrike control.

The enthusiastic support of the following USAF Air Ground Operations School faculty members is gratefully acknowledged:

Lt Col Ken Joyner, USAF
Lt Col James Patrie, USA
Maj George Gore, USAF
Maj Richard Wilkins, USAF
Capt Chris Gere, USAF

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ABOUT THE AUTHOR

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EXECUTIVE SUMMARY

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REPORT NUMBER 88-0320

AUTHOR(S) MAJOR JOHN A. BOGGS, USAF

TITLE INITIATIVE-25 AND THE NEED FOR TERMINAL AIRSTRIKE CONTROL AT THE COMPANY LEVEL

I. Problem: Initiative-25 evolved from the 1984 Joint Force Development Progress and tasked the Air Force to conduct a review of current forward air control (FAC) operations and force structure. The resulting changes to the command and control of close air support (CAS) has added to the problems at the Army maneuver echelon. The Army company commander is dependent on CAS to complement his scheme of maneuver. The concept of centralizing ground forward air controller (GFAC) assets at the division or corps level does not give the maneuver commander the agility, initiative, depth, or synchronization that he needs to win the engagement. Current Air Force manning reductions, coupled with the need for rated officers to fill liaison positions within all Army echelons, have resulted in an unworkable force structure. The three-man Tactical Air Control Party (TACP) cannot provide timely strike control for its maneuver unit. The TACP cannot respond over such a large and fluid battlefield. Additionally, current Air Force doctrine does not exploit the abilities of its enlisted TACP members, nor does it recognize the capabilities of indigenous Army personnel to provide CAS terminal strike control.

II. Objectives: To investigate enhancements to the Air Force Tactical Air Command and Control Specialist (TACCS) career field and the use of indigenous Army personnel for terminal airstrike control.

III. Discussion of Analysis: A brief historical examination of the command and control of airpower reveals that the GFAC has played a critical part in the execution of modern warfare. Studies of the future battlefield suggest that the role of the GFAC will take on even more importance as the threat to airborne command and control platforms increases. Current budgetary restraints and increased requirements under the Army of Excellence forced the Chiefs of Staff to review FAC operations and force structure. Initiative-25 carried out this internal examination under a three-phase program. Phase I and Phase II resulted in a new concept for the employment of battalion air liaison officers (ALOs) and for GFAC operations. This concept of operations was evaluated during Army Field Training Exercises (FTXs) for both heavy and light division size units. Results of these FTXs questioned the mobility and survivability of the GFAC as currently employed. However, a memorandum of agreement (MOA) was accepted by both services and provided a by-name aligned ALO and two TACCSs per battalion. Under this MOA, the ALO and one of the TACCSs would be qualified to control CAS aircraft. An examination of where and how the modern Army expects to fight confirms that this force structure is not sufficient.

III. Findings: Air Force enlisted TACCSs are capable of providing terminal strike control to CAS aircraft. This concept was verified by the Phase III evaluations of Initiative-25. However, this option has not been exploited to its fullest. In addition, the Army has Fire Support Team (FIST) personnel that are highly trained and routinely evaluated in the request and control of CAS assets. The problem here is that the Air Force does not recognize this capability. As a result, we do not conduct joint training using these command and control assets.

IV: Recommendations: The TACCS career field needs to be enhanced. Each enlisted TACP member should be qualified in the control of CAS. The battalion TACP manning needs to be increased to include an additional TACCS qualified in strike control. In addition to strengthening its own programs, the Air Force needs to recognize that the Army has personnel trained in airstrike control. These capabilities need to be exploited and exercised. If we are to train like we will fight, the control of CAS assets must become a joint responsibility. The opportunity to test such proposals exists at the National Training Center, the Joint Readiness Training Center, and the Combat Maneuver Training Complex.

V. Conclusion: The above recommendations address specific deficiencies identified by Initiative-25. The bottom line is that, although these

problems are solvable, they are perpetuated by a parochial Air Force attitude. We, the Air Force, must realize that solutions to current problems require a joint approach. The answer does not always lie in-house.

Chapter One

INTRODUCTION

BACKGROUND

During the Korean conflict, close air support (CAS) became a powerful and flexible means to deliver firepower against enemy ground threats. Since then, both the Army and the Air Force have made significant improvements incorporating CAS into their respective doctrines, operating manuals, and training programs. However, those improvements were not all encompassing. In 1984 the Chief of Staff of the Army (CSA) and the Chief of Staff of the Air Force (CSAF) instituted a Memorandum of Agreement (MOA) on the Joint Force Development Progress. A portion of this MOA, known as Initiative-25, tasked the Tactical Air Command (TAC) to conduct an internal study of air liaison officer (ALO), forward air controller (FAC), and tactical air control party (TACP) operations and force structure (17:60-61). This evaluation fostered much needed changes in ALO/FAC/TACP manning and responsibilities. The major deficiency in the application of these innovative changes was that emphasis was directed at battalion and above, while little, if any, filtered down to the company level. Staffs of both services recognized and initiated solutions to problems associated with winning battles. However, they overlooked the individual engagements at lower tactical levels that ultimately lead to victory.

The individual company commander is as dependent as his battalion commander upon CAS at the proper place, at the proper time, and with the proper results. The primary difference is that, for the maneuver company commander, the air liaison function is not as critical as the actual terminal control of the CAS aircraft. Under current doctrine, airstrike control at all echelons must be conducted by a rated Air Force officer or, in some cases, specially trained Air Force enlisted personnel assigned to the attached TACP. The Air Force, under current manpower reductions and pilot retention problems, can't provide enough qualified ALO/FAC personnel to meet battalion needs, much less requirements at the company level. The purpose of this study is to investigate the Ground FAC (GFAC) manning problem and provide feasible solutions. Recommendations should provide the battalion commander with enough qualified personnel to ensure positive control of all CAS aircraft allocated to support his scheme of maneuver. Additionally, by delegating this terminal strike control to the users, rated Air Force officers currently tasked to perform GFAC duties can be released to fill the critical liaison positions within Army echelons.

SCOPE

This paper will first address the historical development and future impact of the GFAC. Initiative-25 will then be reviewed and the most current TACP MOA generated by this initiative will be discussed. Then the problems encountered in the evaluation of Initiative-25 will be addressed. An investigation of current Air Force and indigenous Army personnel capable of providing terminal airstrike control at the battalion and below will follow. Finally, an analysis of the above should lead to recommendations that will give the Army company commander the immediate control of CAS aircraft allocated to him. This control is necessary to maximize his agility, initiative, depth, and synchronization on the battlefield.

ASSUMPTIONS

Since all aspects of CAS command and control could not be addressed in this study, certain assumptions had to be made. The critical assumptions used to focus primarily on the terminal strike control in the CAS cycle were:

- That the classical concept of Close Air Support will continue to be a viable Air Force mission as described in AFM 1-1. This study assumes the reader is familiar with AFM 1-1.

- That the requirement for indigenous terminal strike control at battalion and below will increase under the Army of Excellence doctrine of maneuver as outlined in Army FM 100-5. This study assumes the reader is familiar with FM 100-5.

Chapter Two

THE GROUND FAC - PAST AND FUTURE

THE PAST

One would think that the concept of ground control of airborne delivered ordnance had its roots with the concept of close air support. However, the idea of dropping bombs from the air in support of friendly forces can be traced back to the siege of Paris in 1870. The French military, held captive in the city, considered the use of balloons to drop incendiaries on the enemy surrounding them. The plan was dropped when the French realized that the prevailing wind might blow the bombs back over the French lines (24:3). It can be assumed, the idea of ground control over such deliveries never entered their minds. The idea of controlling air-to-ground firepower would have to wait until the manned aircraft entered the war arena in World War I.

The Great War was the first conflict where the airplane was employed by both sides as an offensive weapon. The major problem was that neither the Allied nor the Axis pilot could communicate effectively with his respective ground unit. As a result, the strike pilot could not support ground troops when they were engaged in close combat. Consequently air-to-ground communications received a great deal of attention throughout the war. Methods of indirect communications were experimented with such as ground lighting arrays, colored ground panels, smoke signals, and dropping messages (18:2). The British tested the use of "wireless airplanes" and finally, in 1918, were able to establish voice communication between a tank and an airplane at a distance of one quarter mile (2:244). While the Allies were working the air-to-ground command and control problem, the Germans were instituting the first viable element of the ground forward air control team, the ALO (27:130-131).

It was during the final years of World War I (WW-I) that the Germans developed the concept of the air liaison officer. Although their employment of close air support was not as advanced as the Allies, they understood the need for command and control of air assets. They attached an ALO to infantry divisions assigned to areas where main offensive actions would occur. These ALOs, along with radio equipment and operators, were the beginning of the Tactical Air Control Party. Their mission was to keep air commanders updated on the ground situation within their respective areas of operation. Although these teams provided a significant liaison role, they did not actually communicate with the strike aircraft (27:130-131).

The inter-war years saw the first use of ground personnel directly communicating with and controlling aircraft in support of troops in combat. The US Marines were the first to use ground forward air control techniques under fire. On 27 October 1927, after President Coolidge ordered the US Marines into Nicaragua, a patrol laid out ground panels depicting bearing and range to the enemy. The strike pilot, using this information and noting the position of the friendly forces who had marked their position by different colored panels, delivered his ordnance swiftly and precisely. This procedure became standard Marine practice for the remainder of the Nicaraguan Campaign (5:26; 28:10). During this same period the air-to-ground radio had been developed and, again, the Germans were the first to use this new technology for the command and control of air support. In 1936 the Germans conducted operations for the Nationalists in the Spanish Civil War and expanded their ALO concept of WW-I by placing the ALO in mobile command vehicles equipped with portable radios. These first GFACs operated near the front lines and communicated directly with the strike aircraft to provide close air support for army units (1:153; 27:131-133). Because of internal debate over the nature of airpower, it was not until the years just preceding World War II (WW-II) that the US military directed their attention to this approach to airstrike control.

In 1942 the US War Department, after a series of evaluations aimed at how to control air assets, issued FM 31-35, Aviation in Support of Ground Forces. This regulation directed the assignment of groups of air corps advisors to Army division and corps size elements to counsel the ground commander on tactical air power. These teams were designated air-ground cooperation parties (AGCPs) and were collocated with their respective Army headquarters (26:2,46; 18:8). The problem was that they were located, at times, great distances from the action and could not provide positive terminal strike control. At the beginning of WW-II these AGCPs were still located at the higher echelons, but this was soon to change.

The 1942 Guadalcanal campaign proved that the ground-to-air signal devices were not sufficient to direct strike aircraft. The Marine Corps instituted the "air forward observer" with its regiments. This concept was the true beginning of the ground forward air controller. And, as history would have it, these ground-to-air procedures were not the idea of the Army Air Corps, but were patterned after the British and Australian Air Forces (18:10; 16:4).

In 1943 the British, at the Battle of El Hamma in North Africa, used a ground forward controller, located in the lead armor column, to direct aircraft on enemy targets (16:3). This controller, known as "Rover David," used massive air support to aid the British Eighth Army in penetrating enemy lines. This same concept was used at Salerno by the Fifth US Army. The success of these operations convinced the US Army Air Corps that a front line ground forward controller was invaluable when airpower was integrated into the battle plan. Thus "Rover David" evolved into the "Rover Joe" experiment for the Fifth Army's Italian Campaign.

Rover Joe operated from the front and provided direct control over air assets in support of friendly troops. The experiment was successful and the concept was employed by the Ninth Air Force in the European Campaign throughout the rest of the war (9:1-11).

This GFAC program was dismantled after the war but evaluations of this innovative ground control of air assets evolved into the Tactical Air Control Party. Eventually the concept was incorporated into airpower doctrine. FM 31-35, Air-Ground Operations, published in 1946, described the composition of the TACP and included a FAC to direct airstrikes near the front lines. Additionally, the TACP would include an ALO, operating out of the Army command post, to advise the ground commander. TACPs were to be assigned to every combat corps and division (25:2-8). This was the same basic organization for command and control of air assets with which the newly formed US Air Force entered the Korean conflict (3:659).

During the Korean War the airborne forward air controller (AFAC) came of age, but there were some evolutionary changes in the GFAC concept also. The era of the dynamic, fluid battlefield was at hand. Even the air FACs, know as Mosquitoes, conceded that the GFAC was invaluable in delineating the front lines. The problem was with communications systems that were not compatible between the aircraft and ground units and the relationship with the ground commanders (7:65). The GFAC was unable to get bombs on target because either he could not talk to the strike aircraft or the Army commander was not inclined to use the air support. These problems were partially resolved with the reinvention of the AFAC. The AFAC/GFAC system proved effective for the remainder of the war. The TACP and the AFAC provided positive and effective control over strike aircraft and proved to be a workable system once again. The Air Force had reinvented the wheel, but, as before, the FAC team was disbanded after the war. The Air Force entered the inter-war years with only a paper asset.

The command and control of tactical air received little emphasis after Korea. Under Eisenhower's strategy of massive retaliation and project "New Look," the tactical air forces took a back seat to more strategic elements of defense. The Department of Defense budget had been cut and a buildup of strategic nuclear forces had begun. As a result, the Tactical Air Command was forced to operate with antiquated equipment and scrub initiatives to update the air-to-ground system. The terminal strike control and GFAC operational procedures that had been developed in Korea failed to make the transition into formal USAF or USA doctrine (28:34-36).

Even though not a part of formal service doctrine, the Korean command and control system was put to the test during Exercise Sagebrush in November of 1955. The Continental Army Command (CONARC) and TAC developed this operation to review joint air-to-ground procedures. The results indicated that the Korean system needed a revision (10:52-53). In 1957 TAC Manual 55-3, Joint Air Ground Operations, was published. The Joint Air-Ground Operations System (JAGOS) was established and provided for joint planning at all US Army echelons. Additionally, this system called

for a GFAC at battalion level to provide control of allocated air assets (11; 18:35). Air Force personnel were now officially assigned to Army units for CAS command and control (4:258-262). The GFAC concept had finally been made a part of official Army/Air Force training doctrine. This system was integrated into the order of battle when US forces deployed to the Republic of Vietnam under operation "Farm Gate" in 1961.

The 1957 JAGOS provided the basis for the Tactical Air Control System (TACS) developed under the "Barn Door" plan for the Vietnamese (16:11). While this TACS was being implemented in South East Asia, a new concept of command and control of air assets was being developed by the US Strike Command in the States (20:58). This concept, patterned after the US Marine Corps system, was called the Direct Air Support Center (DASC). While the Strike Command was working the DASC problem, the Air Force was also making some changes to its TACS. The TACP was now the sole responsibility of the Air Force and would be manned entirely by Air Force personnel. The Air Force also agreed to provide TACPs to all battalion and higher ground force headquarters up to Field Army (12:1-7). Because of these individual service initiatives, the Secretary of Defense directed the Army and the Air Force to study the close air support system and recommend joint improvements. All of the above mentioned changes were incorporated into what became known as the Concept for Improved Joint Air-Ground Coordination (12:24). This concept was approved by the Chief of Staff of the Army and the Chief of Staff of the Air Force in March of 1965. This system was fully operational in Vietnam by August of 1965 and provided responsive air support until US withdrawal in 1973. The FAC force and concept of operations has changed very little since.

Thus the Air Force was preparing to enter the 1980s with a commitment to provide the Army with TACPs at corps, division, brigade, and battalion level. These TACPs are tasked to provide the necessary interface between the Air Force Tactical Air Control System and the Army Air to Ground System (TACS/AGS). Under the USAF/USA Concept for Improved Joint Air-Ground Coordination, all US Army maneuver battalions would be manned as follows:

- The Air Force would provide two rated officers to serve as FACs for each battalion. One would perform duties as the ALO for that battalion and would deploy with that unit to function as the GFAC. The other FAC would normally be assigned to a Tactical Air Support Squadron (TASS) and perform duties as the AFAC. Both FACs would be fully qualified in terminal strike control.

- The Air Force would provide enlisted personnel to operate the USAF Air Request Net and accomplish maintenance on all essential TACP equipment. No enlisted TACP member would be qualified to control any close air support missions.

The bottom line is that each battalion was now manned with one USAF officer capable of ground control of close air support for the battalion and subordinate units. As the complexity of the battlefield increased, it became evident that one GFAC was not sufficient.

The final historical development significant to this study concerns the use of USAF enlisted TACP personnel to provide terminal strike control. In 1980 the 21st TASS located at Shaw AFB, South Carolina, initiated an Enlisted FAC (EFAC) program to enhance immediate air support for battalions of the 82nd Airborne Division. The use of the enlisted Tactical Air Command and Control Specialist (TACCS), Air Force Specialty Code (AFSC) 275X0, has since been adopted by HQ TAC and designated the Enlisted Terminal Attack Control (ETAC) program. Now a highly qualified enlisted TACCS can be trained to provide terminal strike control. The TACP has evolved into an officer/enlisted team tasked to control all CAS missions allocated to the battalion. It is this CAS command and control concept that the CSA and CSAF tasked their respective services to review and evaluate under a MOA dated 22 May 1984.

THE FUTURE

The future, non-linear battlefield will pose unique challenges to the TACP and the tactical air command and control system. Sophisticated weapons systems, especially improved surface-to-air missiles, and high power communications jammers will severely limit the use of airborne FACs. The GFAC will assume the responsibility of terminal strike control. The most recent Air Force Studies and Analysis White Paper, Forward Air Controllers, 1985-1995, simply states that "in this threat environment, emphasis shifts to the ground FAC to accomplish the required tasks" (13:8).

SUMMARY

Airpower in support of ground maneuver units has been a significant contribution to warfare since WW-I. As the battlefield evolved, so did the command and control of air assets. History has proven that the GFAC played a significant role in the evolution of airpower. Studies of future combat environments confirm that the GFAC will become the critical, if not the only, link in air-to-ground operations supporting ground forces.

Chapter Three

INITIATIVE-25 AND THE RESULTING MOA

INITIATIVE-25

• Joint Force Development Initiative-25, one of the 31 Initiatives, was developed under the Joint Force Development Progress of 1984. Under a joint MOA the staffs tasked the Army and Air Force to "organize, train, and equip a compatible, complementary, and affordable Total Force that will maximize our joint combat capability to execute airland combat operations" (17:105; 8:1). The agreement encompasses some 31 initiatives each dealing with current joint issues. Initiative-25, A and B, (17:113) specifically addressed FAC/TACP organization and training and directed:

A. The Army and Air Force will provide enhanced training in maneuver unit operations for ALOs and selected FACs.

B. The Army and Air Force will conduct an in-depth review and evaluation of FAC operations and TACP structure.

This chapter will examine Initiative-25B. It seems logical that a thorough examination of what you have to work with should be conducted prior to developing enhanced training programs. Under this assumption, Initiative-25A will be addressed in light of recommendations developed in a subsequent chapter.

PHASE-I

The direction of Initiative-25B was carried out in three phases. Phase I consisted of a wall-to-wall study of current FAC/TACP operations and force structure within the TAC. The results of this internal inspection revealed that the TACP structure and function at the brigade level and above was still valid and should not be changed. However, the battalion TACP required enhancement in both areas. Specifically, four critical sub-areas were briefed to and approved by HQ TAC/CC on 27 July 1984 (29:Slide 10). The USAF liaison at the battalion level needed to be expanded. Secondly, battalion liaison positions still require tactically qualified rated officers . Third, the Air Force airborne FAC (AFAC) mission is still valid and will have to be manned. Finally, the TACP concept of operations should not be related to the liaison function and should focus on the actual control of CAS aircraft.

PHASE-II

Phase II was the joint TAC/TRADOC review of Initiative-25A and 25B. The completed report was published on 19 December 1984 and briefed to HQ TAC/CC and TRADOC/CG in March of 1985 (29:Slides 9,13). The findings reinforced the results of TAC's internal evaluation. Both Army and Air Force staffs agreed that, at echelons at brigade and above, the TACPs were functioning effectively and did not require change. Both services also concurred that the battalion TACP needed improvement and supported the battalion ALO concept as described previously. Finally, the report stated that CAS control was the responsibility of the Air Force (29:Slide 13).

The internal study performed by TAC and the subsequent joint TAC/TRADOC review was conducted under a critical assumption. Both services assumed that the maneuver battalion commander did not need indigenous personnel capable of providing terminal strike control. The consensus was that a FAC was necessary only when CAS was dedicated to the battalion. Accordingly, they believed that GFACs could now be centralized at division and corps and sent forward as needed. This change to the TACP concept of operations was evaluated during the third phase of the initiative.

PHASE-III

The final phase of the process was the field evaluation of TACP force structure and concept of operations. Primary areas evaluated included the coordination of GFAC support and the execution of terminal strike control by the enlisted TACCS. The first field evaluation was conducted during a brigade Field Training Exercise (FTX) of the 1st Cavalry Division, Fort Hood, Texas, in December 1985. This heavy division FTX was followed, in May 1986, by an evaluation of the 7th Infantry Division (Light), Fort Ord, California. Both FTX after action reports addressed the same problem areas. The number one concern was the mobility and survivability of the centralized GFAC pool (32:Back Up Slides 10,11; 35:--). On numerous occasions, dispatched GFACs were attrited while moving from the division to the maneuver area of operation. Of those who did survive the journey, many did not arrive in time to provide the necessary terminal strike control (35:--). The second concern centered around the manpower requirements to meet Army CAS command and control needs during wartime (32:Back Up Slide 11). Two qualified personnel per battalion were not sufficient on the fluid, non-linear battlefield. On the other hand, these evaluations validated that enlisted USAF TACCSs could provide terminal strike control on a routine basis (32:Slide 7).

EVALUATION RESULTS

Headquarters USAF guidance concerning the use of USAF enlisted personnel for CAS command and control that evolved from the above

evaluations was very definitive. Selected NCOs would now be trained to perform terminal attack control on a routine basis. Major commands were tasked to develop the required training and evaluation programs. However, the liaison and advisory function would continue to be accomplished by a tactically qualified rated officer--the battalion ALO. This guidance resulted in a revised MOA for TACP combat operations.

RESULTING MOA

The most current MOA was jointly accepted on 1 January 1987. This agreement provides the battalion with a full-time, by-name, aligned ALO during wartime. Although qualified in airstrike control, his primary mission is liaison and coordination. This MOA also requires that the ALO be augmented by two TACCSs per battalion. One of these TACCSs will be fully qualified to control CAS (19:5). The resulting TACP composition for the organic battalion/squadron (UTC 7FVUF) is one ALO and two TACCSs (19:6).

SUMMARY

Initiative-25 generated a much needed review of current FAC operations and TACP structure. The internal study performed by TAC ascertained that the battalion FAC/TACP required enhancement. The subsequent joint review by TAC and TRADOC resulted in a proposal to pool GFACs at the division or corps level and distribute them as needed. The idea being that the maneuver commander did not need personnel qualified in airstrike control unless CAS had been distributed to him. This concept was evaluated during two FTXs and found to have some problems. These problem areas included the mobility and survivability of the centralized GFACs and the manpower requirements necessary to meet Army command and control needs. In response to these deficiencies, the MOA of 1 January 1987 provided a by-name ALO for each battalion and one TACCS qualified in terminal airstrike control.

Chapter Four

THE PROBLEMS DEFINED

EVALUATION

The problem areas identified during the phase three evaluation of the current TACP concept of operations have a significant impact on the maneuver commander. A command structure that limits mobility and decreases survivability is detrimental in a combat environment. This chapter will analyze the current concept of centralizing GFACs at the division/corps level and how it affects the maneuver commander. The age-old problem of manpower to meet combat needs will be addressed in light of current Air Force personnel strength, rated officer retention problems, and future force reductions.

WHERE HE FIGHTS

In order to appreciate the ground commander's point of view, the Air Force must come out of the blue and examine the modern ground battlefield. The luxury of a well-defined forward edge of the battle area (FEBA) or, in many cases, a forward line of troops (FLOT), may not be available during future conflicts. Army doctrine refers to a battlefield that "will probably extend across a wider space of air, land, and sea than previously experienced" (23:2). This battlefield will be characterized by chaos, intense firepower, and around-the-clock operations. The boundaries of this battlefield will be non-linear and not well-defined. FM 100-5, Operations (23:2), contains the Army's current AirLand doctrine and defines the modern battle area as one where

> . . . Army forces must prepare to fight campaigns of considerable movement, not only to reduce vulnerability, but also to obtain positional advantage over the enemy. Rapid movement will be complemented by the use of advanced, highly lethal weapons throughout the battle area.
>
> . . . from the first hours of battle, deep reconnaissance, air mobility, long-range fires, and special operating forces (SOF) will blur the distinction between front and rear and will impose a requirement for all around defense and self-sufficiency on all units.

The modern maneuver commander, and his supporting elements, must remain flexible and capable of adjusting to this rapidly changing environment.

HOW HE FIGHTS

An appreciation for how the ground commander will engage the enemy is just as important as understanding the characteristics of the modern battlefield. "Success on the battlefield will depend on the Army's ability to fight in accordance with four basic tenets: initiative, agility, depth, and synchronization" (23:15). Commanders at all echelons will conduct their operations in accordance with these tenets. However, at the maneuver level, the initiative of the commander and the agility of the unit is critical.

For the maneuver commander, taking the initiative and maintaining his unit's agility requires him to be able to act independently. He must be able to make judgements concerning the current situation and act accordingly to gain the advantage. Once he gains this initiative, he cannot allow the enemy to recover. AirLand Battle Doctrine uses terms such as speed, flexibility, and rapidity in its discussion of this tenet (23:15). Anything that slows the action is harmful to the operation. The units agility follows in concert with the initiative. Our forces must be able to move faster than the enemy. FM 100-5 refers to agility as ". . . the first prerequisite for seizing and holding the initiative" (23:15).

THE OBSTACLES

The two major obstacles that can keep the commander from gaining the initiative and reduce his agility on the battlefield are inertia and the friction of war. Overcentralization can slow down the decision making process and lead to inertia. Decision authority must be decentralized to the lowest practical level to guard against losing the initiative (23:15). The friction of war is characterized by chance (Murphy's Law) and the unexpected. Anything that can be done to reduce the chance and the unexpected will, in turn, reduce the friction encountered on the battlefield.

How does the current TACP/GFAC concept of operations fit into this modern battlefield? Does the centralization of GFAC resources at the division or corps level enhance or detract from the AirLand Battle Doctrine? Since we have reviewed the modern battlefield and examined how the ground commander will engage the enemy by gaining the initiative and remaining agile, answers to these questions should be evident.

THE PROBLEMS

The major deficiency in the pooling of command and control resources at higher echelons surfaced as a question of mobility and survivability of the GFAC. This problem can be addressed as a simple time/distance equation (Time = Distance/Speed). The time that it takes the GFAC to be alerted and make his way to the supported unit is a function of the distance and his speed in getting there. Under current battle management doctrine, we can assume that the distance from the division/corps area to the main battle area will remain somewhat constant. However, this is where the assumptions must end. We cannot assume that resources, such as dedicated Army aviation support or special terrain vehicles, will be available to transport the GFAC to the unit requiring CAS. Such resources will become critical or nonexistent on the modern battlefield. In addition, speed can be hindered by the friction generated in a chaotic, violent battlefield environment. Movement would be slowed by a chance encounter with hostile SOF, an unexpected breakdown in equipment, or the inability to navigate to the rendezvous point. Such events can increase the time factor to unmanageable proportions. The command and control of airpower, the GFAC, must be decentralized and be made an indigenous part of the maneuver unit. With this capability at the maneuver unit level, control of CAS assets would not be dependent on critical Army assets, aviation or otherwise, to transport the GFAC/ETAC to the battle area. The friction of war, chance, and Murphy's law would be lessened. The command and control of strike aircraft would be immediate, if needed. In short, the maneuver unit would be more independent and flexible to the situation and thus enhancing the tenets of initiative and agility necessary for victory.

This leads to the manpower problem. Current Air Force doctrine provides a three-man team to each maneuver battalion. The officer fills the ALO position and, as a secondary function, is qualified in airstrike control. He is assisted by two TACCSs; one of which is qualified to control CAS. A three-man team must provide the CAS command and control requirements of a battalion and subordinate maneuver units. Experience has proven that any battalion commander worth his salt will not let his ALO out of sight (33:--; 34:--; 35:--; 37:--). The commander must rely on his ALO to advise and coordinate the use of airpower in the scheme of maneuver. This leaves one TACCS to provide terminal strike control of CAS over the entire battalion area of operations on an around-the-clock basis. Although this area may vary because of terrain and threat, an average depth of 15-20 kilometers and width of 10-15 kilometers is not unrealistic (22:1-2). If the concept is to pool the GFAC resources at division or corps, we must now factor in the distance from the staging area to the main battle area. Whatever the distance, the GFAC must spend considerable time enroute to cover an area encompassing up to 300 square kilometers. It becomes immediately evident that this is an impossible task for one individual.

The simple solution to the manpower problem would be to increase battalion ALO/GFAC manning to a level that would provide the needed support. Recent developments concerning reductions in force and retention problems among rated officers make increasing ALO/GFAC manning unlikely. The Honorable Frank Carlucci, Secretary of Defense, recently announced that Air Force officer strength will drop 2,255 by 30 September 1988 (6:1). This reduction is required to comply with the 1 percent personnel reduction mandated by Congress. Future reductions of 2 percent in fiscal years 1989 and 1990 will follow. In addition to this force reduction, the Air Force does not have enough tactically qualified pilots to fill aircraft commander positions, much less fill positions as ALO/GFACs. The Assistant Secretary of the Air Force stated that "as of 1986, there was a requirement for 225 TACP's to support early deployed forces only. TAC could only meet 73% of these Army requirements" (24:12).

Add to this increased requirements for ALO support under the Army of Excellence and Total Force concept and the probability of increased officer GFAC manning is nil. Figures obtained from HQ TAC/RF (Reserve Forces) indicate a shortfall of 329 officer (ALO) and 583 enlisted (TACP) positions for follow-on-forces required to deploy no later than 30 days after mobilization. The annual cost of filling these requirements is over 41 million dollars, a study in itself, and does not include the necessary support equipment (31:1). The bottom line is that a different approach is needed to meet Army requirements of CAS command and control.

SUMMARY

Air Force policy makers must be aware of where, when, and how the Army expects to fight. They must realize that the ground commander must gain the initiative and remain agile on the battlefield. To do this he cannot afford support elements that increase the time between decision and action. The current concept of centralizing GFAC resources at division or corps level is representative of the overcentralization that leads to inertia on the battlefield. Additionally, the distance between the division/corps and the main battle area, when coupled with the friction inherent in a chaotic and violent combat arena, can increase response times to unacceptable levels. If we factor in Murphy's Law, the maneuver unit in need of CAS may well be out of luck. Command and control of airpower must be indigenous to the maneuver unit. Current Air Force doctrine and budget restraints do not allow increases in ALO/TACP manning to meet the growing Army of Excellence and Total Force requirements. Air Force officer manning is on the decline and will continue to decline, as a minimum, over the next two fiscal years. TAC is having problems retaining tactically qualified pilots and cannot afford to release those who remain to fill ALO/GFAC positions. A different approach to the problem is needed.

Chapter Five

A SOLUTION

INTRODUCTION

The solution to the mobility, survivability, and manpower problems identified by the Initiative-25 Phase III evaluation can simply be solved by efficient use of resources already in place. The Air Force must enhance its current TACCS ETAC program and recognize the Army's indigenous capabilities to control CAS aircraft. Most importantly, both services must adhere to the military dictum of "train as you will fight."

TACCS ENHANCEMENT

As stated in Chapter Three, the results of the Initiative-25 tests confirmed that well-trained enlisted TACCSs can perform the terminal strike control function. Programs have already been developed to qualify selected 275X0 personnel to control CAS on a regular basis. User commands are now incorporating the ETAC into their operational plans to support Army units worldwide. In short, the ETAC program is a proven concept to fill the Army CAS control requirements for maneuver units. However, current manning levels and training standards within the career field are in need of review.

Concerns over unit manning and career field enhancement were voiced by senior ALOs and TACCS at the 1987 TAC Senior ALO/275X0 Conference held at the USAF Air Ground Operations School, Hurlburt, Field, FL. Contained in the Ten Most Important Issues raised during this conference were: a third 275X0 at the battalion level and improved training and enhancement for the ETAC certified 275X0s (15:4). The solutions proposed by this study will not address the development of training programs. On the other hand, a shift in training philosophy, in addition to a slight increase in TACP manning, will be discussed. Such changes would enhance the current command and control system.

The recommendations for a third 275X0 at the battalion level and enhancements to the career field deserve staff attention. It is unlikely that the officer manning, as discussed previously, will be increased. Thus, any increase in TACP manning will have to be in the form of additional TACCSs. Any officer who has served as an ALO will confirm that, when the head knocking starts, the ALO will be confined to the Tactical Operations Center. His primary duty will be to coordinate the

effective use of airpower to his supported unit. Additional TACP responsibilities will become the responsibility of the enlisted specialists. An increase in manning at this level is paramount. However, this increase should be in conjunction with the requirement that all TACCSs be qualified as an ETAC prior to being assigned to a battalion. The personnel system will have to ensure that recruits entering the career field are sufficiently screened and capable of meeting training standards. Additionally, the possibility of 275X0 incentive pay should be considered to retain those who are certified as ETACs. Such an enhancement would help draw quality individuals needed to fill the positions and reduce attrition within the AFSC.

As is generally the case, implementation of such changes costs money. The major question is the cost effectiveness of these changes. Figures obtained from HQ TAC/RF show that the average cost for a TACP qualified officer is $72,000 as compared to $30,000 for an enlisted member (31:1). Even with the front loaded training costs associated with ETAC certification, it is evident that using qualified enlisted TACP personnel can provide a significant savings. These savings, in turn, could provide the core funds to implement an incentive pay program for the 275X0 AFSC. In any event, the Air Force must make changes within the CAS command and control system to meet Army needs. Internal to the Air Force, the most cost effective means to meet this challenge is through the use of qualified enlisted personnel.

RECOGNITION OF ARMY CAPABILITIES

Outside of Air Force channels, the most cost effective and readily available solution to the control of CAS assets lies within the supported Army units themselves. Under current Army doctrine, each maneuver unit has assigned to it Fire Support Team (FIST) personnel trained and capable of providing CAS command and control (21:3-13). While the Air Force must recognize that Army personnel capable of terminal strike control exist at all echelons, it is imperative that it immediately recognize this capability at the company level. Even if no other innovations to the TACS are considered, using indigenous Army personnel to provide CAS terminal strike control will reduce the battalion TACP's workload and enhance the company commander's flexibility on the battlefield.

By not having to rely on division or corps personnel susceptible to the previously mentioned problems of mobility and survivability, the company commander can act independently and decisively. Additionally, the larger numbers of indigenous personnel qualified in CAS control available to the company commander reduce the friction associated with attrition on the battlefield. In order for the blue-suiter to better appreciate the Army capability, a review of the company FIST is appropriate.

Each company-size ground maneuver element is provided with a FIST. This team is attached to supported companies/troops upon deployment and

will normally remain with that unit for the duration of the war. The infantry and mechanized infantry FIST consists of a headquarters and forward observer parties. The tank companies and armored cavalry troops have an assigned FIST consisting of only the headquarters element. The net result is that all infantry companies have a minimum of five and armor units a minimum of two indigenous FIST personnel. Each of these soldiers is trained to act as a CAS guide and is qualified to request and control CAS missions (21:2-2 - 2-4, 3-14).

The Honorable Dennis M. Kenneally, Deputy Assistant Secretary of the Air Force, has gone on record with his belief that "the capability of air strike control must exist at the company level" (24:14). His intent can be achieved by the Air Force simply accepting the Army's capabilities in regards to terminal air strike control. By this recognition and the ultimate incorporation of joint responsibility for CAS control into realistic training scenarios, we will be better prepared for the next conflict.

TRAIN LIKE YOU WILL FIGHT

The final discussion of Initiative-25 will focus on the enhanced training directed under Initiative-25B. Both Air Force and Army basic doctrine reference the age-old adage of "training like you intend to fight the war." Air Force Manual 1-1 addresses training in the following sense:

> To ensure the readiness of our forces, commanders must develop and implement training programs that build required warfighting skills and that simulate, as closely as possible, the combat environment in which we expect to fight. This means training in simulated combat situations that impose the operational realities of degraded command, control, and communications; adverse environmental conditions; and intense physical and electronic enemy threats. When we provide this kind of education and training, . . ., we maintain the highest level of readiness. (21:4-7)

Army Field Manual 100-5 is more direct:

> Unit training should simulate as closely as possible the battlefield's tempo, scope, and uncertainty. Units and headquarters that will fight together in teams, task forces, or larger units should train together routinely. (24:6)

We, as joint warfighters, are tasked to develop these realistic scenarios that simulate the actual combat environment. The Training Center Concept, that includes the National Training Center (NTC) at Fort Irwin, California, the Joint Readiness Training Center (JRTC) at Fort Chaffee, Arkansas, and the Combat Maneuver Training Complex (CMTC) at Hohenfels, West Germany, has given us the arena in which to develop this

environment. However, simulating the modern battlefield is of no import if we do not identify and correct deficiencies in our way of doing business. Specifically, we cannot afford to differentiate training objectives between a peacetime and contingency environment. All training objectives should be aimed at fighting the war--anything less is counter productive.

Such differentiation is common language in directives issued by higher headquarters: headquarters that are bound by their respective doctrines. A recent message from HQ TAC (30:2) concerning terminal strike control illustrates this problem vividly.

> The priority for performing the terminal attack control function at battalion level is the AFAC, the BN ALO, the ETAC, a 275XO, and finally, in the absence of all the above, a representative designated by the Army commander. (NOTE: This final option only applies to real-world contingencies. The last two control options fall under the emergency CAS category.)

War fighting <u>is</u> an <u>emergency</u> situation. Training regulations and directives should not use language that limits training objectives that, in reality, would be encountered early on in the war. In the above example, the Air Force cannot use Army FIST personnel to control airstrikes in a training scenario. Ironically, the FIST personnel are, in many cases, better trained at the task than the 275XO or the ETAC. Not only are they better trained, they are evaluated in CAS control through the Army Training and Evaluation Program (ARTEP). During each ARTEP, the FIST is routinely tasked to request and control CAS in support of their unit (35:--; 36:--).

It is imperative that, as we develop training environments such as the NTC, the JRTC, and the CMTC, we also develop more realistic training objectives. On the joint battlefield, the principal of economy of force demands that we not waste any talent, ability, or capability of <u>any</u> service element. This requires a tearing down of parochialism and a recognition of the capabilities of sister services. Training objectives, especially those directed to combat units, should be defined in light of joint operations, joint execution, and joint responsibilities. With regards to this study, the people who are ultimately responsible for getting bombs on target, whether Air Force or Army, should be training in a realistic, joint environment. That environment should be defined, not only by its physical makeup, but also by a modernized philosophy concerning how we expect to fight.

<u>SUMMARY</u>

The Air Force can lessen the problems identified by Initiative-25A if it can provide additional personnel capable of controlling CAS to each

battalion. Under current manning and budgetary constraints, the most cost effective internal fix is to increase enlisted TACP manning and enhance the 275X0 career field. The addition of a third enlisted TACP member is required. Provisions should be made to ensure all TACP members are qualified in terminal strike control. The possibility of incentive pay for the TACCS should be investigated. In the joint arena, the Air Force must recognize that the Army has personnel trained and critically evaluated in requesting and controlling CAS. The coordination and control of air assets remains an Air Force responsibility at echelons above battalion. However, the responsibility for the actual terminal strike control becomes more of a joint effort at lower echelons. This joint effort needs to be practiced in an environment that simulates the modern battlefield. Such training sites exist at the NTC, the JRTC, and the CMTC. Such training can only be maximized if we change our philosophy and not differentiate between a peacetime and contingency environment. Training regulations and directives must be written to foster the flexibility and independent action required to win the engagement and, ultimately, the battle.

Chapter Six

CONCLUSION

The recommended solutions proposed in the preceding chapter addressed problem areas that surfaced during the research and evaluation of Initiative-25. However, the single, most noteworthy, conclusion drawn from this study goes far beyond finding a fix to these specific deficiencies. The one theme that surrounded this investigation was one of parochialism. Service staffs talk of decentralization but do not utilize the abilities and capabilities of their enlisted members or other services. Planners speak of joint operations but, in reality, one branch will not acknowledge another's ability or capability to perform similar tasks. Individual services go to great lengths to keep solutions to problems in-house, even if the solution is costly and detrimental to the joint effort. The military establishment must realize that the next battlefield will not have an air war, a land war, and a sea war. The arena will truly be joint. The conclusion is if we don't break down these parochial barriers, practice economy of force, and trust in the ability of sister services, we might as well not show up.

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