THE EVOLUTION OF DIRECT SUPPORT ORGANIZATION FROM WWII TO OIF

BY

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ABSTRACT

The United States Air Force (USAF) has undergone an evolutionary process to create the organization necessary to provide direct support to the United States (US) Army during combat operations. US airpower has played an important role providing close air support (CAS) to ground forces in every major conflict since World War II (WWII). Additionally, weather forces and air mobility assets assumed ever-increasing roles as US military forces evolved during the second half of the twentieth century. The need to improve CAS, air mobility, and weather support to the army drove the development of direct support forces that are now known as Tactical Air Control Parties (TACP), Air Mobility Liaison Officers (AMLO), and Combat Weather Teams (CWT).

This paper examines the development and evolution of direct support forces from their beginnings in WWII through contemporary combat experience. It focuses on United States Army Air Force and USAF direct support experience from WWII through Operation Iraqi Freedom, examining the historical evidence to determine the factors influencing the development of direct support structure and how these lessons apply to contemporary organization. The paper then examines the historical evidence in conjunction with current command guidance to determine the best way to organize contemporary direct support forces to fulfill current and future air-ground integration with the Army.
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INTRODUCTION

UNITY OF COMMAND IS VITAL IN EMPLOYING AIR AND SPACE FORCES. AIR AND SPACE POWER IS THE PRODUCT OF MULTIPLE CAPABILITIES, AND CENTRALIZED COMMAND AND CONTROL IS ESSENTIAL TO EFFECTIVELY FUSE THESE CAPABILITIES.

AIR FORCE DOCTRINE DOCUMENT 1
17 NOVEMBER 2003

THE UNITED STATES AIR FORCE (USAF) HAS UNDERGONE AN EVOLUTIONARY PROCESS TO CREATE THE ORGANIZATION NECESSARY TO PROVIDE DIRECT SUPPORT TO THE UNITED STATES (US) ARMY DURING COMBAT OPERATIONS. THIS JOURNEY BEGAN WITH THE CREATION OF FIELD MANUAL (FM) 100-20 DURING WORLD WAR TWO (WWII) BY FOCUSING ON THE CENTRALIZED CONTROL AND DECENTRALIZED EXECUTION OF AIRPOWER TO ENSURE THE BEST EMPLOYMENT OF AIR ASSETS IN SUPPORT OF ARMY GROUND COMBAT MANEUVER UNITS. FM 100-20 DICTATED, “CONTROL OF AVAILABLE AIR POWER MUST BE CENTRALIZED AND COMMAND MUST BE EXERCISED THROUGH THE AIR FORCE COMMANDER IF THIS INHERENT FLEXIBILITY AND ABILITY TO DELIVER A DECISIVE BLOW ARE TO BE FULLY EXPLOITED.”¹ USAF EXPERIENCE FROM ITS CREATION IN 1947 THROUGH CURRENT COMBAT OPERATIONS IN OPERATION IRAQI FREEDOM REFLECTS THE IMPORTANCE OF UNITY OF COMMAND AS QUOTED IN THE NOVEMBER 2003 AFDD 1 AND REINFORCES THE PRIMARY USAF DOCTRINAL TENET THAT CENTRALIZED CONTROL AND DECENTRALIZED EXECUTION “ARE THE FUNDAMENTAL ORGANIZING PRINCIPLES FOR AIR AND SPACE POWER.”²

THE CONCEPT OF CENTRALIZED CONTROL AND DECENTRALIZED EXECUTION EXPRESSED ORIGINALLY IN FM 100-20 PROVIDED THE BASIS FOR USAF OPERATIONS FROM 1947 TO OPERATION IRAQI FREEDOM. ALTHOUGH FOCUSED ON THE CREATION AND DEVELOPMENT OF THE JOINT FORCES AIR COMPONENT COMMANDER (JFACC) AS A SINGLE AIR COMMANDER, THESE PRINCIPLES ALSO REFLECT THE NEED FOR UNITY OF COMMAND AND EFFECTIVE SPAN OF CONTROL AT LOWER LEVELS TO

ENSURE DECENTRALIZED EXECUTION. THE BROAD FUSION OF USAF CAPABILITIES PROVIDING DIRECT SUPPORT TO THE US ARMY DEMANDS AN ORGANIZATIONAL STRUCTURE THAT PROVIDES UNITY OF COMMAND TO FACILITATE THE SEAMLESS INTEGRATION OF AIR AND LAND POWER DURING PEACETIME TRAINING AND WARTIME OPERATIONS.

THIS PAPER EXAMINES THE QUESTION OF HOW TO ORGANIZE USAF TACTICAL AIR CONTROL PARTIES (TACP), COMBAT WEATHER TEAMS (CWT), AND AIR MOBILITY LIAISON OFFICERS (AMLO) PROVIDING DIRECT SUPPORT TO US ARMY MANEUVER UNITS IN ORDER TO BEST ACCOMPLISH PEACETIME TRAINING AND PREPARE FOR FUTURE COMBAT OPERATIONS. UNLIKE A MAJORITY OF USAF UNITS, DIRECT SUPPORT UNITS DO NOT CURRENTLY ORGANIZE WITHIN A WING STRUCTURE AND OPERATE AT GEOGRAPHICALLY SEPARATED LOCATIONS TO MEET THE NEEDS OF INDIVIDUAL ARMY UNITS. NO STANDARDIZED TEMPLATE FOR THE PEACETIME ORGANIZATION OF DIRECT SUPPORT UNITS WITHIN THE USAF CURRENTLY EXISTS AND ORGANIZATION VARIES BY MAJOR COMMAND (MAJCOM) AND BETWEEN INDIVIDUAL UNITS. IN SOME CASES, THERE ARE DUAL CHAINS OF COMMAND WITHIN THE THEATER, A SITUATION THAT EXISTS WITH AMLOs AND TACPs WORKING WITHIN THE SAME GROUPS, A POSSIBLE SOURCE OF FRICTION AT THE LOWER LEVELS OF THE ORGANIZATION.

THIS STUDY FOCUSES ON THE DEVELOPMENT AND IMPLEMENTATION OF USAF DIRECT SUPPORT ORGANIZATION EMPLOYING TACPS, AMLOs, AND CWTS USING HISTORICAL AND CONTEMPORARY EXAMPLES. EXAMINATION OF USAF ORGANIZATIONAL STRUCTURE FOCUSES ON THE PRIMARY TENET OF UNITY OF COMMAND, OR THE ABILITY TO “ENSURE CONCENTRATION OF EFFORT FOR EVERY OBJECTIVE UNDER ONE RESPONSIBLE COMMANDER.” AT AN ORGANIZATIONAL LEVEL, THIS UNITY OF COMMAND CURRENTLY RESIDES WITH THE CORPS LEVEL AIR LIAISON OFFICER (ALO), THE SENIOR USAF COMMANDER AT THE MANEUVER LEVEL OF THE ARMY. A HISTORICAL EXAMINATION OF COMMAND STRUCTURE FROM WWII THROUGH CONTEMPORARY COMBAT OPERATIONS PROVIDES A FRAMEWORK AND BASIS FOR EVALUATING CURRENT PEACETIME AND WARTIME ORGANIZATION. IN TURN, THIS EVALUATION ALLOWS FOR A DETERMINATION OF THE APPROPRIATENESS OF CURRENT USAF DOCTRINE WITH

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RESPECT TO UNITY OF COMMAND AND THE ABILITY TO MEET THE CURRENT AND FUTURE MISSION NEEDS OF THE ARMY. EXAMINATION OF THE HISTORICAL EVIDENCE AND CONTEMPORARY EXAMPLES FOCUSES ON THE KEY AIRPOWER TENETS OF CENTRALIZED COMMAND AND DECENTRALIZED EXECUTION AND UNITY OF COMMAND TO DETERMINE WHAT EFFECT EACH PLAYED IN THE DEVELOPMENT OF DIRECT SUPPORT ORGANIZATION.

CHAPTER ONE EXAMINES THE WWII HISTORICAL BACKGROUND OF DIRECT SUPPORT ORGANIZATIONAL STRUCTURE THAT SERVED AS THE BASIS FOR LATER ORGANIZATIONS. THE US MILITARY ENTERED WWII UNPREPARED TO FULLY INTEGRATE AIR AND LAND POWER UPON THE BATTLEFIELD. THIS DISCUSSION FOCUSES ON THE ORIGINS AND DEVELOPMENT OF THE DIRECT SUPPORT ORGANIZATION DURING COMBAT OPERATION IN NORTH АFRICA AND WESTERN ЕUROPE. IT EXAMINES THE INTRODUCTION OF FM 100-20 AND THE NEW DOCTRINE’S INFLUENCE ON DIRECT SUPPORT DEVELOPMENT. THE CHAPTER ALSO EXAMINES THE DIRECT SUPPORT STRUCTURE EMPLOYED BY NINTH AIR FORCE DURING THE ALLIED CAMPAIGN IN WESTERN ЕUROPE IN 1944 AND 1945. EXAMINATION OF EQUIPMENT AND STRUCTURE PROVIDES EVIDENCE CONCERNING HOW US TACTICAL AIR POWER IN WESTERN ЕUROPE ADAPTED TO IMPROVE DIRECT SUPPORT EMPLOYMENT ON THE BATTLEFIELD. THE CHAPTER CONCLUDES BY FOCUSING ON THE LESSONS AIR LEADERS TOOK FROM THE WAR AND THE APPLICATION OF THESE LESSONS TO FUTURE DIRECT SUPPORT ORGANIZATIONAL DEVELOPMENT.


CHAPTER FOUR FOCUSES ON CURRENT USAF ORGANIZATION AND COMMAND STRUCTURE EXAMINING PRESENT DOCTRINAL AND COMMAND GUIDANCE AND COMPARING IT TO EXISTING DIRECT SUPPORT ORGANIZATIONAL STRUCTURE. IT EXAMINES DIFFERENCES IN ORGANIZATIONAL STRUCTURE BETWEEN AIR COMBAT COMMAND (ACC) AND UNITED STATES AIR FORCES EUROPE (USAFE), AND BETWEEN TACP, CWT, AND AMLO ELEMENTS WITHIN THE DIRECT SUPPORT FORCES. SERVICE DOCTRINE, AIR FORCE INSTRUCTIONS (AFIs), AND COMMAND LEVEL GUIDANCE PROVIDE A BASIS FOR DETERMINING IF CLEAR DIRECTION EXISTS CONCERNING THE PEACETIME AND WARTIME ORGANIZATION OF DIRECT SUPPORT UNITS. COMPARISON OF DOCTRINE AND COMMAND GUIDANCE WITH THE CURRENT ORGANIZATIONAL STRUCTURE OF TACPS, CWTs, AND AMLOs PROVIDES INSIGHT INTO THEIR ABILITY TO SUPPORT CURRENT AND FUTURE ARMY WARTIME TASKINGS. THE CHAPTER ALSO DISCUSSES RECENT USAF ORGANIZATIONAL EXPERIENCE GAINED FROM OPERATION IRAQI FREEDOM. THIS CONTEMPORARY EXAMINATION INVOLVES THE CREATION AND OPERATION OF THE 484TH AIR EXPEDITIONARY WING (AEW) IN PROVIDING ADMINISTRATIVE SUPPORT AND LEADERSHIP TO USAF DIRECT SUPPORT UNITS OPERATING ACROSS IRAQ. INTERVIEWS FROM 484TH AEW PARTICIPANTS, AS WELL AS ARCHIVAL INFORMATION FROM THE AIR
FORCE HISTORICAL RESEARCH AGENCY, offer information concerning the creation of the wing and what influence, positive or negative, it had on combat operations during IRAQI FREEDOM. An analysis of the 484<sup>th</sup> AEW experience in Iraq provides insight into a new direct support organizational structure to meet the peacetime and wartime needs of USAF units providing support to the Army. Chapter four concludes by providing recommendations on how the 484<sup>th</sup> AEW operations can offer improvements to current USAF direct support organizational structure.

The final chapter draws overarching conclusions about the development and implementation of direct support organization from WWII through Operation IRAQI FREEDOM and examines current direct support structure with reference to the US Army transformation concept to determine if USAF organizational structure meets current and future army combat operations. The chapter offers recommendations on how the USAF should organize direct support organization to provide TACP, CWT, and AMLO support to meet the current and future support needs of the Army.

Direct support organization played a critical role in every major conflict since WWII. Based on the importance of direct support forces in previous wars, there are clearly lessons learned from their experiences. This thesis focuses on USAAF and USAF direct support experience from WWII through Operation IRAQI FREEDOM, examining the historical evidence to determine the factors influencing the evolution of direct support structure and how they apply to contemporary organization. Examination of this evidence in conjunction with current command guidance provides the means to determine the best organization of peacetime direct support forces to fulfill current and future air-ground integration with the Army.
CHAPTER 1

USAAF DIRECT SUPPORT DURING WWII

Centralized control and decentralized execution of air and space power are critical to effective employment of air and space power. Indeed, they are the fundamental organizing principles for air and space power, having been proven over decades of experience as the most effective and efficient means of employing air and space power.

Air Force Doctrine Document 1
17 November 2003

US air power direct support for ground forces received little emphasis prior to the start of WWII. The United States Army Air Corps (USAAC) focused on the strategic bombardment mission and applied little thought to the creation of the forces and tactics, techniques, and procedures (TTP) necessary for the integration of tactical air power into the ground commander’s scheme of maneuver.4 Additionally, the USAAF failed to develop and implement the organizational structure required to control direct support assets on the battlefield. USAAC leaders focused on fitting attack aviation into the mission of air superiority by emphasizing attacks directly against an enemy’s air force infrastructure and fielded equipment.5 While most USAAC officers recognized the importance of centralized control and decentralized execution of air power on the battlefield, they also believed direct support of ground forces to be an inefficient use of air assets. Prior to WWII, then Brig. Gen. Henry H. Arnold stated in an address to the US Army War College, “Do not attach the air force to small commands where it will be fritted away in petty fighting.

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4 C. C. Elebash, “Was It the Air Corps or Army Air Forces in WWII?” Army Air forces Historical Association, January 2002. On-line. Internet, 14 May 2005. Available from http://www.aafha.org/aaf_or_aircorps.html. The USAAC came into existence in 1926 as the aviation arm for the Army. The USAAC became the USAAF on June 20, 1941 when Secretary of War Henry L. Stimson and Army Chief of Staff George C. Marshall realized the necessity for a stronger Air Force.
HOLD IT CENTRALLY AND USE IT IN ITS PROPER PLACE, THAT IS, WHERE IT CAN EXERT ITS POWER BEYOND THE INFLUENCE OF YOUR OTHER ARMS, TO INFLUENCE GENERAL ACTION RATHER THAN THE SPECIFIC BATTLE.” WWII WITNESSED THE BIRTH OF UNITED STATES ARMY AIR FORCES (USAAF) DIRECT SUPPORT ORGANIZATION AND UNITS TO FULFILL THE BATTLEFIELD REQUIREMENTS OF THE US ARMY. THIS ORGANIZATION PROVIDED THE FOUNDATION FOR FUTURE USAF DIRECT SUPPORT DEVELOPMENT.

EVOLUTION OF DIRECT SUPPORT DURING THE NORTH AFRICA CAMPAIGN

THE US ENTERED WWII FOCUSED ON THE STRATEGIC EMPLOYMENT OF AIR POWER BUT HAD DONE LITTLE TO DEVELOP THE ORGANIZATION AND EMPLOYMENT OF TACTICAL AIR ASSETS IN SUPPORT OF ARMY MANEUVER UNITS. DOCTRINE, TRAINING, AND EQUIPMENT ALL FOCUSED ON THE PRIMARY MISSION OF DAYLIGHT STRATEGIC BOMBING. THE USAAF EMPHASIZED STRATEGIC BOMBARDMENT AND DID LITTLE TO CREATE THE METHODS AND TACTICS FOR ACCOMPLISHING THE CLOSE AIR SUPPORT (CAS) OF GROUND FORCES. WHEN US FORCES FIRST FOUGHT IN TUNISIA IN LATE 1942, THE ARMY FIELD COMMANDER CONTROLLED THE TACTICAL AIR POWER OF THE 12TH AIR FORCE. THIS ARRANGEMENT SUBORDINATED TACTICAL AIR ASSETS TO THE CONTROL OF CORPS COMMANDERS AND EACH CORPS’ LOCAL SITUATION. IN THIS CASE, 12TH AIR FORCE TACTICAL AIR POWER WAS TIED TO SEPARATE GROUND UNITS REGARDLESS OF THE CURRENT BATTLE SITUATION AND UNABLE TO RESPOND EN MASSE TO OTHER TASKINGS ACROSS THE THEATER. UNDER THIS ARRANGEMENT, COMMAND STRUCTURE AND ORGANIZATION DID NOT ALLOW FOR THE EFFECTIVE INTEGRATION OF TACTICAL AIR POWER AND FAILED TO TAKE ADVANTAGE OF ITS INHERENT MOBILITY.

THIS ARRANGEMENT LED TO DISASTROUS RESULTS IN THE INITIAL TUNISIAN CAMPAIGN WITH ALLIED FORCES SUFFERING HEAVY LOSSES DURING THE GERMAN

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6 “The Air Corps,” address to the Army War College, October 8, 1937, text in US Army Center of Military History, Carlisle Barracks, PA; 10.
OFFENSIVE IN THE KASSERINE PASS area. These setbacks combined with the ineffectiveness of Allied air power on the battlefield, which greatly outnumbered Axis air power, led to the initial reorganization of tactical air power command and control. Allied military leaders implemented steps at the Casablanca Conference in January 1943 to structure all Allied air assets under a Theater Air Force Commander and a new organizational command became operational encompassing all tactical air forces in North Africa a month later. The Allies created a new joint air-ground headquarters between the air and ground command staffs to ensure proper administration of the revolutionary doctrine. General Eisenhower realized the need for the command reorganization and commented:

The new administrative and operational organization successfully solved one of the most basic problems of modern warfare—how to apply air power most effectively to the support of land operations. Direct support of ground troops is naturally the method preferred by the immediate military commander concerned, but his [sic] needs to be supplemented by assaults on the enemy’s bases, on his lines of communication, and on his factories, which are beyond the immediate range of the local commander’s vision.

While this change primarily focused on organizing Allied air assets to achieve air superiority over German forces in the theater, it laid the foundation for doctrinal and organizational changes that enabled CAS success in upcoming operations.

The immediate result of the USAAF North Africa experience involved the development of FM 100-20, Command and Employment of Air Power. This

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9 Syrett, “The Tunisian Campaign, 1942-43,” 167. There are several instances of tactical air power being misused under the control of Corps Commanders during this period of the North African campaign. Syrett describes one case; “On January 17, Spaatz learned that Maj. Gen. Lloyd R. Fedendall, U.S. II Corps Commander with de facto control of the aircraft in XII Air Support Command, had denied a request for air support from the French XIX Corps, because an American battalion G-2 thought that his unit required this support. In consequence, while the French came under heavy Axis assault, aircraft from the XII Air Support Command flew air cover for the U.S. 509th Parachute Regiment, with no enemy air or ground forces to attack in front of the Americans.”

10 Tactical Air Command, History of USAF CAS Command and Control, 10.

11 Tactical Air Command, History of USAF CAS Command and Control, 11.
NEW MANUAL DEFINED THE EMERGING RELATIONSHIP BETWEEN AIR AND GROUND COMMANDERS, LAID THE FOUNDATION OF UNITY OF COMMAND FOR ALL FUTURE AIR POWER ORGANIZATIONS AND “FORMED THE CORE OF FORMALLY TACTICAL AIR DOCTRINE.”  

FM 100-20 PRIORITIZED THE USAAF MISSIONS IN ORDER OF IMPORTANCE FROM THE GAINING AND MAINTAINING OF AIR SUPERIORITY, DOWN TO INTERDICTING ENEMY THEATER OPERATIONS AND FINALLY PARTICIPATING IN THE COMBINED COMBAT EFFORT OF AIR AND GROUND FORCES. WHILE FM 100-20 PLACED DIRECT FIELD SUPPORT TO THE ARMY AS THE THIRD PRIORITY IT PROVIDED THE FRAMEWORK FOR A SINGLE AIR FORCE COMMANDER TO CONTROL ALL THEATER ASSETS AND ORGANIZE THEM AS NECESSARY TO CONCENTRATE AIR POWER EFFECTS ON THE BATTLEFIELD. FM 100-20 CLEARLY STATED THE NECESSITY TO CENTRALIZE ALL AVAILABLE AIR POWER WITH COMMAND EXERCISED THROUGH THE AIR FORCE COMMANDER. IN THIS RESPECT, USAAF TACTICAL AIR FORCE COMMANDERS WORKED AS EQUALS WITH US FIELD ARMY COMMANDERS AND EXERCISED UNITY OF COMMAND FOR ORGANIZING AND EMPLOYING USAAF UNITS TO MEET THE TASKING OF THE OVERALL THEATER COMMANDER. THE USAAF PUT THIS AUTHORITY TO GREAT USE IN THE DEVELOPMENT AND EMPLOYMENT OF DIRECT SUPPORT DURING THE ALLIED OFFENSIVE ACROSS WESTERN EUROPE AFTER THE D-DAY INVASION IN JUNE 1944.

**EVOLUTION OF DIRECT SUPPORT ORGANIZATION IN WESTERN EUROPE**

THE DEVELOPMENT OF NINTH AIR FORCE IN PREPARATION OF THE FORTHCOMING INVASION OF THE CONTINENT BUILT UPON THE LESSONS LEARNED FROM

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North Africa. USAAF leaders incorporated recent combat experience to improve organization, training, and equipment in order to develop tactical air units capable of integrating with the army. To achieve complete air-ground cooperation, it was imperative that Ninth Air Force develop and perfect a system of tactical control of airborne aircraft for precise coordination of the air effort during all phases of the ground effort.\(^\text{14}\)

The USAAF created Tactical Air Commands below Ninth Air Force to work in parallel with US field armies to coordinate the application of tactical air power with ground battle operations. A USAAF flag officer led each Tactical Air Command and exercised command of the assigned USAAF assets. The Tactical Air Commands provided the day-to-day air support for a corresponding field army.\(^\text{15}\) For example, the IX, XIX, and XXIX Tactical Air Commands were all in place by early 1945 providing tactical support to the First, Third, and Ninth US Armies, respectively. Administrative functions remained with higher headquarters as Ninth Air Force planned the theater deployment and movement of the Tactical Air Commands and managed long range logistical plans so the Tactical Air Commands could focus on combat operations. In fact, Ninth Air Force retained control of all administrative and training matters while lower echelon command and control elements such as Air Support Parties (ASP) coordinated operations below the air force level.\(^\text{16}\)

A key task Ninth Air Force tackled prior to the D-Day invasion involved training and preparing tactical air assets to accomplish direct support for the allied ground forces. The buildup of Ninth Air Force tactical air power required a massive training program since many personnel arrived from the US with little experience and proved unfamiliar with current combat tactics and the special problems of coordination with


GROUND FORCES. “IT WAS PARTICULARLY IMPORTANT THAT MUTUAL UNDERSTANDING OF THE PRINCIPLES OF AIR-GROUND COOPERATION SHOULD EXIST BETWEEN THE AIR AND GROUND STAFFS.”

NINTH AIR FORCE RELIED UPON THE RECENT COMBAT EXPERIENCE OF GENERALS LEWIS BRERETON AND ELWOOD “PETE” QUESADA IN NORTH AFRICA TO ESTABLISH TRAINING REQUIREMENTS AND PROGRAMS. OFFICERS WITH NORTH AFRICAN OR ITALIAN COMBAT EXPERIENCE CONDUCTED LECTURES AND TRAINING SEMINARS ON AIR SUPPORT OPERATIONS TO TRAIN AIR AND GROUND OFFICERS ON THE PRINCIPLES OF AIR-GROUND COOPERATION. SPECIAL ATTENTION FOCUSED ON THE TRAINING OF GROUND FORCE OFFICERS WHO WORKED IN THE “COMBAT GROUPS AS LIAISON OFFICERS FOR THE PURPOSE OF INTERPRETING THE GROUND SITUATION FOR AIR FORCE PERSONNEL.”

NINTH AIR FORCE ALSO SOUGHT INFORMATION AND EXPERIENCE FROM OTHER COMMANDS AND ALLIES TO TRAIN AND PREPARE FOR THE UPCOMING INVASION. TEAMS OF OFFICERS WENT TO ITALY TO OBSERVE AND PARTICIPATE IN THE ONGOING COMBAT OPERATIONS IN ORDER TO LEARN THE LESSONS OF AIR SUPPORT. LIKEWISE, QUALIFIED TWELFTH AIR FORCE OFFICERS CAME TO ENGLAND TO PREPARE AND SUPERVISE TRAINING PROGRAMS.

GENERAL QUESADA UTILIZED EIGHTH AIR FORCE AND ROYAL AIR FORCE SCHOOLS SPECIALIZING IN GUNNERY, ARMY COOPERATION AND LOW-LEVEL ATTACK TO TRAIN THE TACTICAL AIR FORCES FOR THE UPCOMING GROUND SUPPORT MISSION. ADDITIONALLY, THE ALLIES CONDUCTED THE JOINT MANEUVER EXERCISES KNOCKOUT, FOX, AND BEAVER TO PRACTICE AIR-GROUND COORDINATION ARRANGEMENTS PRIOR TO THE INVASION. ALTHOUGH EXERCISE RESULTS PROVED MIXED AND REVEALED SERIOUS COMMUNICATION PROBLEMS, THEY DID PROVIDE THE FIRST OPPORTUNITY TO PRACTICE THE NEW TACTICS PRIOR TO ENTERING COMBAT. NINTH AIR FORCE ALSO LOOKED TO THE LESSONS OF THE NORTH AFRICAN AND ITALIAN CAMPAIGNS TO CREATE THE ORGANIZATION NECESSARY TO INTEGRATE AIR SUPPORT INTO THE ARMY’S SCHEME OF MANEUVER.

18 Craven and Cate, The Army Air Forces in WWII, Vol. 3, 134.
ORGANIZATION

Combat experience from the Mediterranean campaigns clearly demonstrated the need for close coordination and planning between the ground and air headquarters. The established use of joint air-ground headquarters in North Africa and the collocation of XII Tactical Air Command with the US Fifth Army headquarters in Italy enabled the successful integration of air and ground combat forces.\(^{21}\) Ninth Air Force used this experience to develop an organization that enabled air power integration at each level of the primary army maneuver echelons. IX Tactical Air Command and First Army established a Combined Operations Center at the location of the Army and Tactical Air Command headquarters to exercise allocation and mission control of air support.\(^{22}\) The close proximity of the air and ground command staffs enabled efficient planning and operations while establishing unity of command among the tactical air power assets supporting the army. General Bradley and Quesada’s command posts sat next to each other with General Quesada commenting, “The only thing that separated us was a hedgerow, that so a single bomb could not kill both of us.”\(^{23}\) Mutual understanding and confidence in tactical air and ground integration grew based on “the intimate association of the respective commanders” and close cooperation between their intelligence sections.\(^{24}\) If it was not possible for Tactical Air Command and Army command posts to be collocated, the Tactical Air Commands forward deployed a small mobile command echelon at the advanced headquarters of the corresponding field army to maintain air-ground integration. The USAAF also worked to facilitate the integration of tactical air power on


\(^{24}\) Craven and Cate, The Army Air Forces in WWII, Vol. 3, 203.
THE BATTLEFIELD BY ESTABLISHING AN AIR LIAISON SUPPORT ORGANIZATION AT COMMAND ECHELONS BELOW THE FIELD ARMY LEVEL.

AIR SUPPORT PARTIES (ASP) RECEIVED ASSIGNMENT TO EACH MANEUVER LEVEL OF THE ARMY FROM CORPS DOWN TO THE ARMORED COLUMN. EACH ASP PROVIDED AN INITIAL LIAISON AND COMMUNICATION NETWORK TO COORDINATE AND REQUEST DIRECT SUPPORT FROM THE COMBINED OPERATIONS CENTER. MEMBERS OF THE TEAMS INCLUDED AN AIR SUPPORT PARTY OFFICER (ASPO), A QUALIFIED FIGHTER PILOT, AND COMMUNICATIONS PERSONNEL WITH RADIO EQUIPMENT FOR TRANSMITTING AIR SUPPORT REQUESTS TO THE COMBINED OPERATIONS CENTER, (FIGURE 1). THE ASPO ADVISED THE ARMY COMMANDER ON THE INTEGRATION OF AIRPOWER AND
EVALUATED TARGETS SELECTED BY THE ARMY GROUND STAFF FOR CAS. ASPs initially provided the air expertise and experience to assist the ground staff integrate pre-planned tactical air support into the following day’s plan of attack. However, as the demand for employment of immediate air support grew, ASPs took on the responsibility of coordination and terminal control of CAS. ASPs borrowed from US and British terminal control experience gained in the Italian campaign and applied it during the Normandy fighting to provide forward control of tactical air power.

Forward air control in France grew out of the British Rover and US Rover Joe parties employed with success in Italy. The forward controllers, comprised of a pilot and army officer, observed the battlefield from a well-concealed position with a view of the front lines and talked the fighter-bombers on to the target utilizing terrain features and artillery smoke markers. A P-47 pilot described forward control duties; “His job would be to communicate with frontline division command posts about their priority targets and pass on accurate descriptions and location coordinates as well as information on the closest friendly troops to an airborne P-47 formation.” ASP employment as forward air control teams became highly desired as it greatly reduced response time and increased accuracy of direct support against enemy strong points. Tactical Air Commands assigned additional ASPOS to the forward parties to increase their capability to provide direct control of tactical air power.

Tactical Air Commands also facilitated terminal control of aircraft through the embedding of ASPs in tank columns. General Quesada implemented the plan after looking for a way to improve air-ground integration in order to reduce fratricide and help locate and destroy enemy defensive positions. He was convinced Armored Column Cover would be much more effective if there was an ASP embedded within the maneuver unit.

28 Hughes, *Over Lord*, 183.
ASPOS rode in tanks equipped with Very High Frequency (VHF) radios in the armor spearhead to provide point of contact coordination to covering aircraft. The ASPs provided two-way communication between the tanks and the escorting CAS aircraft to facilitate air cover and fires integration.29 One P-47 pilot described Armored Column missions: “We would check in with the air-ground controller in a tank or halftrack traveling with the armored spearhead. If they had a target for us, we would comply with their request for bombing or strafing. If they had no immediate target for us, we would roam, at low altitude, in front of them, checking their advance route.”30 Armored Column cover directly contributed to the US Army’s breakout from Normandy and remained a valuable innovation until the end of the war. In addition to implementing an organization to facilitate air-ground coordination, Ninth Air Force also employed new technology and equipment to improve integration and command and control of tactical air power.

Equipment

Ninth Air Force once again looked to the lessons learned in the Italian campaign to improve tactical air support in France. In the spring of 1944 XII TAC supporting Fifth Army in Italy began using artillery observation aircraft to direct fighter-bombers onto CAS targets. XII TAC adapted pre-existing military equipment to improve the command and control of direct support employment. Ninth Air Force introduced flying air controllers into the battle for France after the invasion of Southern France in August 1944. L-5 “HORSEFLY” aircraft, “equipped with SRC-522 radios, achieved notable success leading fighter-bombers to targets located close to the front lines and controlling their subsequent attacks.”31 Horsefly aircraft flown by fighter-bomber pilots operated as

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29 Craven and Cate, The Army Air Forces in WWII, Vol. 3, 239.
31 Tactical Air Command, History of USAF CAS Command and Control, 18.
**Forward Air Controllers (FAC), with an infantry observer aboard for identifying friendly forces, and included several advantages over the ASPs when controlling CAS. The Horsefly aircraft carried their own smoke bombs to mark enemy positions when artillery was unavailable and they also acted as an easily located orbit point for the fighter-bombers to rendezvous close to the target.**

32 The use of the Horsefly aircraft as a FAC with an army observer on board made it possible to attack targets close to friendly troops with a lower chance of fratricide.

**Ninth Air Force also embraced the utilization of new technology to improve command and control of tactical air support. Plagued by periods of poor flying weather, General Quesada wanted to improve direct support during weather conditions of low ceilings and poor visibility. Ninth Air Force adapted radar designed for defense against enemy aircraft to assist in the control of direct support aircraft. Each Tactical Air Command employed a Tactical Control Center (TCC) in close proximity to the Combined Operations Center utilizing Microwave Early Warning Radar (MEW) for detection of enemy aircraft.**

33 Forward Director Posts that operated several SCR-584 radars for fire-control of anti-aircraft artillery supported the TCC and MEW. The TCC monitored aircraft formations providing direct support while using the SCR-584 at Close Control Units to provide guidance into the target area. The SCR-584 radar allowed the controller to vector a flight over the target and place the flight leader into position for a visual attack during poor weather conditions.

34 Ninth Air Force utilized this network extensively to guide aircraft around the battlefield and shift them as necessary to provide direct support at the critical point on the battlefield. In some cases the system even provided the capability to strike at targets through the weather.

35 Adaptation of pre-existing equipment and the integration of new

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32 Gooderson, *Air Power at the Battlefront*, 43.
33 Gooderson, *Air Power at the Battlefront*, 45.
TECHNOLOGY TO IMPROVE COMMAND AND CONTROL OF TACTICAL AIR POWER
DEMONSTRATED THE DESIRE OF SEVERAL NINTH AIR FORCE LEADERS TO IMPROVE AIR-
GROUND INTEGRATION ON THE BATTLEFIELD. IN MANY CASES, THE PERSONALITY OF KEY
LEADERS PLAYED A VITAL ROLE IN THE FORMATION OF THE ORGANIZATION THAT ENABLED
AIR–GROUND INTEGRATION.

ONE OF THE GREATEST OBSTACLES IN THE PATH OF DIRECT SUPPORT COMMAND
AND CONTROL DEVELOPMENT INVOLVED THE PRE-EXISTING BELIEFS ABOUT AIRPOWER
AT THE TIME. AS EVIDENT IN FM 100-20 THE UNITED STATES ARMY AIR FORCE
LEADERSHIP DID NOT CONSIDER DIRECT SUPPORT AN EFFICIENT USE OF AIR POWER. 36
MANY USAAF LEADERS REMAINED FOCUSED ON STRATEGIC BOMBING AND DID NOT
SUPPORT THE EVOLUTION OF TACTICAL AIR POWER. CONVERSELY, MANY ARMY
LEADERS OPPOSED PLACING AN AIR COMMANDER IN CHARGE OF TACTICAL AIR POWER.
MOST ARMY GROUND COMMANDERS FELT THE ONLY WAY TO ACHIEVE SUCCESSFUL
DIRECT AIR SUPPORT MISSIONS WAS BY PLACING AIRCRAFT UNDER THEIR COMMAND. 37

IT TOOK COMMITTED LEADERSHIP AND FORCE OF PERSONALITY TO ENSURE THE
DEVELOPMENT OF EFFECTIVE ORGANIZATION AND COMMAND AND CONTROL FOR
SUCCESSFUL DIRECT SUPPORT. THE DRIVING FORCE IN THE WESTERN EUROPEAN
CAMPAIGN WAS GENERAL QUESADA AND HIS DESIRE TO PROVIDE BETTER AIR SUPPORT
TO THE ARMY. HE RECOGNIZED THE ONGOING BICKERING BETWEEN AIR AND GROUND
COMMANDERS AND NOTED, “A LOT OF THESE PEOPLE WERE STILL FIGHTING THE BATTLES
OF THE 1930s, AND IT HURT OUR EFFORTS IN THE EXECUTION OF THE WAR.” 38 GENERAL
QUESADA BUILT PERSONAL RELATIONSHIPS WITH GROUND COMMANDERS SUCH AS
GENERAL OMAR BRADLEY AND WORKED HARD TO REMOVE THE ANIMOSITY THAT
EXISTED BETWEEN AIRMEN AND SOLDIERS. HE ALSO EMPLOYED ALL OF THE ASSETS AT
HIS DISPOSAL TO IMPROVE DIRECT SUPPORT PROVIDED TO THE ARMY AND DROVE
SUBORDINATES TO CREATE NEW WAYS TO TACKLE COORDINATION PROBLEMS. FOR

36 FM 100-20, Command and Employment of Air Power, 12. FM 100-20 states, “However, in the zone of
contact, missions against hostile units are most difficult to control, are most expensive, and are, in general,
least effective. Targets are small, well-dispersed, and difficult to locate. In addition, there is always a
considerable chance of striking friendly forces due to errors in target designation, errors in navigation, or to
the fluidity of the situation. Such missions must be against targets readily identified from the air, and must
be controlled by phase lines, or bomb safety lines which are set up and rigidly adhered to by both ground
and air units. Only at critical times are contact zone missions profitable.”
38 Hughes, Over Lord, 119.
EXAMPLE, GENERAL QUESADA WAS THE FORCE BEHIND THE IMPLEMENTATION OF ARMORED COLUMN COVER AND THE ADAPTATION OF AIR DEFENSE RADAR AS A DIRECT SUPPORT COMMAND AND CONTROL DEVICE. HIS PERSONALITY AND DESIRE TO BUILD A CLOSE ASSOCIATION BETWEEN GROUND AND AIR FORCES AT ALL TACTICAL LEVELS CREATED THE ATMOSPHERE FOR CHANGE WITHIN IX TAC AND LATER NINTH AIR FORCE. HIS LEADERSHIP IN CONJUNCTION WITH NEW ORGANIZATION, EQUIPMENT, AND TRAINING ALLOWED FOR THE DEVELOPMENT OF A COMMAND AND CONTROL STRUCTURE THAT PROVIDED FOR THE UNITY OF COMMAND OF TACTICAL AIR POWER EMPLOYED BY THE TAC COMMANDERS IN WESTERN EUROPE DURING WWII.

THE US MILITARY ENTERED WWII LARGELY UNPREPARED FOR THE INTEGRATION OF AIR AND LAND POWER UPON THE BATTLEFIELD. USAAF LEADERS SPENT LITTLE TIME AND APPLIED LITTLE THOUGHT TO THE DEVELOPMENT OF A DIRECT SUPPORT ORGANIZATION TO IMPROVE INTEGRATION WITH THE ARMY. EXPERIENCE, DOCTRINE, AND ORGANIZATION FOCUSED ON STRATEGIC DAYLIGHT BOMBING AND THE PARCELING OUT OF LIMITED ATTACK AVIATION ASSETS TO ARMY CORPS COMMANDERS TO EMPLOY AS THEY SAW FIT IN THEIR AREA OF RESPONSIBILITY. OPERATIONAL NECESSITY SOON FORCED USAAF LEADERS TO PLACE MORE EMPHASIS ON DIRECT SUPPORT OF THE ARMY. BATTLEFIELD EXPERIENCE FROM THE NORTH AFRICAN CAMPAIGN PROVIDED THE CATALYST FOR CHANGE IN THE CREATION OF FM 100-20, WHICH LAID THE FOUNDATION FOR CENTRALIZED CONTROL OF AIR POWER BY A USAAF COMMANDER. WHILE AIR SUPERIORITY AND INTERDICTION REMAINED PRIMARY USAAF MISSIONS, FM 100-20 ACKNOWLEDGED THE NEED FOR INTEGRATION OF AIR AND LAND COMBAT POWER. NINTH AIR FORCE LEADERSHIP TOOK THIS NEW MANDATE AND CREATED THE TACTICAL AIR COMMANDS AT THE FIELD ARMY LEVEL TO PROVIDE FOR THE CENTRALIZED CONTROL AND UNITY OF COMMAND NECESSARY TO COORDINATE TACTICAL AIR POWER DURING THE MARCH ACROSS WESTERN EUROPE. THE USAAF INTRODUCED MANY NEW INNOVATIONS SUCH AS ASPS, FACs, AND TCCs EQUIPPED WITH MEWS TO IMPROVE COMMAND AND CONTROL AND FACILITATE CAS TO THE ARMY. THE WWII EXPERIENCE OF US TACTICAL AIR POWER IN WESTERN EUROPE DEMONSTRATED THE NECESSITY TO ADAPT DOCTRINE, ORGANIZATION, AND COMMAND AND CONTROL SYSTEMS TO MATCH THE CURRENT COMBAT ENVIRONMENT. UNFORTUNATELY THIS IS A LESSON THE AIR
FORCE WOULD HAVE TO LEARN DURING DIRECT SUPPORT OPERATIONS AGAIN ON THE KOREAN PENINSULA.
CHAPTER 2

USAF DIRECT SUPPORT DURING THE KOREAN WAR

AIR POWER...SHOULD GO TO THE HEART OF THE INDUSTRIAL CENTERS TO
BECOME REASONABLY EFFICIENT...IN MY OPINION, THE PROPER WAY TO
USE AIR POWER IS INITIALLY TO STOP THE FLOW OF SUPPLIES AND
AMMUNITION, GUNS, EQUIPMENT OF ALL TYPES, AT ITS SOURCE. THE
NEXT MOST EFFICIENT WAY IS TO KNOCK IT OUT ALONG THE ROAD BEFORE
IT REACHES THE FRONT LINE. THE LEAST EFFICIENT WAY IS AFTER IT
GETS DUG IN AT THE FRONT LINE. NEVERTHELESS, THERE ARE
REQUIREMENTS CONSTANTLY WHERE THE UTILIZATION OF AIR POWER IN
CLOSE SUPPORT IS NECESSARY.

GENERAL HOYT VANDENBERG

EVOLUTION OF DIRECT SUPPORT ORGANIZATION PRIOR TO KOREA

THE DEVELOPMENT AND REFINEMENT OF AAF DIRECT SUPPORT
ORGANIZATIONAL STRUCTURE STOPPED AFTER THE END OF WWII. THE DROPPING OF
THE ATOMIC BOMBS ON JAPAN COMBINED WITH THE CREATION OF THE USAF AS AN
INDEPENDENT SERVICE IN 1947 HERALDED A NEW ERA OF NUCLEAR STRATEGIC
deterrence. LIMITED DEFENSE SPENDING BUDGETS COMBINED WITH AN EMPHASIS ON
STRATEGIC BOMBING RESULTED IN FEW ADVANCES IN TACTICAL AIR FORCES INCLUDING
INITIATIVES TO IMPROVE OR PROVIDE DIRECT SUPPORT TO THE ARMY. THE RAPID
DRAWDOWN IN EQUIPMENT AND MANPOWER LIMITED THE USAF MISSION AS STATED BY
GENERAL CARL SPAATZ:

TO PROVIDE A LONG-RANGE STRIKING FORCE IN INSTANT READINESS AND
WITH THE POWER AND CAPACITY TO DESTROY THE STOREHOUSE OF
ENEMY WEAPONS AND THEREAFTER TO REDUCE THE ENEMY’S INDUSTRIAL
CAPACITY AND WAR-MAKING POTENTIAL AND TO PROVIDE IN PEACETIME A
MINIMUM ESTABLISHMENT FOR PROMPT AND RAPID EXPANSION FROM
PEACE TO WAR. 39

TACTICAL AIR FORCES FELL VICTIM TO THE MASSIVE DRAWDOWN AFTER WWII AS AAF STRENGTH DROPPED FROM A PEAK OF ALMOST 2.5 MILLION PERSONNEL TO 305,000 BY JUNE 1946 AND THE NUMBER OF AIRCRAFT FELL FROM 80,000 TO FEWER THAN 40,000. While the introduction of FM 31-35 in 1946 restated the combat lessons of WWII and principles of FM 100-20, the USAAF leadership ignored the further development of joint air-ground doctrine and direct support organization.

When the USAF achieved independence in 1947, the doctrine spelled out in FM 31-35 remained the same as the USAF assumed responsibility for providing direct air support for the army, but words did not equal capability. The newly formed Tactical Air Command (TAC) took on the role of training and equipping tactical air forces, but doctrinal development remained dormant prior to the Korean War. Just as the AAF had done little to develop direct support organization prior to WWII, the new USAF displayed little initiative to improve the direct support organization to meet the demands of future conflicts. The North Korean invasion of South Korea did little to immediately improve direct support organization. Allan Millet noted, “Coordination between the services was minimal; roles and missions became indistinct and overlapping; the lack of preparedness for war ensured confusion, frustration, and inefficiency.” In most respects the combat employment of the USAF during Korea duplicated those used with success during WWII. Airmen entered the conflict with training, equipment, and doctrine almost identical to that employed on the battlefields of Western Europe a half decade prior.

DIRECT SUPPORT ORGANIZATION DURING KOREA

41 Tactical Air Command, History of USAF CAS Command and Control, 33.
44 Tactical Air Command, History of USAF CAS Command and Control, 34.
DIRECT SUPPORT OPERATIONS AND ORGANIZATION IN KOREA CLOSELY FOLLOWED THE USAAF EXPERIENCE FROM WWII. CENTRALIZED COMMAND REMAINED WITH THE THEATER AIR COMMANDER WITH A TACTICAL AIR FORCE ASSIGNED TO SUPPORT EACH ARMY GROUP OR FIELD ARMY. THE LOWEST LEVEL OF USAF DECENTRALIZATION IN DETERMINING AIRPOWER PRIORITIES RESIDED WITH THE TACTICAL AIR FORCE COMMANDER WORKING IN COOPERATION WITH HIS GROUND COUNTERPART. Tactical air force and army headquarters staff personnel operated out of a joint operations center (JOC) to coordinate air-ground operations. The JOC was the control center for the air-ground operations between a field army and tactical air force. Seventh Air Force assigned newly formed Tactical Air Control Parties (TACP) to lower army command echelons to accomplish liaison duties and provide close control of CAS aircraft analogous to ASPs in WWII. Far Eastern Air Forces (FEAF) headquarters established a Tactical Air Control Center (TACC), similar to the TCC employed during WWII, next to the JOC to accomplish aircraft control and warning duties (see figure 2).

46 Riley Sunderland, Evolution of Command and Control Doctrine for Close Air Support (Washington, D.C.: USAF, 1973) 23. Sunderland states, “The JOC provided the interface for theater level integration of tactical air power into the ground commander’s scheme of maneuver. Comprised of an air-ground operations section for the Army to provide requests for air support and a combat operations section for the USAF to plan and control direct supporting aircraft, the JOC, tactical air force headquarters and field army command post were normally located close together for easier coordination and communication.”
47 Tactical Air Command, History of USAF CAS Command and Control, 35.
The TACC expanded upon the TCC mission from WWII by providing the capability for the tactical air commander to control theater air forces. Tactical Air Direction Posts (TADPs) equipped with specialized radars and radios provided direct control for CAS during inclement weather and night operations. FACs utilizing the T-6 aircraft ("Mosquitoes") operated in the same role as the Horsefly aircraft of WWII. One addition to the command and control structure involved the utilization of C-47s equipped with extra VHF radio sets to act as airborne relay stations to resolve the line of sight communication problems caused by the Korean mountains. The command and control elements of the tactical control system comprised of the TACC, TADCs, and TACPs fell under the responsibility of the 502d Tactical Control Group, which deployed to Korea in fall of 1950 in order to provide theater command and control. The 502d commenced operations on 10 October, absorbing 500 airmen already in theater to establish the 605th and 6164th Tactical Control Squadrons, 606th, 607th, and 6132d Aircraft Control and Warning Squadrons.48 Elements of the 502d provided the initial

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RADARS, COMMUNICATIONS EQUIPMENT, AND PERSONNEL TO SETUP AND RUN THE TACTICAL AIR CONTROL SYSTEM to integrate and control tactical air power on the KOREAN BATTLEFIELD. HOWEVER, THE 502D UNIT HISTORY CITED EARLY CHALLENGES: “NUMEROUS PERSONNEL SHORTAGES, PARTICULARLY IN TECHNICAL SKILLED PEOPLE EXISTED AT THIS TIME.”

Many of the problems that plagued the development and employment of tactical air support at the beginning of WWII reemerged at the start of the KOREAN WAR. The absence of joint doctrine and operating procedures led to early communication and coordination problems between the ARMY and AIR FORCE prior to the establishment of the TACTICAL AIR CONTROL SYSTEM AT THE END OF 1951. MANY AIR FORCE PERSONNEL LACKED TRAINING AND PROFICIENCY IN TACTICAL AIR OPERATIONS PRIOR TO THE KOREAN WAR. DURING THE EARLY DAYS OF THE CONFLICT USAF PERSONNEL EMPLOYED AD HOC PROCEDURES AND DREW ON WWII EXPERIENCE. FOR EXAMPLE, THE EMPLOYMENT OF T-6 AIRCRAFT RESULTED AS A SOLUTION TO WORK AROUND COMMUNICATION PROBLEMS SINCE THERE WAS NO COMMAND AND CONTROL STRUCTURE TO DIRECT CAS AIRCRAFT TO CRITICAL AREAS ON THE FRONT. ONE T-6 CONTROLLER STATED, “THERE WAS NO DEFINITE SYSTEM. THE ONLY THING WE HAD WAS AERONAUTICAL CHART AND A RADIO…WE WENT INTO THE BACK OF ENEMY LINES AND RECONNOITERED THE ROADS…WE SAW SOME TANKS, GOT ON EACH RADIO CHANNEL UNTIL WE GOT FIGHTERS IN THE CHOCHIWON AREA, AND ANY FIGHTER WHO HEARD US WOULD GIVE US A CALL AND WE WOULD GIVE THEM THE TARGET.” While airmen responded to fill the combat need for direct support, they lacked both the equipment and the training to accomplish the mission. For example, TAC’S ONLY CONTROL ORGANIZATION, THE 502D TACTICAL CONTROL GROUP, EARNED A PALTRY THIRTY PERCENT EFFECTIVENESS RATING BY INSPECTORS DURING A PRE-WAR INSPECTION. Failure of the USAF TO CONTINUE DEVELOPMENT OF WWII DIRECT SUPPORT ORGANIZATION RESULTED IN THE

LACK OF CAS COMMAND AND CONTROL CAPABILITY AT THE BEGINNING OF THE KOREAN WAR.

PROMPTED INTO ACTION BY THE OUTBREAK OF THE WAR AND THE OBVIOUS NEED FOR BETTER AIR-GROUND INTEGRATION ON THE BATTLEFIELD, TAC AND ARMY FIELD FORCES PUBLISHED A DOCTRINAL TRACT TO IMPROVE AIR-GROUND OPERATIONS, \textit{JOINT TRAINING DIRECTIVE FOR AIR-GROUND OPERATIONS (JTD)} ON 1 SEPTEMBER 1950. WHILE NEITHER THE AIR STAFF NOR ARMY STAFF ACCEPTED JTD AS SERVICE POLICY OR JOINT DOCTRINE, BOTH ALLOWED ITS USE IN THE KOREAN WAR ZONE. JTD PROVIDED AMPLIFICATION AND REVISION OF THE PRINCIPLES, MEANS, AND PROCEDURES SET FORTH IN FM 31-35. For example, JTD guidance directed the Army to create and maintain the communication structure of the tactical air request network. The JTD stated, “The division G-3 air officer, the S-3 officer of combat commands or regiments, and the S-3 air officers of infantry, armored infantry, and armored battalions are provided special radio equipment for the transmission of requests for tactical air support within the division.” In contrast, the USAF received responsibility to create and maintain the tactical air direction network to execute control of CAS on the battlefield. The separation of communication channels prevented decentralized control below the tactical air force level and resulted in many examples of poor CAS integration on the battlefield. The FEAF Report on the Korean War stated, “At the start of the war, many ground force personnel apparently did not realize their responsibilities to provide communications between their units and the JOC, nor did they always comply with the coordination procedures established to implement the air-ground

\footnotesize{\textsuperscript{52} Tactical Air Command, \textit{History of USAF CAS Command and Control}, 33. \textsuperscript{53} Joint Training Directive for Air-Ground Operations (Fort Monroe: Office, Chief, Army Field Forces, Langley AFB: Headquarters, Tactical Air Command, 1 September 1950) 140. \textsuperscript{54} Millett, “Korea, 1950-1953,” 394. Millett notes, “The JOC-AGOS system of processing all missions insured that sorties often arrived too late to provide timely support to beleaguered ground troops. The JOC communications system again proved too centralized and slow, and not one air request from II ROK Corps came through normal channels. In addition, the principal Eighth Army officers in the JOC found themselves ill-informed of the tactical situation by both their Air Force counterparts and their own subordinates.}
TACTICAL CONTROL SYSTEM. By the end of the Korean War, an Army solution to this problem involved creating additional TACPs and employing them down to the battalion level to improve decentralized CAS execution and coordination. In order to provide the level of TACP support desired by the Army, the USAF and Army agreed on a compromise in which the Army provided a majority of the enlisted personnel and equipment while the USAF furnished the Forward Air Controller (FAC). However, the Army requirement for fifteen FACs per division resulted in the need for over 360 pilots, far in excess of USAF capabilities. Unfortunately many of these air-ground coordination issues stemmed from the fact the Air Force did not have the equipment or trained personnel in place to provide the level of support the Army desired.

EQUIPMENT

Inadequate or obsolete equipment also played a key role in the poor coordination and integration of tactical air power employment during the early stages of the Korean War. TACPs radio jeeps proved vulnerable to enemy fire and rough terrain and their portable radios proved unreliable.

56 Millett, “Korea, 1950-1953,” 398. Millet states, “Division commanders supported the proposal to assign one TACP to each maneuver battalion and to fuse the air request and air direction functions in the TACP, which would communicate requests directly to the JOC or only through a division FSCC. Air Force commanders resisted the move to multiply the TACPs and enlarge their functions. They experimented with putting FACs in helicopters, but decided the ground fire risk was too great. They also argued that the Army’s use of air support was so wasteful that the Air Force should make no special concessions until ground commanders became more competent in planning air support. Even though the Army now supplied all the equipment and enlisted personnel of the TACP, the Air Force saw no profit in providing experienced fighter-bomber pilots for FACs if the Army did not use their skills well.”
57 Futrell, The USAF in Korea 1950-1953, 708. Robert Futrell states, “In a change designed to simplify the support of the front-line parties the USAF and U.S. Army on 2 July 1953 agreed that the Army would provide the equipment and enlisted personnel of tactical air-control parties but that the Air Force would continue to furnish the forward air controller.”
58 Futrell, The USAF in Korea 1950-1953, 708. Robert Futrell states, “Since both the Air force and the Marines agreed that a FAC had to be a pilot of flight-leader proficiency, the Army requirements for fifteen FACs per division would have required the Fifth Air Force to provide 364 pilots for FAC duty in Korea. Such a requirement—even for pilots who were not of flight-leader caliber—would have been extremely expensive in Korea.”
These problems shifted the burden of controlling strikes to the hastily formed airborne FACs flying ill equipped WWII era L-5 observation aircraft. The FACs quickly switched to the T-6 Texan equipped with radios that could handle ground requests as well as direct fighter-bombers.\textsuperscript{60} The lack of adequate equipment led to communication issues in the integration of direct support on the battlefield. Communication limitations affected the entire tactical air request and direction system. The TACPs, T-6, and fighter-bombers all communicated on an 8-channel ARC-3 radio, while coordination with Army units depended on the less reliable SCR-300.\textsuperscript{61} FACs preferred to strike at targets well forward of friendly troop positions to limit the potential of fratricide due to poor communications. Additionally, TACC elements, including the 502d Tactical Control Group, deployed with the same radar sets utilized during WWII. One USAF study noted, “The equipment available was that used in WWII and was not suitable for use in the rugged Korean terrain…personnel were not qualified to perform the highly technical maintenance that was required for operation of the equipment.”\textsuperscript{62} The issue of obsolete equipment and low quality of personnel training prior to the start of the Korean War reflected the lack of Air Force interest in the development of tactical air power employment following WWII.

Combat operations and direct support experience during the Korean War did little to change or improve the organization of direct support units after the armistice. While the USAF employed the direct support organizational structure developed during WWII and modified by JTD with some degree of success, USAF leaders subsequently ignored several important lessons brought out at the Air-Ground Conference at Fifth Air Force upon conclusion of combat operations.\textsuperscript{63} Each of the lessons dealt

\textsuperscript{60} Millett, “Korea, 1950-1953,” 364.
\textsuperscript{62} Evaluation of the Effectiveness of the USAF in Korea (Maxwell AFB: Air University, 30 July 1951) 12.
\textsuperscript{63} Millett, “Korea, 1950-1953,” in \textit{Case Studies in the Development of CAS}, 394. Proposed changes to the air request and air control system as spelled out in the JTD doctrine after the Air-Ground Operations Conference in Seoul August 8 to 22, 1953:
WITH IMPROVING AIR-GROUND COMMAND AND CONTROL TO FACILITATE BETTER AND
FASTER INTEGRATION OF CAS ON THE BATTLEFIELD. THE GROUND FORCE
COMMANDERS WANTED CHANGES TO INCREASE THE EFFICIENCY OF THE CURRENT CAS
REQUEST AND TACTICAL AIR CONTROL SYSTEM. HOWEVER, USAF LEADERS REMAINED
FOCUSED ON THE MISSIONS OF STRATEGIC BOMBING AND INTERDICTION AND DID NOT
WANT TO DRAW LIMITED ASSETS AWAY FROM THESE TO SUPPORT CAS. AS IN WWII,
THE USAF CONTINUED TO PUT CAS AS THE LOWEST PRIORITY MISSION BEHIND AIR
SUPERIORITY AND INTERDICTION. SEVERAL FACTORS INFLUENCED THE DECISION TO
IGNORE COMBAT LESSONS FROM THE KOREAN WAR. MANY MILITARY AND POLITICAL
LEADERS FELT THAT KOREA WAS A DIVERSION FROM THE REAL SOVIET THREAT IN
EUROPE AND THE STYLE OF WAR FOUGHT IN KOREA WAS UNIQUE AND WOULD NOT
APPLY ELSEWHERE. GENERAL GEORGE STRATEMEYER WARNED THAT THE KOREAN
CONFLICT PRESENTED LESSONS UNIQUE TO THAT THEATER AND IT WOULD MAKE A POOR
MODEL FOR PLANNING FUTURE OPERATIONAL REQUIREMENTS.  

GENERAL STRATEMEYER CLEARLY STATED, “THE POINT I WANT TO MAKE IS: THE WAR HAS BEEN
FOUGHT WITH A MINOR POWER AGAINST A VERY AGGRESSIVE GROUND OPPONENT AND IF
WE ARE NOT CAREFUL, PEOPLE BACK HOME IN THE PENTAGON WILL DRAW CONCLUSIONS
FROM THIS WAR WHICH WILL NOT BE TRUE.”

FURTHER, THE POLITICS AND ECONOMIES OF PRESIDENT EISENHOWER’S “NEW LOOK” POLICY AFTER THE KOREAN WAR ALSO
PLAYED A ROLE AS IT DROVE THE SERVICES TO COMPETE AGAINST EACH OTHER FOR
LIMITED BUDGET DOLLARS. CHARLES WILSON, PRESIDENT EISENHOWER’S SECRETARY

1. Once the theater air commander had decided on the relative importance of all air missions, the
   JOC should allocate a set number of sorties to ground corps commanders and pass control of the
   sorties to a subordinate TADC run by an air officer. The corps could communicate directly
   through the AGOS to the supporting aviation units. In an emergency the JOC could override
corps-determined sorties.

2. The corps TADC/FSCC could manage its sorties so that aircraft checked in on a pre-determined
time-table for pre-planned strikes, but would be predictably available for emergency missions.
The existence of pre-planned missions ensured that the corps would not make up trivial sorties just
to use its aircraft.

3. The air request system had to be decentralized and simplified, especially for emergency missions.
   Whether the request came from a ground officer or air officer, it should go directly to the corps
   TADC/FSCC. Intervening echelons of command should monitor the tactical air request net, but
   not intervene except in emergencies.

64 Robert Futrell, Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force 1907-1960
OF DEFENSE, CALLED THE SERVICE CHIEFS TOGETHER IN 1953 TO EMPHASIZE THE POINT THAT THE US ALREADY POSSESSED THE MILITARY STRENGTH TO DETER FUTURE ADVERSARIES AND STATED, “ANY ATTACK ON THIS NATION WOULD BE FOOLHARDY IN THE EXTREME.”\textsuperscript{66} AS A RESULT, THE USAF REMAINED FIRMLY FOCUSED ON SAC AND ITS MISSION OF NUCLEAR DETERRENCE WHILE DISPLAYING A DECLINING INTEREST IN TACTICAL AIR POWER AND CAS.


THE USAF ENTERED THE KOREAN WAR UNPREPARED FOR THE INTEGRATION OF AIR AND LAND POWER UPON THE BATTLEFIELD. DESPITE THE OVERWHELMING AMOUNT OF PRACTICAL EXPERIENCE FROM THE WWII BATTLEFIELDS OF WESTERN EUROPE, USAF LEADERS APPLIED LITTLE TIME OR THOUGHT TO THE CONTINUED DEVELOPMENT OF DIRECT SUPPORT ORGANIZATION TO IMPROVE INTEGRATION WITH THE ARMY. BUDGETARY CONCERNS COMBINED WITH LIMITED ASSETS AND A PRIMARY FOCUS ON THE ROLE OF SAC IN THE YEARS BETWEEN WWII AND KOREA LEFT THE USAF ILL-

\textsuperscript{66} Futrell, Ideas, Concepts, Doctrine, 424.
\textsuperscript{67} Millett, “Korea, 1950-1953,” 399.
\textsuperscript{68} Millett, “Korea, 1950-1953,” 399.
\textsuperscript{69} Sunderland, Evolution of Command and Control Doctrine for Close Air Support, 32.
PREPARED TO CONDUCT DIRECT SUPPORT OPERATIONS AT THE START OF THE KOREAN WAR. THE USAF ENTERED THE CONFLICT WITH POORLY TRAINED DIRECT SUPPORT FORCES EQUIPPED WITH OBSOLETE MATERIAL FROM WWII. WHILE BOTH THE USAF AND ARMY WORKED ON THE DEVELOPMENT OF FM 31-35 AND JTD, NEITHER ACCEPTED THEM AS THE STANDARD FOR EMPLOYMENT BETWEEN THE TWO SERVICES. HOWEVER, JUST AS IN WWII A DECADE EARLIER, OPERATIONAL NECESSITY FORCED USAF LEADERS TO PLACE MORE EMPHASIS ON DIRECT SUPPORT OF THE ARMY.

ONCE AGAIN WWII BATTLEFIELD EXPERIENCE PROVIDED THE FOUNDATION FOR THE IMPLEMENTATION OF A TACTICAL AIR CONTROL SYSTEM TO INTEGRATE AND CONTROL TACTICAL AIR POWER IN SUPPORT OF GROUND FORCES. UNLIKE THE AAF EXPERIENCE IN WWII, THE USAF DID LITTLE TO IMPROVE DIRECT SUPPORT ORGANIZATION DURING THE COURSE OF THE KOREAN WAR. ONCE A WORKING DIRECT SUPPORT SYSTEM WAS IN PLACE, THE USAF DID LITTLE TO IMPROVE IT. FURTHERMORE, THE USAF FAILED TO DRAW LESSONS FROM THE KOREAN WAR TO CONTINUE THE DEVELOPMENT OF FUTURE DIRECT SUPPORT ORGANIZATION. USAF LEADERS CONVINCED THEMSELVES THAT THE LESSONS FROM KOREA WOULD NOT APPLY TO LAND WAR IN EUROPE. BASED ON THE UNIQUE CIRCUMSTANCES OF THE CONFLICT, MANY USAF LEADERS SUCH AS LT. GEN. STRATEMEYER FELT IT WOULD BE VERY EASY TO DRAW THE WRONG CONCLUSION FROM THE WAR IN REGARD TO THE EMPLOYMENT OF AIR POWER IN FUTURE CONFLICTS. THIS VIEW WORKING IN CONJUNCTION WITH BUDGETARY DEMANDS AND THE EMPHASIS OF DEFENSE ON THE CHEAP THROUGH NUCLEAR DETERRENCE RESULTED IN THE NEAR COMPLETE ABANDONMENT OF DIRECT SUPPORT FORCES AFTER THE KOREAN WAR. JUST AS THE AAF HAD DONE AT THE END OF WWII, THE USAF FAILED TO TAKE THE DIRECT SUPPORT LESSONS OF THE KOREAN WAR AND APPLY THEM TO DEVELOP ORGANIZATION FOR FUTURE CONFLICTS. THIS SITUATION WOULD CAUSE THE USAF TO RE-DEVELOP AND IMPLEMENT DIRECT SUPPORT ORGANIZATION TO MEET THE DEMANDS OF VIETNAM AND THE COLD WAR.
CHAPTER 3

EVOLUTION OF DIRECT SUPPORT ORGANIZATION DURING THE COLD WAR

I HAVE LONG BELIEVED THAT SINCE THERE EXISTS IN THE ARMY AND THE AIR FORCE A UNIQUE COMPLEMENTARY RELATIONSHIP TO CONDUCT WARFARE ON THE LANDMASS, IT IS ABSOLUTELY ESSENTIAL THAT A CLOSE RELATIONSHIP EXIST, AT ALL LEVELS, BETWEEN THE TWO SERVICES. THE ARMY’S RECENT EXPERIENCE IN SOUTHEAST ASIA HAS FURTHER REINFORCED MY BELIEF IN THE ESSENTIALITY OF CLOSE WORKING TIES WITH THE AIR FORCE... THE PROBLEM THAT GEORGE BROWN AND I BOTH FACE, IS HOW TO CARRY OVER THIS COMMONALITY OF PURPOSE WHICH EXISTED SO CLEARLY IN VIETNAM, AS IT HAS IN OTHER OPERATIONAL SETTINGS, INTO THE ENTIRE FABRIC OF RELATIONSHIPS BETWEEN THE TWO SERVICES.

GENERAL CREIGHTON

ABRAMS

DIRECT SUPPORT ORGANIZATION TOOK A GIANT LEAP FORWARD IN THE 1960S WITH THE EXPANSION OF TACTICAL FORCES TO OFFSET THE SOVIET CONVENTIONAL ADVANTAGE IN EUROPE AND TO PROVIDE FOR THE BUILDUP OF FORCES IN SOUTHEAST ASIA (SEA). PRESIDENT KENNEDY’S ADVOCACY OF THE CONCEPT OF FLEXIBLE RESPONSE FUELED THE DEVELOPMENT OF TACTICAL FORCES BY PROMOTING DEVELOPMENT OF GENERAL PURPOSE FORCES IN AN EFFORT TO “REDRESS THE IMBALANCE” BETWEEN NUCLEAR AND CONVENTIONAL FORCES.70 FACED WITH INCREASING PRESSURE FROM THE DEPARTMENT OF DEFENSE AND THE ARMY OVER CAS ISSUES, THE USAF CONDUCTED A JOINT EXAMINATION WITH THE ARMY TO EXAMINE CAS TOPICS RELATED TO TTPS, TRAINING AND INDOCTRINATION, RESOURCES, COMMAND RELATIONSHIPS, AND TYPE OF CAS AIRCRAFT. AT THE SAME TIME, THE USAF FACED A GROWING CONFLICT IN SEA IN WHICH TACTICAL AIR POWER PLAYED AN EVER INCREASING ROLE IN PROVIDING DIRECT SUPPORT TO GROUND FORCES. THE GROWTH AND DEVELOPMENT OF CONVENTIONAL FORCES ALSO PROPELLED THE INTEGRATION OF AIR FORCE WEATHER AND MOBILITY ASSETS PROVIDING THEATER...

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LEVEL COMBAT SUPPORT. AIR FORCE weather units and theater airlift assets providing direct support to the Army grew in importance in order to meet the demands of rapidly deployable mechanized forces. The development of Tactical Air Control Partiers (TACP), Combat Weather Teams (CWT), and Tactical Airlift Liaison Officers (TALO) forces during the Vietnam War provided the foundation for the further evolution of direct support organization throughout the Cold War and into the 1990s.

DIRECT SUPPORT ORGANIZATION in VIETNAM

Just as in WWII and Korea, the USAF established a Tactical Air Control System in Vietnam based on the model of centralized control and decentralized execution to direct air operations. The senior air commander at the Air Operations Center (AOC) controlled the early TACS in SEA, with an Air Support Operation Centers (ASOC) collocated at the Corps headquarters providing forward operational control for CAS and tactical air reconnaissance.\(^\text{71}\) Air Liaison Officers (ALO) and FACs integrated at the Corps level, moved to lower command echelons to coordinate as required, and worked under the direct supervision of an ASOC director. Control and Reporting Centers (CRC) and Control and Reporting Posts (CRP) provided radar and communication control throughout South Vietnam, (Figure 3).

The USAF established a Tactical Air Control System into South Vietnam in 1962 and pulled ALOs and FACs from Fifth Air Force to man the organization.\(^\text{72}\)

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\(^{71}\) Tactical Air Command, History of USAF CAS Command and Control, 53.

\(^{72}\) Tactical Air Command, History of USAF CAS Command and Control, 59.
FIGURE 3


THE IMPLEMENTATION OF THE JOINT AIR GROUND SYSTEM (JAGOS) MELDED THE ARMY AIR GROUND OPERATIONS SYSTEM WITH THE ESTABLISHED TACTICAL AIR

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73 Tactical Air Command, History of USAF CAS Command and Control, 61.
74 Tactical Air Command, History of USAF CAS Command and Control, 63.
Control System in 1965.\textsuperscript{75} The implementation of JAGOS along with the expansion of TACs down to the battalion level solved many of the CAS coordination problems experienced in WWII and Korea. The Air Force gained control of the of the immediate air request nets for the TACPs at battalion level and above reducing coordination delays by passing immediate CAS requests directly to the DASCs.\textsuperscript{76} Additionally, the TACC assumed the responsibility for coordinating tactical air assets for pre-planned CAS requests while the DASCs concentrated on filling immediate CAS requests.\textsuperscript{77} These changes in command and control allowed for rapid request and allocation of CAS alert assets for immediate support to ground forces. The growth of TACPs and FACs in Vietnam also necessitated the development of organizations to provide training, equipment, and administrative support for these units.

Organizational support for elements of the Tactical Air Control System developed through a dual structure. This dual structure proved cumbersome as direct forces increased with the US military buildup during the Vietnam War. OPCON of TACPs started with the TACC director, ran through the DASC director or Corps ALO, and through subsequent ALOs at each Army command echelon to the senior ALO in the TACP controlling the CAS mission (see Figure 3).\textsuperscript{78} This structure allowed for centralized

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\textsuperscript{75} Tactical Air Command, History of USAF CAS Command and Control, 60.
\textsuperscript{77} CHECO Report, The DASCs in II Corps Tactical Zone, 3.
\textsuperscript{78} JP 1-02, Department of Defense Dictionary of Military and Associated Terms (Washington, D.C.: Department of Defense, 2001) 387. Operational Control (OPCON) is defined as “command authority that may be exercised by commanders at any echelon at or below the level of combatant command. Operational control is inherent in combatant command (command authority) and may be delegated within the command…Operational control is the authority to perform those functions of command over subordinate forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction necessary to accomplish the mission. Operational control includes authoritative direction over all aspects of military operations and joint training necessary to accomplish missions assigned to the command. Operational control should be exercised through the commanders of subordinate organizations. Normally this authority is exercised through subordinate joint force commanders and services and/or functional component commanders. Operational control normally provides full authority to organize commands and forces and to employ those forces as the commander in operational control considers necessary to accomplish assigned missions; it does not, in and of itself, include authoritative direction for logistics or matters of administration, discipline, internal organization, or unit training.”
CONTROL AND DECENTRALIZED EXECUTION OF TACTICAL AIR POWER. USAF LOGISTICAL AND ADMINISTRATIVE SUPPORT FOR THE DIFFERENT DIRECT SUPPORT UNITS VARIED BY ORGANIZATION TYPE AND LOCATION. INITIALLY, THE DASC ADMINISTRATIVE SECTION PROVIDED ADCON OF TACPs DEPLOYED IN THE FIELD WITH THE ARMY.\(^79\) HOWEVER, BY THE MIDDLE OF 1965 DUE TO THE BUILDUP OF US MILITARY FORCES, SEVENTH AIR FORCE ADDED THREE NEW TACTICAL AIR SUPPORT SQUADRONS (TASS) TO A PRE-EXISTING TASS TO FORM THE 504\(^{TH}\) TACTICAL AIR SUPPORT GROUP (TASG).\(^80\) THE 504\(^{TH}\) TASG ASSUMED ADCON OF THE DASCs AND TACPs FROM THE TACC IN ADDITION TO PROVIDING LOGISTICAL SUPPORT. IN THE CASE OF FACs, ADCON CHANGED BASED ON WHETHER THEY OPERATED FROM A FIXED BASE AS PART OF THE TASS OR FROM THE FIELD WITH THE TACP AS A FORWARD DEPLOYED FAC (FIGURE 4).

![TACP Chains of Command Diagram](image)

**Figure 4**
SOURCE: CREATED BY AUTHOR.

\(^79\) JP 1-02, *Department of Defense Dictionary of Military and Associated Terms*, 6. Administrative Control (ADCON) is defined as “direction or exercise of authority over subordinate or other organizations in respect to administration and support, including organization of Service forces, control of resources and equipment, personal management, unit logistics, individual and unit training, readiness, mobilization, demobilization, discipline, and other matters not included in the operational missions of the subordinate or other organizations.”

WITH RESPECT TO FACs, SEVENTH AIR FORCE REGULATION (AFR) 55-35 outlined specific duties for the Deputy Director of the DASC. These duties included, “Maintain operational control over assigned and attached Air Control parties and FAC aircraft within their respective areas of responsibility. In coordination with the respective TASS, designate operating locations for TACP and FAC aircraft within their respective areas of responsibility. Be responsible for the activities of all USAF personnel under his direct supervision / assigned to duty with the DASC.”

OPCON by the DASC or senior ALO at forward locations during mission execution occasionally created friction with the administrative support or control the TASS provided to the FACs in the field. SEVENTH AFR 23-39 spelled out the TASS responsibilities as, “Supervise training, indoctrination, and standardization of assigned and attached personnel and supervise flying and safety at operating locations within assigned geographic area of responsibility.”

In the end, FACs worked for two commanders while in the field, including the DASC through the ALO and their primary assigned TASS. This arrangement resulted in a conflict of responsibility over administrative matters such as leave, special duties, working hours, Officer Evaluation Reports, and responsibility for accident investigations. The 22ND TASS commander clearly described the situation in an end of tour report; “The TASS in fulfilling its function runs head on into the Corps ALO who naturally supposes that almost anything impinging on operations is his province…The ALO levies guard duty for aircraft, building of revetments, housing conditions, jeep maintenance…virtually everything the TASS presumes is within the scope of its support responsibilities.”

While the creation and integration of the TASG into the Tactical Air Control System did not always provide clear unity of command of Air Force assets, it provided the organization to support and control the USAF field units. The

82 CHECO Report, The DASCs in IV Corps Tactical Zone, 24.
83 CHECO Report, The DASCs in IV Corps Tactical Zone, 25.
84 CHECO Report, The DASCs in IV Corps Tactical Zone, 25.
EXPANSION IN CONVENTIONAL FORCES DURING THIS TIME ALSO PROPELLED THE GROWTH AND INTEGRATION OF AIR FORCE WEATHER SUPPORT TO THE ARMY.

**Weather Support**

Weather support to the Army became a USAF mission in the National Security Act of 1947. The Air Weather Service (AWS) fell under control of the USAF with the establishment of the Department of Defense and under a roles and mission agreement provided "meteorological service to the Army." From 1947 until 1959, the USAF provided weather support to the Army on the basis of geographic availability. Under this system, the Army requested the desired weather support from the Air Staff, and if approved, the closest AWS unit responded. This arrangement changed in 1959 with the initial activation of two Weather squadrons on Army installations organizationally aligned to provide exclusive support to the Army. AWS squadrons or detachments stationed at Army bases provided initial field and aviation weather services. The typical AWS organization supporting a field army included a Weather Squadron at the Field Army headquarters and a Weather Detachment at each subordinate Corps and Division level headquarters. The expansion of Army aviation and modernization of maneuver forces throughout the 1960s and 1970s resulted in an increased emphasis on AWS support. For example, the USAF reassigned the 5th Weather Squadron to Fort McPherson in order to provide direct support to FORSCOM units, with similar arrangements in Europe and the Pacific. In this example, OPCON and ADCON of the detachments flowed from Military Airlift Command (MAC), down to AWS headquarters, then to the

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5th Weather Wing at Langley AFB, down to the 5th Weather Squadron and finally out to the satellite units (Figure 6).

![AWS Chain of Command Diagram]

*Provides or arranges for weather support to Army units in US.*

**Figure 5**

Source: Crowder, *Army Weather Support*, 42. Produced by author from information within the paper.

This arrangement raised several issues for the detachments, as they had to rely on the Army for much of their administrative support. The USAF was responsible for installing and maintaining any AWS weather equipment while the Army provided logistical and administrative support for vehicles, field equipment, and eating facilities. Differences in service culture and level of support affected AWS personnel assigned to Army bases. John Fuller noted, “There was disenchantment by AWS personnel assigned to support the Army—such problems as life in the field, career progression, and belief that the Army was more formal and rank conscious than the Air Force.”

These issues combined with the increasing demand for AWS field units drove the need for a strong organization to provide effective command and control. The rise of tactical airpower during the Vietnam War also influenced the development and organization of air mobility support to the US Army.

**TALO Support**

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91 Fuller, *Air Weather Service Support to the United States Army*, 76.
THE TALO DEVELOPED OUT OF THE NEED TO PROVIDE BETTER TACTICAL AIRLIFT COORDINATION AND INTEGRATION WITH THE ARMY. COL RAY L. BOWERS DESCRIBED THE UNIQUE MISSION OF TACTICAL AIRLIFT IN VIETNAM:

AIR TRANSPORTATION GAVE THE ALLIES IN VIETNAM A POWERFUL TOOL FOR MOBILITY AND SUPPLY, PERMITTING MAJOR OPERATIONS IN REMOTE AREAS ON SHORT NOTICE. AIRLIFT ALSO MADE IT POSSIBLE TO ECONOMIZE ON DEFENSIVE FORCES BY AFFORDING A FAST MEANS OF REINFORCING THREATENED REGIONS, EITHER FROM OFFSHORE OR FROM OTHER PARTS OF VIETNAM. TRANSPORTS ROUTINELY SUSTAINED ISOLATED GARRISONS, WHEN NECESSARY BY PARACHUTE. FINALLY, THE TRANSPORT FORCE CONDUCTED A COUNTRYSIDE PASSENGER AND LOGISTICS SERVICE AND MADE IMMEDIATE DELIVERY OF SPARE PARTS TO REPAIR GROUNDED AIRCRAFT.  

USAF TACTICAL AIRLIFT CAPABILITY PROVIDED THE NECESSARY RESPONSIVENESS, FLEXIBILITY, AND MOBILITY TO SUPPORT FRIENDLY GROUND FORCES. THE 834TH AIR DIVISION, TASKED WITH PROVIDING TACTICAL AIRLIFT WITHIN SOUTH VIETNAM, ALIGNED TALOS WITHIN EXISTING TACPS TO IMPROVE EFFICIENCY IN THE SOUTHEAST ASIA AIRLIFT SYSTEM. GENERAL WILLIAM G. MOORE, JR. EXPLAINED THE IMPORTANCE OF EMPLOYING TALOS:

PRIOR TO 1 NOVEMBER 1966 THERE WAS VERY LITTLE INTERFACE BETWEEN THE ARMY UNITS ON TACTICAL OPERATIONS IN THE FIELD AND THE AIRLIFT CONTROL NETWORK, WHICH SUPPLIED THEM WITH ROUTINE AND EMERGENCY AIRLIFT SUPPORT. IN ORDER TO ESTABLISH THE EXTREMELY IMPORTANT LINK BETWEEN THE USER AND THE AIRLIFT CONTROL NET, WE PLACED TALOS IN THE TACPS WHERE, IN SHORT, THEY PERFORM THE SAME FUNCTIONS FOR GROUND COMMANDERS ON AIRLIFT MATTERS AS ALO’S AND FAC’S DO FOR FIGHTERS.

THE NECESSITY TO CENTRALLY CONTROL THEATER AIRLIFT WHILE FULFILLING THE GROUND COMMANDER’S NEEDS DROVE THE CREATION AND ASSIGNMENT OF TALOS TO FACILITATE TACTICAL AIRLIFT INTEGRATION. THE TALO WORKED AS A MEMBER OF

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THE DASC OR TACP AND ASSISTED THE ARMY UNIT TO DEVELOP, COORDINATE, AND SUBMIT AIRLIFT REQUESTS. HOWEVER, TALOs DIFFERED FROM TACPs, AS THEY DID NOT FALL UNDER THE TACTICAL AIR CONTROL SYSTEM CHAIN OF COMMAND, BUT REMAINED UNDER THE OPERATIONAL CONTROL OF THE 834TH AIR DIVISION. The 834TH AIR DIVISION ADDED THE TALO TO PROVIDE THE ARMY COMMANDER AND HIS STAFF ACCESS TO A DEPLOYMENT AND AERIAL RESUPPLY EXPERT, AS ALL ALOs WERE FIGHTER PILOTS OR WEAPON SYSTEM OPERATORS WITH LITTLE OR NO EXPERIENCE IN MOBILITY OPERATIONS. TALOs Deployed with their assigned ARMY unit during combat operations and advised the commander on airlift resources in support of the unit’s mission. TALOs worked as members of the TACP in the field with the ARMY, but did not fall under the command authority of the senior ALO. This organizational situation would persist within the AMLO structure 40 years later. The USAF used the TALO, TACP, and AWS experience gained in SEA and applied it across the tactical air forces to develop the organization, equipment, and training to provide conventional direct support to the Army throughout the remainder of the Cold War.

DIRECT SUPPORT DURING THE COLD WAR

Unlike WWII and the Korean War, the USAF retained the lessons learned in the development of Tactical Air Control System, AWS, and mobility assets providing direct support to the Army in Vietnam. In the late 1960s and early 1970s, TAC created TACGs that later became Tactical Air Control Wings (TAIRCW) to provide the organization for ground radar control and command and control of direct support of US ground forces. The TAIRCWs included all of the radar command and control elements of the TACC, DASCs, TACPs, and TASSs with FACs (Figure 6). During peacetime all of the elements of the TAIRCW operated at an Air Force base under the

OPCON and ADCON of the host Wing. During contingency operations and in time of war elements of the TAIRCW deployed to provide the key elements of TACS, including DASCs, TACPs, and FACs, to provide direct support to the Army. As in Vietnam, OPCON went from the TACC, to the DASC, down to the TACPs. Likewise, the lines of ADCON varied based on the location of TACPs and FACs in relation to the TASS that was providing support. This system, with a few minor changes provided the foundation for TACS organization for the remainder of the Cold War.

![1970s TAIRCW Operations Chain of Command](image)

**Figure 6**
(source: created by author.)

In the late 1970s and early 1980s, the US military’s emphasis on tactical capability increased in order to counter the perceived Soviet conventional military advantage in Western Europe. The Army responded to the Soviet challenge with AirLand Battle doctrine and TAC leaders offered a firm commitment to provide the best possible support from the TACS. For example, the Air Force established TAIRCW detachments at Army bases to provide daily interaction and improve training between TACPs and the ground units they supported in wartime. As in Vietnam, the Air Force attached TACPs at each echelon of Army command from corps to battalion.
Level. Peacetime command ran from the TAIRCW Deputy Commander of Operations to the senior ALO at each geographically separated detachment. In the example of Detachment Six of the 602d TAIRCW at Fort Lewis, a Colonel from the TAIRCW was the ASOC Director and Corps ALO to the I Corps Commander, while the Detachment Six Commander was a Lt. Colonel who was the Senior ALO for the 9th Infantry Division. The rest of the Tactical Air Control System units and functions remained centralized at the TAIRCW bases for ease of maintenance and to facilitate training for the flying and radar control assets, with FACs deploying as necessary to provide training support for the Army. The 602 TAIRCW history described this arrangement: "Stationing the FACs with the TASS units while in-garrison was the result of a mid-1960's USAF decision to pool Battalion TACPs at their parent TASS, to better arrange and utilize their resources, and at the same time to allow them for improved training goals." While this arrangement provided better FAC flying training continuity, it limited their TACP integration to deployed training exercises and combat operations. The increase in conventional US military power also resulted in the expansion of tactical airlift and greater emphasis on the role of the TALO.

The establishment of MAC in 1974 coupled with the increasing emphasis on conventional maneuver warfare required TALOs to integrate with the TACPs assigned at Army bases. However, the TALO remained in a separate chain of command. Despite being a member of the TACP, the TALO remained under the OPCON and ADCON of MAC, while receiving administrative support from the TACP. In order to focus the TALO's efforts on airlift support and maintain centralized control over all airlift functions, MAC chose to retain command of the TALO instead of passing it to the senior ALO. Under this arrangement, TALOs fell under the command of the Commander Airlift Forces (COMALF) when deployed to a theater of

98 History of the 602d Tactical Air Control Wing, Volume 1, p. 23, K-WG-602-HI 80/01/01 – 80/03/31, IRIS No. 1037242, in USAF Collection, AFHRA.
operations or a joint task force.\textsuperscript{99} The MAC Numbered Air Force or Airlift Division Commanders exercised command while the TALO was in garrison. This arrangement resulted in the TALO serving two masters. He worked for and received all of his support from the senior ALO, but continued to report to MAC during peacetime and wartime operations. MAC’s successor, AMC, maintained this organizational and command and control structure AMC’s throughout the remainder of the Cold War into the 1990s. While this arrangement provided the MAC/AMC with centralized control of its mobility assets, it disrupted unity of command within the TACP supporting the TALO. Responsibility resided with the Corps ALO to provide logistical and administrative support for the TALO, but he exercised no authority over the TALO working within his command. The fall of the Soviet Union in the early 1990s brought several changes to the other USAF assets providing direct support to the Army.

**Desert Storm**

The TAIRCW organization remained in place with minor changes throughout the Cold War. TAC maintained two TAIRCWs, the 507\textsuperscript{th} at Shaw AFB and the 602\textsuperscript{nd} at Davis Monthan AFB. The only other changes prior to the early 1990s involved the gradual deactivation of TASSs with the retirement of obsolete FAC aircraft such as the OV-10, O-2, and OA-37. Deactivation of the TASSs resulted in the ASOC, previously the DASC, assuming ADCON of the TACPs during contingency operations. Creation of the Theater Air Control System to support Operation Desert Storm in 1990 utilized the elements of the existing TAIRCWs. Radar command and control elements, ASOCs, and TACPS all deployed and operated within TACS to provide direct support for the Army during the First Gulf War. The aftermath of DESERT STORM in conjunction with the end of the Cold War brought about the downsizing of the US military.

General Merrill McPeak, CSAF, led the force reduction and reorganization of the USAF and introduced the Objective Wing structure. The Objective Wing sought to create an organization in which every function that supported a specific base and its operations reported to the local Wing Commander. According to a September 1991 USAF White Paper, the Objective Wing would: “Strengthen the chain of command by giving field commanders mission responsibility and accountability, provide decentralization of power from headquarters down to operating units, strengthen field commanders by consolidating operations, streamline and flatten the command structure by reducing layers of command, and clarify functional responsibility.” The cornerstone of this restructuring plan was the idea of “one base, one wing, one boss.” USAF active force structure downsizing in conjunction with implementation of the Objective Wing led to the demise of the TAIRCWs. TAIRCWs deactivated in conjunction with the retirement of the majority of FAC aircraft and the USAF desire to streamline and consolidate wing operations under a single commander. The existing ASOCs moved to Army bases to support their respective Corps and formed Air Support Operation Groups (ASOG) with Air Support Operation Squadrons (ASOS) below them comprised of the division, brigade, and battalion level TACPs. Peacetime command relationships started at the Numbered Air Force headquarters down to the AGOS and the ASOS, with wartime OPCON and ADCON going through the COMAFFOR to the AOC then to the ASOC and onto the TACPs. TALOs continued to operate with the TACPs, but remained under the command of AMC. General McPeak’s reorganization of the USAF also resulted in changes for AWS units supporting the Army.

103 Prior to their deactivation TAIRCWs were tenet wings on Shaw and David-Montham AFB, working in conjunction with the host operational flying wing.
The AWS organization experienced major changes after the implementation of the Objective Wing structure in 1992. The desire to consolidate operational missions under one commander in conjunction with the need to rapidly drawdown active duty manning drove the dismantling of AWS infrastructure. USAF reorganization stripped the Weather Wings of their commands and changed them to divisions (DOW) under the MAJCOM Director of Operations.\(^\text{104}\) This organizational change resulted in greater unity of command among the USAF assets working on Army bases. The Army weather support squadrons and detachments transferred from the AWS and became Weather Squadrons providing CWTs within the newly formed ASOGs.\(^\text{105}\) The units organized to consolidate all USAF organizations supporting an Army corps under one Air Force commander, the Corps ALO, following the same chain of command as the rest of the ASOG squadrons.

All USAF personnel, except the TALO, now fell under the command of the senior ALO on the installation. The reorganization of the USAF after the end of the First Persian Gulf War marked the beginning of the transition from a Cold War fighting force to the current expeditionary force.

As in WWII, the US military entered Korea and Vietnam largely unprepared for the integration of air and land power upon the battlefield. While the USAF ignored the lessons of Korea and reverted back to a reliance on nuclear deterrence, the buildup of conventional forces during Vietnam led to an emphasis on the development of direct support organization in the 1960s and 1970s. The 1960s witnessed the creation of TACGs to support the Tactical Air Control System, the introduction of TALOs to facilitate battlefield mobility operations, and the first assignment of weather units to provide exclusive support to the Army. As in WWII, the experiences of USAF tactical air forces in South Vietnam demonstrated the necessity to adapt doctrine and organization to match the current combat environment. Operational experience gained during the Vietnam War

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Provided the catalyst for change within TAC, which continued the employment and gradual development of organizations providing direct support to the Army. While nuclear deterrence remained a primary USAF mission, conventional employment and air-land integration continued to grow in importance after Vietnam to counter the perceived Soviet advantage in Western Europe. USAF leaders followed the direct support template created in Vietnam to build the Tactical Air Control System, AWS, and TALO organization employed throughout the remainder of the Cold War. Elements of the direct support organizations experienced great change with the reorganization of the USAF in the early 1990s; however the current organization of TACPs, TALOs, and CWTs providing direct support to the Army is still largely unchanged from Vietnam and the Cold War. While the USAF learned the importance of tactical air-land integration on the battlefield, it continued to rely upon wartime necessity to shape changes in force development and organization. The next chapter will examine current USAF doctrine, guidance, and organization of direct support units and the influence affecting their future development and employment.
CHAPTER 4

CURRENT ORGANIZATIONAL DOCTRINE AND GUIDANCE

AT THE VERY HEART OF WARFARE LIES DOCTRINE. IT REPRESENTS THE CENTRAL BELIEFS FOR WAGING WAR IN ORDER TO ACHIEVE VICTORY. DOCTRINE IS OF THE MIND, A NETWORK OF FAITH AND KNOWLEDGE REINFORCED BY EXPERIENCE, WHICH LAYS THE PATTERN FOR THE UTILIZATION OF MEN, EQUIPMENT, AND TACTICS. IT IS THE BUILDING MATERIAL FOR STRATEGY. IT IS FUNDAMENTAL TO SOUND JUDGMENT.

GENERAL CURTIS E. LEHAY

THE USAF EXPERIENCED A SHIFT IN ORGANIZATION AND MISSION PRIORITY FROM THE BEGINNING OF THE KOREA AND VIETNAM CONFLICTS TO THE FORCE IN PLACE AT THE END OF THE COLD WAR. THE PRIMARY RELIANCE ON STRATEGIC NUCLEAR FORCES TO DETER NUCLEAR AND CONVENTIONAL SOVIET AGGRESSION GRADUALLY GAVE WAY TO THE DEVELOPMENT OF CONVENTIONAL AIR FORCES TO MEET THE MISSION NEEDS OF SEA AND FULFILL THE ROLE OF SUPPORTING THE ARMY’S AIRLAND BATTLE DOCTRINE IN EUROPE. THIS EXPERIENCE IN CONJUNCTION WITH THE OBJECTIVE WING CONCEPT AFTER THE FIRST PERSIAN GULF WAR PROVIDED THE FOUNDATION FOR CURRENT USAF ORGANIZATION. IN CONTRAST, EACH OF THE PRIMARY USAF ASSETS PROVIDING DIRECT SUPPORT TO THE ARMY TODAY STILL RELY HEAVILY UPON THE ORGANIZATIONAL STRUCTURES DEVELOPED DURING VIETNAM AND THE COLD WAR. WHILE CONVENTIONAL USAF WINGS ADAPTED TO MEET THE CONTINGENCY DEPLOYMENT CHALLENGES OF THE 1990s, TACPs, AMLOs, AND CWTS PROVIDING DIRECT SUPPORT TO THE ARMY STILL ORGANIZE AND TRAIN UNDER A COLD WAR CONSTRUCT. THESE UNITS HAVE LARGELY FAILED TO ADAPT IN ORDER TO MEET CURRENT AIR EXPEDITIONARY OPERATIONS AND FACE MAJOR CHALLENGES IN FULFILLING FUTURE ARMY COMBAT REQUIREMENTS.

THIS CHAPTER BRIEFLY OUTLINES USAF DOCTRINAL ORGANIZATION AND CURRENT GUIDANCE GOVERNING THE ORGANIZATION OF TACP, AMLO AND CWTS PROVIDING DIRECT SUPPORT TO THE ARMY. THE CHAPTER EXAMINES THE ORGANIZATION OF THE 484TH AEW DURING OPERATION IRAQI FREEDOM AS A

USAF DOCTRINAL ORGANIZATION

ACCORDING TO AFDD 1 AIR AND SPACE DOCTRINE IS “A STATEMENT OF OFFICIALLY SANCTIONED BELIEFS, WARFIGHTING PRINCIPLES, AND TERMINOLOGY THAT DESCRIBES AND GUIDES THE PROPER USE OF AIR AND SPACE FORCES IN MILITARY OPERATIONS.” Consequently air and space doctrine provides guidance for the manner in which the USAF organizes trains and equips to prepare for future conflict. Two key concepts contained within air and space doctrine provide the foundation for how the USAF organizes. These concepts include the principle of unity of command and the tenet of centralized control and decentralized execution. Unity of command is vital to air and space power allowing for unity of effort under one commander in peacetime and during war. Likewise, centralized control and decentralized execution is a key tenet guiding the organization and employment of USAF assets in peace and war. DURING BOTH COMBAT AND PEACETIME OPERATIONS, RESPONSIBILITY OF COMMAND THROUGH A SINGLE COMMANDER, ALTHOUGH AT DIFFERENT LEVELS, IS ESSENTIAL TO ENSURE EFFECTIVE AND EFFICIENT EMPLOYMENT OF AIR AND SPACE ASSETS TO ACCOMPLISH THE MISSION.

DURING PEACETIME, THE USAF MISSION IS TO TRAIN, EQUIP, AND ORGANIZE AIR AND SPACE FORCES FOR FUTURE CONTINGENCY OR COMBAT OPERATIONS. MAINTAINING UNITY OF COMMAND WHILE ACCOMPLISHING ASSIGNED WARTIME TASKING WITHOUT

107 AFDD 1, *Air Force Basic Doctrine*, 20. AFDD 1 states, “Unity of command is vital in employing air and space forces. Air and space power is the product of multiple capabilities, and centralized command and control is essential to effectively fuse these capabilities.
108 AFDD 1, *Air Force Basic Doctrine*, 28. AFDD 1 explains, “Centralized control and decentralized execution of air and space power are critical to effective employment of air and space power. Indeed, they are the fundamental organizing principles for air and space power, having been proven over decades of experience as the most effective and efficient means of employing air and space power.”
Reorganizing forces drives current USAF organizational structure. Functional grouping of units provides a key mechanism for ensuring unity of command to provide for standardized training and equipping of combat air forces. For example, AFI 38-1 clearly states, “Organizations have these characteristics: a clear-cut purpose, goal and scope, with one individual in charge…constituting a complete entity; and natural divisions of work that clearly define where responsibility begins and ends.” In order to achieve this functional grouping without the need for reorganization during wartime, the USAF employs a standardized structure from the MAJCOM down to the wing level units.

Peacetime command flows from Headquarters USAF (HQ USAF) down through the MAJCOMs to the Numbered Air Forces (NAF) and normally ends at a wing or independent group (Figure 7).110

![Typical USAF Peacetime Chain of Command](image)

**Figure 7**

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110 AFI 38-101, *Air Force Organization*, 13. In some cases USAF organization does not follow this structure. AFI 38-101 states, “Air Mobility Command, because of its airlift generation mission, has adopted the Air Mobility Operations Group (AMOG), a “global reach” organization directly subordinate to the NAF Commander. The AMOG is designed to support airlift requirements in conventional and austere environments.”
Each level of command exercises unity of command over subordinate units. HQ USAF and the MAJCOMs are management level commands providing the staffs necessary to accomplish the organizing and equipping of current forces to meet future challenges. The MAJCOM commanders provide equipment and training guidance to the NAF commanders. The NAFs lead the tactical echelon directly below the MAJCOMs and assume responsibly for the training and readiness of operational forces. Key NAF mission tasks include, “preparing forces for deployment and employment; planning for bed down of forces; and exercising operational control of assigned forces.”

NAF commanders can expect to fill AFFOR or Joint Task Force commander duties for contingency operations. During non-deployed operations, USAF OPCON and ADCON run from the MAJCOM to the NAF and down to the wing level. The Standard wing serves as the basic USAF unit for generating and employing combat capability.

A standard wing is comprised of dependent groups aligned by function (figure 8).

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112 AFI 38-101, *Air Force Organization*, 14. AFI 38-101 explains, “The standard operational wing structure is a wing with four dependent groups (operations, logistics, support, and medical) with related functions and disciplines aligned under the appropriate group. Generally, only the wing staff and the four group commanders report directly to the wing commander. Thus, the wing commander concentrates on the wing’s primary mission and delegates authority to subordinates so they can accomplish their responsibilities. Major wing functions are divided among a few principal subordinates, each accountable for carrying out a specific part of the wing mission.”
Operational capabilities based on aircraft type or combat mission normally determine the composition of wings with the wing commander exercising unity of command over all assets. The USAF uses the standard wing structure to accomplish peacetime training and to organize for combat operations.

The primary difference in USAF organization between peacetime and wartime operations lies in the command levels above the NAF commander. Command runs from the President through the Secretary of Defense (SECDEF) to the Joint Force Commander (JFC) to the COMAFFOR. A senior USAF officer is designated the COMAFFOR and serves as the commander of USAF forces assigned and attached to the USAF component.¹¹³ Normally the NAF commander assumes the role of the COMAFFOR as is in the case of Seventh Air Force in Korea.¹¹⁴ The COMAFFOR normally exercises OPCON and ADCON over all assigned and attached USAF forces within the theater.

¹¹⁴ AFDD 2, Organization and Employment of Aerospace power, 35. In the case of an ASETF subordinate to a NAF, the MAJCOM can assign a Colonel to Major General to be the COMAFFOR based on the size of the contingency deployment.
OF OPERATIONS. SPECIFIC USAF FORCES AND CAPABILITIES, SUCH AS INTERTHEATER AIR MOBILITY AND SPACE ASSETS, MAINTAIN A GLOBAL FOCUS PRELUDDING THE TRANSFER OF OPCON TO THE JFC AND COMAFFOR.\textsuperscript{115} THIS STRUCTURE PROVIDES CLEAR UNITY OF COMMAND OF USAF DEPLOYED COMBAT FORCES.

USAF WARFIGHTING STRUCTURE CLOSELY FOLLOWS PEACETIME ORGANIZATION OF UNITS TO ALLOW A SEAMLESS TRANSITION TO COMBAT OPERATIONS. AN AEROSPACE EXPEDITIONARY FORCE (AEF) COMPOSED OF USAF COMBAT ASSETS PROVIDES COMBATANT COMMANDERS WITH RAPID AND RESPONSIVE AEROSPACE POWER.\textsuperscript{116} AEFs PROVIDE SCALABLE RESOURCES TO FULFILL SPECIFIC WARFIGHTING NEEDS AND DEPLOY WITHIN AN AEROSPACE EXPEDITIONARY TASK FORCE (AETF) AS AEROSPACE EXPEDITIONARY WINGS (AEW), GROUPS (AEG), OR SQUADRON (AES).\textsuperscript{117} OPCON AND ADCON RUN FROM THE COMMANDER OF THE SENIOR DEPLOYED ECHELON TO THE COMAFFOR. USAF ORGANIZATIONAL STRUCTURE OF THE AEW, AEG AND AES ALL MIRROR THEIR PEACETIME COUNTERPARTS (FIGURES 9 AND 10).\textsuperscript{118} CURRENT EXAMPLES INCLUDE F-15 OR F-16 FIGHTER WINGS WITH COMPOSITION BASED ON FUNCTIONAL CAPABILITY AND SCALABLE FROM WING TO SQUADRON SIZE IN ORDER TO FULFILL SPECIFIC AETF TASKING. NORMALLY ONE WING PROVIDES CORE SUPPORT ELEMENTS INCLUDING MISSION SUPPORT AND MEDICAL, WITH SPECIFIC GROUPS AND SQUADRONS ADDED TO PROVIDE ADDITIONAL OPERATIONAL CAPABILITIES. WHILE MOST USAF WINGS AND GROUPS FOLLOW THIS ORGANIZATION AND DEPLOY WITHIN THE AEF MODEL, USAF UNITS PROVIDING DIRECT SUPPORT TO THE ARMY STILL USE AN ORGANIZATIONAL STRUCTURE DEVELOPED TO MEET THE MISSION REQUIREMENTS OF THE COLD WAR.

\textsuperscript{115} AFDD 2, \textit{Organization and Employment of Aerospace power}, 51.
\textsuperscript{116} AFDD 2, \textit{Organization and Employment of Aerospace power}, 38.
\textsuperscript{117} AFDD 2, \textit{Organization and Employment of Aerospace power}, 38.
\textsuperscript{118} AFDD 2, \textit{Organization and Employment of Aerospace power}, 38. AFDD 2 explains, “Since USAF groups are organized without significant staff support, a wing slice is needed to provide the command and control for AEFs smaller than a normal wing.” Additionally, “an individual squadron is not designed to conduct independent operations; it requires support from other units to obtain the synergy needed for sustainable, effective operations. As such, an individual squadron or squadron element should not be presented by itself without provision for appropriate support and command elements.”
Organization of TACPs and CWTs Providing Direct Support to the Army

Peacetime organization of TACPs and CWTs providing direct support to the Army still follow practices established decades ago in the late 1960s. While most USAF units group together in wings based on functional capability, direct support units continue to split apart and work as independent groups and isolated squadrons on Army installations providing support to Army maneuver units. This results from the Cold War practice of assigning TACPs to support individual Army maneuver units in the same manner as Tactical Fighter Wings received base assignments in Europe. While USAF standard wings evolved into the AEF concept, direct support units continue to align with specific Army units and normally only deploy...
WHEN THEIR ASSOCIATED ARMY UNIT DEPLOYS.\textsuperscript{119} THE CURRENT DIRECT SUPPORT MODEL OFFERS THE PRIMARY ADVANTAGE OF ENSURING THE ARMY MANEUVER COMMANDER HAS DAILY ACCESS TO THE TACP, CWT, OR AMLO PROVIDING SUPPORT TO HIS UNIT. THIS SITUATION PROVIDES THE OPPORTUNITY FOR CLOSE INTERACTION AND TRAINING BETWEEN THE USAF AND ARMY ASSETS. HOWEVER, THERE ARE SEVERAL DISADVANTAGES TO THIS MODEL. ADMINISTRATIVE SUPPORT IS DIFFICULT BASED ON THE GEOGRAPHICAL DISPERSION OF DIRECT SUPPORT UNITS FROM WING ADMINISTRATIVE SUPPORT GROUPS. ADDITIONALLY, INSTITUTIONAL STOVEPIPES MAY DEVELOP BETWEEN DIRECT SUPPORT UNITS BASED ON THE ARMY MANEUVER UNIT THEY ALIGN WITH AND SUPPORT. TACPS SUPPORTING HEAVY ARMOR UNITS OPERATE DIFFERENTLY FROM TACPS SUPPORTING LIGHT INFANTRY INHIBITING STANDARDIZATION IN TRAINING AND PROCEDURES. DESPITE FOLLOWING AN OUTDATED COLD WAR BASING MODEL WITH ADMINISTRATIVE SUPPORT LIMITATIONS, TACP ORGANIZATION DOES FOLLOW THE PRINCIPLE OF UNITY OF COMMAND AND THE TENET OF CENTRALIZED CONTROL AND DECENTRALIZED EXECUTION.

TACP PEACETIME ORGANIZATION FOLLOWS A GROUP MODEL WITH AN ASOG PROVIDING UNITY OF COMMAND FOR ALL ASSIGNED TACPS AND CWTs. A CURRENT EXAMPLE INVOLVES THE 3\textsuperscript{RD} ASOG STATIONED AT FORT HOOD TEXAS SUPPORTING III CORPS. THE GROUP COMPRISES THE 3\textsuperscript{RD} WEATHER SQUADRON (WS) AND THE 9\textsuperscript{TH}, 10\textsuperscript{TH}, 11\textsuperscript{TH}, 13\textsuperscript{TH}, AND 712\textsuperscript{TH} AIR SUPPORT OPERATION SQUADRONS (ASOS) (FIGURE 11).\textsuperscript{120}

\textsuperscript{119} AFI 13-106, \textit{Air Support Operations and TACPS} (Washington, D.C.: USAF, 1994) 10. AFI 13-106 describes TACP alignment as: “The USAF aligns TACPs with Army combat maneuver units from corps through battalion and squadron. TACPs aligned with corps, division, regiments, brigade, combat aviation brigades and ranger battalion headquarters are permanently stationed with the Army unit and function as a special liaison staff element within that unit headquarters.”

\textsuperscript{120} Author’s personal experience as a Brigade ALO in 11\textsuperscript{th} ASOS.
The NAF commander exercises OPCON and ADCON through the ASOG commander who is also the Corps ALO. The 712th ASOS fulfills ASOC duties for the group while being aligned with III Corps and stationed at Fort Hood. The 9th, 10th, 11th, and 13th ASOSs provide TACP support to division, brigade, and battalion level army maneuver units. Additionally, ASOS basing aligns with the division they support. As depicted in this example, two elements of the ASOG are geographically separated and do not have access to the group for daily administrative support.

As a result, the isolated ASOSs are far more reliant upon the host army installation for logistical and administrative support. One ALO who worked within an ASOG and ASOS commented, “Administrative support was adequate within the ASOG, but support for an isolated ASOS was horrible based on the non-availability of administrative support personnel.”

Unit structure also varies by group and MAJCOM with the 4th ASOG in Europe.

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121 Lt Colonel Zane Mitchell, phone interview by author, Maxwell AFB, 9 May 2005. (19th ASOS/CC and 11th ASOS/DO). Lt Col Mitchell’s experience includes working within the 3rd ASOG at Fort Hood as the 11th ASOS/DO and as an isolated unit commander as the 19th ASOS/CC at Fort Campbell. At the 19th ASOS, ASOG administrative support was eight hours away and the nearest USAF wing support was over four hours away.
HAVING NO ASSIGNED WEATHER SQUADRON WHILE ASOGS IN AIR COMBAT COMMAND ALL HAVE ASSIGNED WEATHER UNITS. THE USAFE WEATHER SQUADRON DIVIDES ITS PERSONNEL BETWEEN MANNING CWTs AND SUPPORTING USAFE FLYING OPERATIONS. THE SITUATION IN EUROPE COULD LEAD TO CWT MEMBERS FAILING TO RECOGNIZE THE DIFFERENCE IN THE WARTIME CHAIN OF COMMAND. IN ONE EXPERIENCE AN ASOS/CC NOTED FROM AN EXERCISE IN GERMANY, "A WEATHER FLIGHT COMMANDER THOUGHT HE WORKED FOR THE ARMY G-2." Unlike the case of conventional USAF wings there is no standardized organization for the peacetime structure of ASOGs and their associated TACPS and CWTs.

WARTIME ORGANIZATION OF TACPS FOLLOWS THE STRUCTURE SPELLED OUT IN THE THEATER AIR CONTROL SYSTEM AND DIFFERS FROM THE CURRENT AEF CONCEPT OF OPERATIONS. Unlike AEF units, TACPs REMAIN FIXED IN SIZE AND COMPOSITION TO MEET THE REQUIREMENTS OF THE SPECIFIC ARMY MANEUVER UNIT THEY SUPPORT. DEPLOYMENT AND ORGANIZATION ALIGN WITH THE ARMY UNIT THEY SUPPORT RESULTING IN THE ASOG BREAKING INTO SEPARATE TACPS TO SUPPORT THE DIFFERENT ECHELONS OF THE MANEUVER FORCE (FIGURE 12).


**FIGURE 12**

122 Lt Colonel Zane Mitchell, phone interview by author, Maxwell AFB, 9 May 2005. (19th ASOS/CC and 11th ASOS/DO). The Army G-2 is the division or corps level intelligence officer.
The JFACC exercises TACON of direct support forces through the AOC and the ASOC to achieve the centralized control to move CAS where required on the battlefield. TACPs aligned at echelons below corps provide the command and control for decentralized execution of CAS at the point of contact. In the 3rd ASOG example, the 712th ASOS becomes the ASOC supporting III Corps with the ASOG commander becoming the ASOC director in addition to fulfilling duties as the Corps ALO.\textsuperscript{123} The 9th through 13th ASOSs split into their separate TACPs to support their assigned division, brigade, and battalion level maneuver units. The 3rd WS allocates its resources to provide CWT battlefield support as required between the different echelons of Army command. OPCON and ADCON run from the COMAFFOR to the AOC director down to the corps ALO. The ASOC provides logistical, maintenance, and administrative support to all of the USAF assets deployed to support the corps ALO. The Corps ALO represents the COMAFFOR as the senior Air advisor to the Army Corps commander and provides unity of command over all USAF assets supporting the corps.\textsuperscript{124} While TACP wartime organization provides clear unity of command to execute the mission, it relies upon ASOC support and is not scalable to support Army deployments below the Corps level.

In contrast, USAF CWTs providing direct support to the Army lack the clear organizational guidance in place for TACPs. While weather doctrine and command guidance highlight the importance of tactical weather support, there is little specific guidance on the organization of CWTs providing direct support to the Army. AFM 15-135 and AFI 15-128 both contain very specific guidance on CWT operations, but they provide very little organizational direction. During peacetime operations weather units may fall within the ASOG organization as in ACC or they may organize as a separate weather squadron reporting directly to the MAJCOM, as is the case.

\textsuperscript{123} AFI 13-106, \textit{Air Support Operations and TACPS}, 5. AFI 13-106 states, “The Corps ALO normally becomes the ASOC Director, reporting to the AOC when the ASOC deploys, and locates within the senior Army element CP, normally the Corps. The ASOC Director reports to the AOC Director or commander.”

\textsuperscript{124} AFI 13-106, \textit{Air Support Operations and TACPS}, 5.
Thus, during peacetime training in Europe, CWTs supporting the Army remain outside the chain of command of the 4TH ASOG stationed in Germany. Failure to follow proper chain of command can result, as discussed previously. Furthermore, this arrangement contradicts with the draft version of AFDD 2-9.1 that states, “An Air Support Operations Group commands all US Air Force forces directly supporting Army tactical units, including weather forces.”

Weather organization changes during wartime or contingency operations with CWTs providing direct support to the Army, regardless of MAJCOM, operating under the OPCON and ADCON of the Corps ALO as the senior representative of the COMAFFOR in the field. This lack of standardized organization for CWTs providing direct support during peacetime could lead to confusion of OPCON and ADCON when deploying to fulfill wartime taskings. Separate chains of command also constitute an issue for AMLOs under current doctrine.

**Organization of AMLOs Units Providing Direct Support to the Army**

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125 AFM 15-135, *Combat Weather Team Operations* (Washington D.C.: USAF, 2001) 10. AFM 15-135 states, “CWTs interact with their MAJCOM functional manager directly or indirectly. The MAJCOM functional manager fulfills responsibilities to organize, train, and equip subordinate units while the parent unit employs the resources provided by MAJCOMs to effectively and efficiently accomplish the mission. CWTs will ensure issues concerning the availability, use, and employment of resources (e.g., people and systems) are addressed through the operational chain to the MAJCOM. Specific MAJCOM responsibilities with respect to CWT operations are found in AFI 15-128, *Aerospace Weather Operations-Roles and Responsibilities*.”

126 AFI 15-128, *Aerospace Weather Operations-Roles and Responsibilities* (Washington, D.C.: 2004) 4. AFI 15-128 states, “AFW support to operational USAF and USAF field units is organized for tactical, mission-specific operations. A CWT is a generic term used to describe a weather team that provides mission-tailored weather products and services to a supported unit in garrison or at a deployed location. For USAF operations, CWTs are normally organized as Weather Flights under Operations Support Squadrons. For US Army operations, CWTs are normally organized as Detachments or Weather Flights under Air Support Operations Squadrons and Combat Weather Squadrons under Air Support Operations Groups. Detachments supporting Army operations in the European theater are organized under the 7WS and Detachments supporting Army operations in the Korean theater are organized under the 607WS. During contingencies, CWTs deploy with operational warfighters.”

As in the case of TACPs, AMLOs continue to operate within an organizational structure created and implemented during the Cold War. While the names of command echelons have changed within the airlift community, AMLOs continue to operate in a separate chain command from the TACP units they work with on a daily basis. In addition to changing the name of TALOs to AMLOs in the late 1990s, AMC published very specific guidance on the organization and mission responsibilities of AMLOs supporting the Army.

Peacetime organization of AMLOs continues to follow the model created in the wake of the Vietnam War. AMLOs normally work at the corps, division, and occasionally brigade levels providing advice to the Army commander’s staff on the safe and optimum employment of air mobility assets. 128 Peacetime OPCON and ADCON of AMLOs flows from AMC down to the NAF, through the AMOG and to the AMLOs, with the host unit Air Support Operations Squadron (ASOS) or Tactical Air Control Party (TACP) providing ADCON support (Figure 13). 129 The ASOG commander is responsible for logistical and administrative support to the AMLO while AMC retains all command authority over the AMLO. While this organization provides centralized control and decentralized execution of mobility assets for AMC, it does not provide unity of command for the ASOG commander. This situation allows AMC to move AMLOs as necessary to fulfill tactical airlift requirements on the battlefield; however, the model makes it extremely difficult for the senior ALO to provide administrative support such as force protection for the AMLO. The AMLO serves one USAF master while working with and requiring the day-to-day support of another.

128 Air Mobility Command Instruction (AMCI) 13-101, Air Mobility Liaison Officers (Scott AFB: 2003), 6.
129 AMCI 13-101, Air Mobility Liaison Officers, 4.
JUST AS IN PEACETIME, THE WARTIME COMMAND AUTHORITY OVER AMLOs FALLS OUTSIDE THE TACP ORGANIZATION. AMLOs ALWAYS REMAIN UNDER THE OPCON AND ADCON OF AMC WITH THE SENIOR ALO IN THE FIELD RESPONSIBLE FOR GENERAL LOGISTICAL AND ADMINISTRATIVE SUPPORT. OPCON AND ADCON RUN FROM THE JFC DOWN TO THE COMAFFOR THROUGH THE DIRECTOR OF MOBILITY FORCES (DIRMOBFOR) TO THE AIR MOBILITY DIVISION (AMD) DOWN TO THE AMLOs DEPLOYED IN THE FIELD (FIGURE 14).
NORMALLY, AMLOs DEPLOY TO SUPPORT THE ARMY AT THE CORPS, DIVISION, BRIGADE, OR REGIMENT LEVELS. THE AMD DIRECTOR, EXERCISING OPCON, IS RESPONSIBLE FOR REASSIGNING AMLOs TO THEATER AREAS AND UNITS REQUIRING LIAISON ASSISTANCE AND IS THE COORDINATING AUTHORITY WITH AMC FOR REQUESTING ADDITIONAL AMLOs OR OTHER AIR MOBILITY PLANNERS FOR THE THEATER OF OPERATIONS.\textsuperscript{130} WHILE THE AMC ORGANIZATION PROVIDES CENTRALIZED CONTROL AND DECENTRALIZED EXECUTION OF LIMITED AIR MOBILITY ASSETS TO SUPPORT JOINT GROUND FORCES, IT DOES NOT PROVIDE UNITY OF COMMAND FOR THE CORPS ALO AS THE SENIOR USAF COMMANDER IN THE FIELD. THE CORPS ALO RETAINS THE RESPONSIBILITY TO ADVISE AND SUPPORT THE ARMY ON ALL MATTERS INVOLVING INTEGRATION OF AIR POWER BUT EXERCISES NO AUTHORITY TO EMPLOY AMLOs AS NECESSARY TO FACILITATE THIS SUPPORT. FOR EXAMPLE, THE CORPS ALO IS UNABLE TO ENFORCE LOCALLY DICTATED MEASURES SUCH AS FORCE PROTECTION PROCEDURES FOR USAF MEMBERS OPERATING IN FIELD CONDITIONS. THIS SITUATION UNDERCUTS

\textsuperscript{130} AMCI 13-101, \textit{Air Mobility Liaison Officers}, 7.
THE AUTHORITY OF THE CORPS ALO AS THE SENIOR USAF COMMANDER IN THE FIELD. THE AMLO ORGANIZATIONAL STRUCTURE CREATES THE POTENTIAL FOR FRICTION IN THE EMPLOYMENT OF AMLOs AND DOES NOT ENSURE UNITY OF EFFORT FOR SUPPORTING THE ARMY IN THE FIELD.

Doctrinal organization of TACP, CWTs, and AMLOs providing direct support to the army still follows the basic structure developed and implemented during the Cold War. This organization provided joint interoperability for the integration of tactical airpower, but did not achieve the joint interdependence required for contemporary transformational operations. The 2004 Army Transformation Roadmap clearly explains the need for joint interdependence: “Joint interdependence purposefully combines service capabilities to maximize their total, complementary and reinforcing effects, while minimizing their relative vulnerabilities.”131

Future joint operations require complete interdependence because each service will rely on the others to fill unique operational capabilities. Key capabilities the USAF provides include air mobility and CAS. The majority of the USAF currently organizes to train and employ under the EAF concept to provide operational flexibility to fulfill joint interdependence responsibilities. However, direct support units have not adapted their structure to operate as part of an AEF. Separate chains of command and differing organizations between USAF direct support forces acts as an impediment to future joint interoperability. USAF organization and employment of TACPs and CWTs moved beyond the current doctrine and command guidance with the establishment of the 484\textsuperscript{th} AEW to provide a centralized command and control element dedicated to theater support of direct support units during Operation IRAQI FREEDOM.

USAF Direct Support Organization during Operation IRAQI FREEDOM

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THE ESTABLISHMENT OF THE 484TH AEW DURING THE BUILDUP OF FORCES PRIOR TO OPERATION IRAQI FREEDOM PROVIDES AN EXAMPLE IN WHICH THE USAF APPLIED THE AEW STRUCTURE TO TACPs AND CWTs. THE 484TH AEW STOOD UP AT PRINCE SULTAN AIR BASE IN SAUDI ARABIA AND INTEGRATED WITH THE EXISTING 363RD AEW FOR LOGISTICAL AND MEDICAL SUPPORT. SIMILAR TO THE TAIRCWS EMPLOYED DURING THE COLD WAR, THE 484TH AEW WAS AN AIR-GROUND OPERATIONS WING COMPRISED OF TACP AND CWT UNITS AND THEIR ASSOCIATED COMMAND AND CONTROL SUPPORT ELEMENTS. The 484TH AEW FOCUSED ON IMPROVING THE ADMINISTRATIVE AND LOGISTICAL SUPPORT TO THEATER TACP AND CWT FORCES WHILE RETAINING THE EXISTING THEATER AIR CONTROL SYSTEM TO PROVIDE DIRECT SUPPORT TO THE ARMY. BUILDING UPON LESSONS FROM OPERATION ENDURING FREEDOM IN AFGHANISTAN, USAF LEADERS WERE LOOKING FOR WAYS TO IMPROVE THE PLANNING, TRAINING, INTEROPERABILITY AND INTEGRATION OF AIRPOWER ON THE BATTLEFIELD.

EMPLOYMENT OF DIRECT SUPPORT FORCES DURING OPERATION ENDURING FREEDOM DID NOT FOLLOW PREVIOUS CONVENTIONAL DEPLOYMENTS. THE INITIAL COMBAT IN AFGHANISTAN USED SMALL SPECIAL FORCES TEAMS WITH COMBAT CONTROLLERS TO PROVIDE SUPPORT FOR THE NORTHERN ALLIANCE FORCES. THESE FORCES EMPLOYED WITHIN THE SPECIAL OPERATING FORCES (SOF) ORGANIZATION COORDINATING THROUGH THE COMBINED AIR OPERATIONS CENTER LOCATED IN SAUDI ARABIA. ONCE THE TALIBAN GOVERNMENT COLLAPSED AND CONVENTIONAL US FORCES, INCLUDING THE TENTH MOUNTAIN DIVISION, MOVED INTO THE COUNTRY THE SOF METHOD OF CAS EMPLOYMENT CONTINUED. US FORCES FAILED TO ESTABLISH A THEATER AIR CONTROL SYSTEM OR ASOC WITHIN AFGHANISTAN A FACTOR CONTRIBUTING TO SUBSEQUENT CAS EMPLOYMENT PROBLEMS. FOR EXAMPLE, POOR AIR-GROUND INTEGRATION BECAME EVIDENT DURING THE EXECUTION OF OPERATION ANACONDA. THE USAF ALLOCATED FEW AIRBORNE ASSETS TO PROVIDE ON CALL

132 History of the 484th Air Expeditionary Wing (U), n.p., K178.81 03/03/01 – 03/03/31, IRIS No 1146086 in USAF Collection, AFHRA. (Top Secret) Information extracted is unclassified.


134 Bruce Pirnie et al., Beyond Close Air Support, Forging a New Air-Ground Partnership (Santa Monica: RAND Corporation, 2005), 49.
CAS “because the planners had expected little opposition.”¹³⁵ Having a full Theater Air Control System with an ASOC would have facilitated better planning and immediate requests for CAS. The ground commander faced several constraints: “His headquarters in Bagram was derived primarily from his divisional headquarters and lacked an ASOC, normally found at corps level, or a full-time liaison with the CAOC.”¹³⁶ While the USAF had numerous controllers assigned within the country, there was a lack of command and control to provide unity of command and ensure appropriate air-ground integration occurred. A key USAF goal going into Operation Iraqi Freedom was to correct the command and control issues present during Operation Anaconda.

Establishment of the 484th AEW took place on January 24th, 2003 by direction of Lt Gen Moseley via order GB-38.¹³⁷ The role of the 484th AEW was to provide a centralized command and control element dedicated to the support of all TACPs and CWTs operating in the Southwest Asian theater of operations.¹³⁸ Based on experience from Afghanistan, USAF leaders wanted an organization built specifically to provide enabling support to the theater’s air-ground activity.¹³⁹ A primary reason for the creation of the wing was to provide an intermediate control function between the CAOC and TACPs, to “reduce and eliminate the communication problems that existed in Operation Enduring Freedom.”¹⁴⁰ Additionally, the 484th AEW filled a large administration role for theater direct support forces, “As the support piece was too big, too demanding, and too time-consuming to be handled by each EASOG.”¹⁴¹ Creation of the 484th AEW structure followed the current USAF model for AEWs with the wing composed of several

¹³⁵ Pirnie et al., Beyond Close Air Support, 55.
¹³⁶ Pirnie et al., Beyond Close Air Support, 59.
¹⁴⁰ Colonel Keith P. Maresca, interview by author, Maxwell AFB, 28 January 2005 interview of Colonel Maresca (Second 484 AEW/CC).
¹⁴¹ Colonel Keith P. Maresca, interview by author, Maxwell AFB, 28 January 2005 interview of Colonel Maresca (Second 484 AEW/CC).
OPERATION GROUPS, MAINTENANCE GROUP, MEDICAL GROUP, AND A MISSION SUPPORT GROUP (FIGURE 15).
EASOGs comprised each of the operations groups with subordinate EASOSSs. Following the Theater Air Control structure, each group included one specialized ASOS that functioned as the deployed ASOC to provide centralized command and control functions to the group’s EASOSSs while also providing maintenance oversight for the group.\(^{142}\) EASOS composition and responsibilities followed current doctrinal organization with unit TACPs and CWTs providing direct support to the army from the division to battalion echelons of command. Centralized control and decentralized execution provided the basis for operations. According to the 484\(^{th}\) official history, “All of the 484\(^{th}\) AEW ASOGs are expected to be centralized from the wing headquarters and deployed throughout the theater of operations.”\(^{143}\) The 484\(^{th}\) AEW Commander exercised OPCON and ADCON of TACPs and CWTs with Tactical Control delegated to each of the EASOG commanders to accomplish their missions.\(^{144}\) The operational

\(^{142}\) History of the 484\(^{th}\) Air Expeditionary Wing, 1-31 March 2003, n.p.
\(^{143}\) History of the 484\(^{th}\) Air Expeditionary Wing, 1-31 March 2003, n.p.
\(^{144}\) History of the 484\(^{th}\) Air Expeditionary Wing, 1-31 March 2003, n.p. Powerpoint slides in 484\(^{th}\) history state “CFACC delegates OPCON of all TACP and CWT forces and their associated support to Col
GROUPS WERE STRICTLY A 484TH AEW ENTITY AND HAD NO DIRECT COMMAND OR SUPPORT INTERACTIONS WITH THE 363RD AEW OPERATIONS GROUPS.

WHILE THE OPERATIONS GROUPS FULFILLED THE MISSION WITHIN THE PRE-EXISTING THEATER AIR CONTROL SYSTEM, THE CREATION OF A MAINTENANCE GROUP PROVIDED AN ADDITIONAL CAPABILITY FOR THE TACPs AND CWTs. A MAINTENANCE OPERATIONS CONTROL CENTER (MOCC) LOCATED AT THE WING PROVIDED OVERALL MAINTENANCE AND MATERIAL CONTROL FUNCTIONS FOR ALL OF THE EASOGs. The MOCC operated as a centralized maintenance control facility for all of the groups in the same manner as an ASOC does for each of the ASOSs within an ASOG. Coordination of equipment maintenance status and parts requirements resided at the MOCC with all actual mission maintenance accomplished at the decentralized operational elements. MOCC coordination of maintenance actions managed limited resources while freeing up personnel to focus on mission execution within the operations groups. Additionally it provided standardized maintenance across all of the EASOGs. Just like the operations groups, the maintenance group was strictly a 484TH AEW function and did not require integration or support from the 363 AEW maintenance group.

UNLIKE THE INDEPENDENT ROLES OF THE OPERATIONS GROUPS AND MAINTENANCE GROUP, THE 484TH AEW RELIED UPON CLOSE INTEGRATION AND SUPPORT FROM THE 363RD AEW FOR THE MEDICAL AND MISSION SUPPORT GROUP. THE 484TH AEW HAD NO ORGANIC MEDICAL SUPPORT AND RELIED UPON THE 363RD AEW TO SUPPORT BOTH AIRCREW AND NON-AIRCREW MEDICAL SUPPORT. This was not a critical issue for the 484TH AEW as most personnel moved forward to operating locations and did not require regular medical support from 363RD AEW assets. Providing mission support proved a larger issue as the EASOGs were not equipped or manned to accomplish this mission. During

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Longoria (484 AEW/CC).” The 484 AEW/CC then delegated Tactical Control to each of the Operations Group commanders for forces aligned with army maneuver forces.

145 History of the 484th Air Expeditionary Wing, 1-31 March 2003, n.p. The 484 AEW MOCC provided maintenance for vehicles, power production, ground radios, and ground combat equipment.


PEACETIME GEOGRAPHICALLY LOCATED USAF BASES PROVIDED THIS MISSION SUPPORT; HOWEVER THE 484TH AEW LACKED A ROBUST MISSION SUPPORT CAPABILITY. In order to overcome this deficiency, the 484TH AEW stood up a small mission support group as a liaison element to interface with the 363RD AEW mission support functions to ensure smooth mission support operations. This interface was vital to providing civil engineering, communications, contracting, and logistical support, finance service, and personnel support for contingency operations (PERSCO). The mission support group function required the greatest amount of coordination for the 484TH AEW to integrate into the 363RD AEW pre-existing support operations and infrastructure.

The 484TH AEW represents a major departure from current organizational doctrine and command guidance governing TACP and CWT employment. The USAF rationale for creating the wing involved providing centralized control and decentralized execution of the theater TACPs and CWTs. It also enabled clear tactical command and control to ensure the USAF provided critical air-ground integration with ground forces on the battlefield. As one 484TH AEW commander stated, “The 484TH AEW provided the Coalition Forces Air Component Commander (CFACC) with one organization to tap into air-ground forces that was collocated with the Coalition Air Operations Center (CAOC).” The 484TH AEW provided centralized command and control to ensure standardized operations among the EASOGs, standardized maintenance and logistical support between all of the ASOCs, and complete mission support to 3,400 wing members spread out across an entire theater of operations. Additionally the 484TH AEW worked to improve communications within the Theater Air Control System.

150 Colonel Keith P. Maresca, interview by author, Maxwell AFB, 28 January 2005 interview of Colonel Maresca (Second 484 AEW/CC).
AND THE 484TH AEW COMMANDER OFTEN ACTED AS THE “CONDUIT FOR CFACC COMMUNICATIONS WITH THE ASOC.”

 Utilizing the wing organization and applying it to current TACP, CWT, and AMLO units provides five potential improvements over the current doctrinal organization. First, employing a wing structure to organize TACPs, CWTs, and AMLOs and basing them at one or two locations offers unity of command of all assets providing direct support to the Army. Second, organizing these missions under one commander also enables standardized training to improve integration of operations in joint exercises and deployments. Third, this organizational structure reduces institutional stove-piping that exists within the TACP and CWT communities. As explained earlier, geographically separated direct support units sometimes adopt unit specific procedures based on the Army unit they support. Fourth, a wing structure provides better mission support to each of the elements. Instead of operating across the country at separate Army bases, TACPs, CWTs, and AMLOs located at a USAF wing would have immediate access to standard mission support capabilities. Finally, the wing structure allows for a scalable force to fit within the AEF concept of operations. Collocating all of the direct support assets at one or two wings allows the USAF to build a rotational schedule of assets to meet future training and operational deployments in the same manner that the USAF currently schedules flying squadrons for AEF rotations. Utilizing the wing structure to organize direct support units provides one method for improving air-ground integration and interoperability.

 The USAF still relies heavily upon the organization developed and implemented during the Cold War for the current employment of TACPs, CWTs, and AMLOs. While the Theater Air Control System provides for centralized control and decentralized execution of these assets during combat operations, different organizational structures between MAJCOMs

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151 Colonel Keith P. Maresca, interview by author, Maxwell AFB, 28 January 2005 interview of Colonel Maresca (Second 484 AEW/CC).
AND ASOGs influence peacetime operations and training. Additionally, AMLOs operate under the control of AMC, but live, operate with, and rely upon the ASOGs for daily support. This does not provide the ASOG commander unity of command to provide administrative support over all of the USAF assets operating within his organization. Experience from the 484\textsuperscript{th} AEW during Operation IRAQI FREEDOM demonstrated the capability of a wing organization to provide the command and control and support necessary to support all of the Theater Air Control System assets. Organizing current TACP, CWT, and AMLO assets to operate from a wing will enable these assets to move from the Cold War paradigm to meet future employment challenges.
CONCLUSION

WE CAN CONCLUDE THAT OUR DOCTRINAL PROCESS IS A DISCIPLINE — A DISCIPLINE FOR DEALING WITH NEW CONCEPTS, TECHNOLOGY, AND ROLES AND MISSIONS RELATIONSHIPS WITH OTHER SERVICES OR ALLIES. IT SERVES TO SHARPEN THE DEBATE BY PROVIDING A FRAMEWORK OF TIME-PROVEN PRINCIPLES AGAINST WHICH WE CAN ILLUMINATE AND TEST CONTENDING IDEAS NOW AND IN THE FUTURE. HOWEVER, IN THE FINAL ANALYSIS, THE MOST IMPORTANT FUNCTION OF DOCTRINE IS THAT IT PROVIDES THE FUNDAMENTAL GUIDANCE FOR THE EMPLOYMENT OF AEROSPACE FORCES IN COMBAT. IN THE EXPERIENCE OF THREE MAJOR WARS — WORLD WAR II, KOREA, SOUTHEAST ASIA — WE HAVE SEEN A CONSISTENT THREAD OF BASIC DOCTRINE ENCOMPASSED IN THE MOST FUNDAMENTAL PRINCIPLES: THAT AIR POWER IS AN ENTITY AND IS BEST EMPLOYED UNDER THE CENTRALIZED CONTROL OF A SINGLE AUTHORITY WHO IS AT A LEVEL THAT CAN BEST ORCHESTRATE THE TOTAL AIR EFFORT.

LT GENERAL JOHN PAULY

THE USAF HAS UNDERGONE AN EVOLUTIONARY PROCESS TO CREATE THE CURRENT ORGANIZATIONAL STRUCTURE PROVIDING DIRECT SUPPORT TO THE US ARMY. THE JOURNEY BEGAN UPON THE BATTLEFIELDS OF NORTH AFRICA DURING THE EARLY DAYS OF WWII AND CONTINUES TODAY WITH CURRENT COMBAT OPERATIONS IN SOUTHWEST ASIA. TWO KEY AIRPOWER TENETS GREATLY INFLUENCED THE DEVELOPMENT OF DIRECT SUPPORT ORGANIZATION DURING THE TWENTIETH CENTURY. CENTRALIZED CONTROL AND DECENTRALIZED EXECUTION OF DIRECT SUPPORT FORCES COMBINED WITH UNITY OF COMMAND EXERCISED THROUGH AN AIR COMMANDER PROVIDED THE FOUNDATION FOR DIRECT SUPPORT ORGANIZATION FROM WWII THROUGH OPERATION IRAQI FREEDOM. THE CREATION OF TACPS, CWTs, AND AMLOs FOLLOWED THESE TENETS TO FACILITATE THE INTEGRATION OF AIR AND LAND POWER DURING WARTIME OPERATIONS. HOWEVER, THE CONTINUAL DEVELOPMENT OF DIRECT SUPPORT ORGANIZATION DURING PEACETIME TO MEET FUTURE COMBAT TASKING HAS BEEN A CHALLENGE FROM WWII TO OPERATION IRAQI FREEDOM. DESPITE USAF SUCCESS IN ADAPTING DOCTRINE, ORGANIZATION, AND EQUIPMENT TO MEET CURRENT COMBAT CHALLENGES, IT HAS REPEATEDLY FAILED TO DEVELOP EXISTING
DIRECT SUPPORT ORGANIZATION DURING PEACETIME TO MEET FUTURE EMPLOYMENT REQUIREMENTS.

WWII combat experience of USAAF direct support forces provided the foundation for future organizational development. Prior to WWII the AAF placed little emphasis on direct support and focused on daylight strategic bombing with little thought applied to the integration of air and land power upon the battlefield. There was no significant development of organization, equipment, or training to support the Army. Early combat lessons forced AAF leaders to reexamine the role of tactical airpower and place a greater emphasis on direct support of the Army. Battlefield experience from North Africa led to the creation of FM 100-20, which emphasized centralized control of airpower by an AAF commander. USAAF leaders took this new mandate and created the Tactical Air Commands at the field army level to provide the centralized control and unity of command necessary to coordinate tactical air power during the march across Western Europe. The WWII experience of USAAF tactical air power in Western Europe demonstrated the necessity to adapt doctrine, organization, and equipment to match the current combat environment. However, the end of the war brought about the demobilization of the US military and the near-complete disbandment of direct support organization. AAF leaders failed to take the lessons learned from WWII and apply them to the development of direct support organization to meet future combat requirements, leaving the nascent USAF unprepared to conduct these operations in Korea.

The Korean War experience did little to further the development of USAF direct support organization. As in WWII, the USAF entered the war unprepared for the integration of air and land power upon the battlefield. The USAF began the conflict with poorly trained and ill-equipped direct support forces. USAF leaders relied upon WWII battlefield experience and equipment to implement a Tactical Air Control system to provide direct support, but did nothing to improve direct support organization over the
COURSE OF THE WAR. MANY USAF LEADERS VIEWED THE KOREAN WAR AS AN ANOMALY, A CONFLICT WITH LITTLE APPLICABILITY FOR A FUTURE CONFLICT AGAINST THE SOVIET UNION. THIS MINDSET IN CONJUNCTION WITH FISCAL CONSTRAINTS RESULTED IN THE USAF FAILING TO APPLY KOREAN COMBAT EXPERIENCE TO FURTHER DEVELOP DIRECT SUPPORT ORGANIZATION, REPEATING THE MISTAKE COMMITTED BY THE USAAF AFTER WWII. THIS SITUATION WOULD CAUSE THE USAF TO RE-DEVELOP AND IMPLEMENT DIRECT SUPPORT ORGANIZATION TO MEET THE DEMANDS OF THE VIETNAM WAR.

CURRENT USAF direct support organization still follows the model put in place during the Cold War and fails to integrate with the AEF concept of operations. While the majority of USAF units organize as standard wings for generating and employing combat capability, direct support units continue to align and station with specific Army units. This organizational scheme follows the Cold War model aligning TACP, AMLO, and CWT assets with specific Army maneuver units based on the assumption that major combat would most likely occur in regions where the Army maintained a large, long-term presence.\textsuperscript{152} This concept of operations is outdated as the US military transforms in order to provide worldwide force projection. While USAF standard wings and groups are scalable to fulfill warfighting needs based on contingency requirements, direct support forces continue to structure their size and composition based on the Army unit they support. The geographically separated ASOGs and ASOSs are currently inflexible and ill-suited to meet AEF tasking. The USAF needs to change direct support organization to meet future combat challenges including Army transformation.

Army transformation provides a unique challenge to the future organization of USAF direct support forces. The US Army is working to transform its forces to achieve greater combat capability with modular capabilities-based units. Within its current force structure the Army must often disassemble division and corps structures to create purpose-built task forces.\textsuperscript{153} Army leaders are working to organize their forces to achieve expeditionary capabilities, with smaller, rapidly deployable units for shorter duration campaigns. To accomplish this goal, the Army is creating modular combined arms maneuver Brigade Combat Team Units of Action referred to as BCT(UA).\textsuperscript{154} The BCT(UA) represents the Army field maneuver unit of the future and is scalable to meet the demands of individual

\textsuperscript{152} Bruce Pirmie, et al., Beyond Close Air Support, Forging a New Air-Ground Partnership (Santa Monica: RAND Corporation, 2005) 92.


\textsuperscript{154} USA, 2004 Army Transformation Roadmap, 3-2.
contingency operations. Additionally, the Army is creating modular headquarters known as the Unit of Employment X (UEX) and Y (UEY) to provide primary tactical, operational, and theater level command and control. Instead of deploying multiple command layers inherent in the current Corps construct, the Army will employ a UEx scaled to meet the contingency requirements. USAF direct support organization needs to adapt in order to meet the demands of the Army transformation model.

Current USAF direct support organization fails to integrate with Army transformation for three primary reasons. First, present TACP and CWT forces have a limited capability to adjust in size and composition to fulfill BCT(UA) support requirements. Direct support forces currently organize to support traditional Army maneuver units. Second, the Army transformation concept will increase the demand for direct support forces. The Army is planning on the assignment of Terminal Air Controllers to every maneuver company, a situation that will require a substantial increase in the number of certified controllers within TACPs. Current TACP organization does not provide for the support of Army maneuver companies. Finally, the USAF direct support command and control structure works through the ASOC that currently resides at the Corps level. The limited number and size of ASOCs fails to provide the scalable command and control below the division level required to support UEExs and BCT(UA)s. Contemporary TACP, CWT, and AMLO units need to organize in order to enable joint interoperability across the entire spectrum of warfare. Army transformation increases the need for CAS and air mobility support to enable faster and lighter operations. One example is the Army’s increased need for CAS in the future: “As the Army seeks to become more strategically deployable and agile on the battlefield, it is reducing the

155 USA, 2004 Army Transformation Roadmap, 3-5 to 3-7. According to the 2004 Army Transformation Roadmap, “The unit of employment X (UEx) is the Army’s primary tactical and operational war-fighting headquarters. It is designed as a modular, command and control headquarters for full-spectrum operations. The UEy would focus on the Army’s component responsibilities for the entire theater’s joint, interagency and multinational operational land forces.”

156 Pirnie et al., Beyond Close Air Support, 168.
WEIGHT OF FIRES AVAILABLE TO MANEUVER UNITS.”\textsuperscript{157} The responsibility lies with USAF direct support assets to meet the requirements of Army transformation to ensure synergy upon future battlefield. Limitations of current direct support assets to operate within the Army’s transformation concept of operations requires the adaptation of USAF direct support organization to ensure the future integration of air and ground power.

Organization of USAF direct support assets should follow the standard wing structure to align with AEF operations and to ensure air-ground integration in future engagements. Building upon lessons gleaned from the 484\textsuperscript{th} AEW experience during Operation IRAQI FREEDOM, the USAF must integrate TACPs, CWTs, and AMLOs within the standard wing structure to manage training, equipment, and organization to meet the demands of Army transformation. Adapting the standard wing organization to collocate TACPs, CWTs, and AMLOs within Air Support Operations Wings (ASOWs) will provide the structure to enable joint interoperability. Establishing ASOWs will offer five improvements over the current USAF direct support organization.

First, establishment of ASOWs provides unity of command for all direct support assets. The creation of two ASOWs in the US and one each for Europe and Asia allows the capability for functional grouping to enable centralized control of TACP, CWT, and AMLO assets. Second, organizing as a wing enables standardized training and equipping to improve integration of operations in joint exercises and deployments. Direct support units will train to support all Army forces as opposed to focusing on one type such as light infantry or air mobile. Third, the ASOW structure reduces institutional stove-piping that currently exists between different ASOGs geographically separated from one another. Fourth, a wing structure provides better mission support to direct support assets and reduces the friction of having to rely on peacetime support from distant installations. Following the TAIRCW model from the 1980s and 1990s, ASOWs should

\textsuperscript{157} Pirnie et al., \textit{Beyond Close Air Support}, 167.
operate on pre-established Air Force Bases (AFB) to integrate into the existing medical and mission support infrastructure. Finally, the ASOW allows for scalable direct support forces to fit within the AEF and Army transformation concepts of operations. Collocating TACP, CWT, and AMLO assets within the ASOWs allows the USAF to build a rotational schedule of assets to fulfill the specific requirements of training and combat deployments.

While the ASOW concept provides a way to improve air-ground integration, it faces several implementation obstacles. First, creation of the ASOWs runs counter to the Objective Wing concept implemented in the early 1990s. ASOWs require integration with a current AFB wing structure for medical, logistical, and administrative support and will break the “one base, one wing, one boss” edict of the Objective Wing concept. This situation should be easily resolved as ASOGs already receive significant support from neighboring AFBs. Second, the USAF will need to convince the Army of the benefits involved with moving direct support forces from Army bases to the ASOWs. Currently, the Army maneuver commanders have daily access to direct support assets, and may object to their removal. While Army maneuver commanders will lose daily peacetime access to direct support assets, the ASOW concept will enable better training for direct support assets to promote joint interoperability in future combat operations. USAF leaders will face the challenge of explaining the benefits the ASOW structure provides for future air-ground integration on the battlefield. Finally, AMC will need to relinquish ADCON of AMLOS to the ASOW commander. Future Army operations will be lighter and more agile, relying heavily on USAF air mobility support getting to the battlefield. The ASOW commander will require command authority of the

158 One concept is to create an East Coast ASOW stationed at Shaw AFB and a West Coast ASOW at Davis Montham AFB to provide regional direct support forces. These wings would operate in the same manner as tenet wings prior to the Objective Wing reorganization. This would align the ASOW with a NAF for close interaction with an AOC for peacetime training. The overseas ASOWs in Europe and Asia should align with the appropriate NAF.
AMLOs to enable joint interoperability in a highly fluid environment. The ASOW will provide the COMAFFOR interface with the Army in the field, and requires the authority to task all direct support assets as necessary to fulfill immediate taskings. While AMC wants to retain command of all mobility assets to ensure the global control of airlift, the ASOW commander requires ADCON to maintain unity of command to manage all of the direct support assets on the battlefield. Overcoming these obstacles will enable the ASOws to provide better organization of direct support forces.

Direct support organization has played a critical role in every major conflict since WWII. In WWII, Korea, and Vietnam the USAF and USAF developed a direct support structure based on combat experience, but subsequently failed to maintain it at the end of each conflict. Historical evidence from these conflicts demonstrates the necessity to develop a clearly defined direct support organization during peacetime to meet the demands for future combat employment. Lessons from the 484\textsuperscript{th} AEW during Operation Iraqi Freedom highlights the advantages of a wing organization for improving centralized control / decentralized execution and providing unity of command for direct support forces. Based on historical evidence and recent experience, the ASOW concept provides the best organization of peacetime direct support forces to fulfill current and future air-ground integration with the Army.
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