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***AIR FORCE COMBAT SUPPORT:
ADJUSTING DOCTRINE TO MEET
EXPEDITONARY AIR FORCE
REQUIREMENTS***



Lt Col Russell R. Grunch

Senior Air Force National Defense Fellow – RAND Corporation

Santa Monica, California

April 17, 2000

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DISCLAIMER

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Combat Support issues and for corresponding with me to answer follow-on questions.

ABOUT THE AUTHOR

Lt Col Russell Grunch is currently a National Defense University Fellow at RAND Corporation in Santa Monica, California. His last duty assignment was as Chief of Logistics Plans for the Combined Forces Command in Seoul, Korea. In this position, he supervised a multi-service staff of United States and Republic of Korea field grade logistics officers. He was responsible for developing combined logistics concepts and procedures to support operational plans for the defense of the Republic of Korea.

Lt Col Grunch has a broad background in logistics including assignments at the Air Force squadron, wing, numbered air force, and major command levels as well serving three joint assignments. Lt Col Grunch is a designated Joint Duty Officer. He has had two command tours at Diego Garcia in the British Indian Ocean Territories and at Osan Air Base in the Republic of Korea. He is married to Jeanie Grunch and has two children, Lynn and Raymond.

PREFACE

The current U.S. Air Force vision of its future is the Expeditionary Aerospace Force (EAF) with the ability to rapidly deploy anywhere in the world in hours and days to meet taskings provided by the National Command Authorities. Although the Air Force has always had this mindset, the drastic overseas force drawdown after the end of the cold war and an expanding role in supporting small contingencies around the world has made rapid deployment more important than at any other time in Air Force history. This paper provides specific recommendations on how Air Force Combat Support doctrine can be adjusted so that rapidly deployed EAF forces can be supported when they reach their warfighting bases.

The Air Force has always been able to deploy rapidly. However, this is of little use without a Combat Support system at the end destination to provide the airfield, munitions, fuel and support equipment needed to fly combat missions. This paper provides doctrinal recommendations that will allow the Air Force to (1) shape a worldwide Combat Support infrastructure to support the EAF concept and (2) improve the Air Force Forces (AFFOR) organizational structure to better shape and control a theater's Combat Support infrastructure to meet EAF timing requirements. Many of the recommendations for a worldwide

Combat Support infrastructure are drawn from previous RAND studies on how the Air Force can better support the EAF. Many of the AFFOR recommendations are based on lessons learned from the Air War Over Serbia.

This report begins with a review of current doctrine on the contingency roles of MAJCOM and NAF Combat Support staffs. The 1999 Air War Over Serbia (AWOS) campaign is then analyzed to show how the Combat Support community in United States Forces Europe evolved from a doctrinally correct organization that was flawed to a non-doctrinal approach that provided better support. We will then look at another theater by looking at Combat Support issues in a notional Korean scenario. Lastly, this report provides specific recommendations to the Air Force on how Combat Support doctrine can be adjusted to be more responsive to EAF requirements.

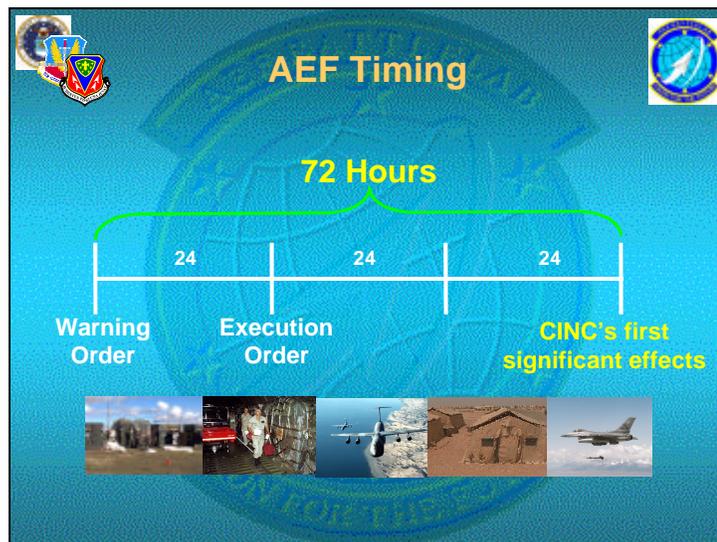
SECTION I – INTRODUCTION

The purpose of this paper is to suggest how Air Force doctrine can be adjusted to provide sufficient Combat Support guidance for Major Commands (MAJCOM) and Numbered Air Forces (NAF) to meet Expeditionary Air Force (EAF) requirements. Specifically, doctrine needs to (1) be adjusted to better explain a vision for strategically shaping Combat Support to meet contingencies anywhere in the world and (2) better define the Combat Support missions of the Commander Air Force Forces (COMAFFOR) at the MAJCOM and NAF levels.

As we will see in Sections II and III, current Air Force doctrine results in MAJCOMs and NAFs developing nonstandard EAF and contingency Combat Support approaches. As a result, deploying wings cannot develop standardized procedures for plugging into existing MAJCOM resources as each theater has different procedures. In addition, it makes it difficult for the Air Staff to champion a common approach to developing a worldwide EAF support structure. Specific areas that are negatively impacted due to insufficient doctrine are:

- Combat Support infrastructure
- Combat Support organizational structures
- Combat Support training
- Combat Support command and control systems

Expanded guidance in the above areas would better enable the Air Force in a contingency to establish airfields in “hours and days” anywhere in the world with the infrastructure, munitions, fuel and sustainment needed to generate combat sorties, as the new EAF deployment concept requires. In addition, a worldwide standardized approach to Combat Support would simplify unit level training and their ability to plug into theater support in an EAF deployment.



EAF REQUIRES DEPLOYMENT IN HOURS AND DAYS¹

The Air Force is very good at rapidly deploying combat forces for the EAF concept. However, having a worldwide web of bases ready in “hours and days” with the munitions, fuel and support equipment so combat forces can execute their mission is another story. Previous studies have shown the Air Force is not ready to do this.²

The Air Force's Combat Support doctrine has never been tested to deploy in "hours and days" to a base outside of an existing Air Force infrastructure. Operations in Korea, Vietnam, Libya, Panama, Desert Storm, and the air wars over the Balkans and Serbia were either supported by an existing Combat Support infrastructure or weeks, months and even years were available to build and shape a Combat Support infrastructure. In addition, the old Cold War scenario resulted in highly developed Combat Support structures in Europe and the Pacific that were mature and supported by numerous Forward Support Locations (FSLs) and Forward Operating Locations (FOLs).

“ The Air Force goal of deploying to an unprepared base and sustaining a nominal expeditionary force at a high operating tempo or a 36-hour package capable of air-defense suppression, air superiority, and ground attack aircraft cannot be met with current support processes. A 48-hour time line can be met only with judicious prepositioning and even then only under ideal conditions.”³

“ It is naïve to think we can provide a sustained flow of munitions by air anywhere on the globe in a handful of hours. However, through proper preparation, prepositioning, training, and planing, the Air Force can obtain the munitions availability to support the EAF concept anywhere in the world”⁴

Altogether, these past experiences have resulted in a false sense of security that the Air Force can today deploy anywhere in the world in

hours and days with the ability to put bombs on target. Since the end of the Cold War, our worldwide Combat Support infrastructure has been sharply reduced due to the dramatic reduction of overseas bases. In addition, the mission of the Air Force has gone away from a Cold War mentality with fixed basing requirements to a global mentality requiring deployments anywhere in the world. As a result, the ability to project forces overseas in a rapid manner has been reduced while at the same time the Air Force worldwide deployment mission has expanded.



CHALLENGES FACING THE 21st CENTURY AIR FORCE⁵

This paper will address Combat Support issues at the MAJCOM and NAF levels and provide doctrine suggestions that provide three benefits to the EAF:

- *The immediate benefit will be MAJCOM and NAF staffs having a clear picture of their peacetime Combat Support strategic shaping*

mission in support of the EAF and contingency operations. The Air Staff also has a key role in this strategic shaping and their role will be discussed. This portion of my recommendations will draw heavily from RAND studies over the last three years on how the Air Force can better support the EAF concept.

- *The specific roles of Air Force Forces (COMAFFOR) Combat Support staffs at the MAJCOM and NAF level will be outlined. Currently, their roles are confusing and it is unclear which level of command is overall in charge for coordinating Combat Support in a contingency. This will allow these staffs to organize, train and evaluate their staffs, and develop augmentation requirements so they are ready to meet EAF mission requirements.*
- *A longer-term benefit is the Air Force can now begin to develop an integrated Combat Support Command and Control automated system that supports the needs of the entire Combat Support community from Wing to Air Staff level. Today's Combat Support command and control systems need drastic improvement as the current system inhibits successful EAF operations.⁶ It will be difficult to make these improvements in a coherent way until doctrine clearly states Combat Support responsibilities resulting in standard organizational structures throughout the Air Force.*

It is important to point out that this report concentrates only on MAJCOMs and NAFs having an AFFOR/JFACC mission. There are numerous MAJCOMs and/or NAFs in AETC, AMC, ANG, and AFR that do not have these missions and are outside the scope of this study.

This report will begin with a review of current doctrine on the roles of MAJCOM and NAF Combat Support staffs and how they are organized to support contingency operations. The 1999 Air War Over Serbia (AWOS) campaign will then be analyzed to show how Combat Support Command and Control evolved from a doctrinally correct operation that was flawed to a non-doctrinal approach that worked. We will then look at another theater by looking at Combat Support doctrine and organizational issues in a notional Korean scenario. Lastly, this report provides recommendations to the Air Force on how Combat Support doctrine can be adjusted to be more responsive to EAF requirements.

¹ “Air Expeditionary Force Battlelab Briefing”: U.S Air Force Air Expeditionary Force Battlelab Web Page, on-line, Netscape, 15 Mar 00, available from www.mountain.af.mil/aeftb/download.htm slide 11 This slide portrays the overall Air Force timing concept for EAF deployments.

² Robert Tripp and Tim Ramey, “Leveraging Logistics to Enhance the Effectiveness of Rapid Response Air Expeditionary Forces,” RAND Report PM-691-AF, Santa Monica, California, July 1997, 2-5.

³ Robert S. Tripp, Eric Peltz, Hyman Shulman, Timothy Ramey, Randy King, CMSgt John G. Drew, Clifford Grammich, “A Vision for Agile Combat Support”, Air Force Logistics Management Agency 2000 First Quarter in Review: 10-19

⁴ Lt Col David K. Underwood and Captain John E. Bell, “AEF Munitions Availability,” Air Force Journal of Logistics, Vol. XXIII, Number 4, Winter 1999: 40

⁵ “Expeditionary Aerospace Force Briefing”: US Air Force Expeditionary Air Force Web Site, slide 4, on-line, Netscape, 2 Apr 00, www.af.mil/eaf/master.ppt This slide portrays how the Air Force has changed since the fall of the Berlin Wall.

⁶ “The Way Ahead,” A report prepared for the Chief Information Officer, USAF, by the Global Combat Support System-AF Requirements Integration Tiger Team, 31 Aug 99: 10

SECTION II – AIR FORCE DOCTRINE FOR COMBAT SUPPORT

This section provides background information on current doctrine and the impact on Combat Support. We will briefly describe the two doctrinal documents that most impact Combat Support and then go into specifics of what each document says. This will provide the background necessary to address the issues raised in the remaining sections of this report.

ORGANIZATION AND EMPLOYMENT OF AEROSPACE POWER: AIR FORCE DOCTRINE DOCUMENT 2 (AFDD-2)

The first major document is AFDD-2. AFDD-2 expands on Air Force Basic Doctrine on how the Air Force presents and commands forces in a joint environment. AFDD-2 is unofficially called the “handbook for the Commander Air Force Forces”¹ and now contains information from a document prepared by USAFE called the “little red book” which described to the joint world how the Air Force goes to war.²

AFDD-2 specifically describes the establishment of a Commander, Air Force Forces (COMAFFOR) for presenting and commanding Air Force forces within a joint environment and the methodology for setting up the Aerospace Expeditionary Task Force.³ AFDD-2 goes into extensive detail on how the Air Force is organized in wartime in the operations arena to execute its warfighting mission.

However, AFDD-2 only describes in general details how Combat Support will be provided and does not get into the details needed for a MAJCOM or NAF staff to understand their specific Combat Support doctrinal roles.

COMBAT SUPPORT:
AIR FORCE DOCTRINE DOCUMENT 2-4 (AFDD 2-4)

The second document is AFDD 2-4. AFDD 2-4 provides an overview of Combat Support doctrine and chapter four is intended to specifically describe “how combat support is organized to ensure aerospace forces receive support.”⁴ However, AFDD 2-4 does not adequately address how to strategically shape Combat Support to provide a worldwide Combat Support infrastructure to support the EAF. In addition, AFDD 2-4 does not provide any specific guidance that a MAJCOM or NAF can use to shape their infrastructure, organization, command and control, manning, and training to meet EAF requirements.

Now, we will cover specific items in these two documents that are important to understand.

“The Numbered Air Force (NAF) is the senior war-fighting echelon of the US Air Force”⁵

First, we will look at the Air Force’s warfighting command structure. US Air Force Doctrine is very specific that the Numbered Air Force (NAF) is the Air Force’s highest war-fighting echelon. As such, the

NAF mission is war fighting planning and execution. One of the better ways to describe a NAF's peacetime role is "the NAFs are a combat staff in a peacetime mode."⁶ In joint operations where the Air Force has the preponderance of air forces, the NAF commander assigned to the operation will be normally be designated the Joint Force Air Component Commander (JFACC). When designated a JFACC, the NAF is a warfighting headquarters responsible to the Joint Force Commander (JFC). The JFACC has the authority to plan, coordinate, allocate, and task assigned joint air forces based on the JFC's apportionment decisions.⁷

The NAF's have purposely been limited to 99 person to keep them focused on operational planning and to ensure they don't become a management headquarters.⁸ A management staff implies having a complete functional staff responsible for conducting organizing, training, equipping assigned forces. The Air Force has developed a skip echelon structure that results in Wings bypassing the NAF and going to straight to the parent MAJCOM on many non-operational Combat Support issues.

"MAJCOMs sit on top of a skip-echelon staffing structure. MAJCOMs, wings, and squadrons possess the full range of staff functions needed to perform required tasks; NAFs, groups and flights have no or minimal staff. These tactical echelons are designed to increase operational effectiveness rather than to review and transmit paperwork.....Problems, however, often are solved by staff communication through the functional chain, bypassing echelons where the function is not found."⁹

Several of the NAFs, such as Seventh Air Force, Ninth Air Force and Twelfth Air Force support specific operational plans and have been given “below the line” units in addition to their 99 person staffs to help them meet their mission requirements. These below the line units can make a NAF very large but the NAF focus still remains operational. As an example, Seventh Air Force has over 1300 personnel assigned to the NAF but the core staff remains at 99. The additional personnel are in tactical units such as in a Combat Operations Squadron, Air Control Squadron, Air Intelligence Squadron, civil engineering RED HORSE squadron, and many other tactical type units.¹⁰ In addition, Third Air Force and Sixteenth Air Force in USAFE have been given 28 person Regional Planning Teams to conduct wartime planning in addition to their 99 person staffs.¹¹ These additional personnel at Seventh Air Force, Ninth Air Force, Twelfth Air Force and the USAFE NAFs are not intended to perform management headquarters functions. The bottom line is management of the force including most Combat Support issues remains the overall responsibility of their parent MAJCOMs.

The NAF commander is required to provide augmentation and/or possibly fill five staffs simultaneously.¹² There are Combat Support manpower requirements in all five staffs. The first four staffs are the AFFOR, key JAOC (Joint Air Operations Center) staff positions within the

JFACC, joint task force liaison positions, and the core of the JTF staff if the COMAFFOR is selected as the JTF commander. The fifth staff is a JFACC support staff when the AFFOR and JFACC are separately located.¹³ With NAF manpower ceilings, it is most difficult for a NAF to fill just the AFFOR requirements much less any of the other requirements. This will be addressed in the AWOS section of this report.

Now, we will review the Air Force's command structure to provide service unique support in support of contingency operations. This is sometimes referred to as providing the bullets, beans and beds. From a Combat Support viewpoint, the mission of a warfighting NAF quickly becomes confusing when reviewing Air Force doctrine.

“Each CINC’s Commander of Air Force Forces (COMAFFOR) is the associated Air Force MAJCOM commander...MAJCOM commanders may delegate COMAFFOR authorities to NAF commanders”¹⁴

Air Force doctrine makes it clear that the AFFOR is responsible for Combat Support operations in support of the warfighter. What isn't clear is the division of AFFOR labor between MAJCOMs and NAFs.

MAJCOMs, such as PACAF, ACC, and USAFE are the designated COMAFFOR to their regional theater joint commander. However, there are a number of variables that makes this complicated and it is difficult to understand whom the real AFFOR is for an operation.

Pacific Air Forces (PACAF) is the AFFOR to US Pacific Command while its Seventh Air Force in Korea is the designated AFFOR to US Forces Korea. Air Combat Command (ACC) at Langley AFB is the AFFOR to Joint Forces Command¹⁵ (JFC) but it's Ninth Air Force and Twelfth Air Forces are AFFORs to joint commands that are outside of ACC's area of responsibility¹⁶. As a result, MAJCOMs often are not in the joint chain of command that their NAFs are fighting in.

Air Force doctrine recognizes these unique command relationships and allows for MAJCOMs to delegate certain AFFOR responsibilities to their NAFs. In addition, Air Force doctrine recognizes that the MAJCOM still has AFFOR responsibilities for all of its forces even when one of their NAFs is acting as an AFFOR in a different joint command. This relationship is cemented through a "forward" and "rear" AFFOR relationship.¹⁷ An example of this was during AWOS where Sixteenth Air Force in Italy was the AFFOR forward while USAFE Headquarters in Germany was the AFFOR rear staff. The problem with these arrangements is that doctrine does not provide enough guidance for the MAJCOMs and NAFs to understand their AFFOR mission to allow them to organize and train accordingly. Specifics of this problem will be reviewed in the AWOS portion of this report.

A deeper look at doctrine is warranted to review the AFFOR mission as it relates to Combat Support. The AFFOR has many roles and

responsibilities that cover many functional areas but the following are the key Combat Support roles:

AFFOR Combat Support Missions:¹⁸

- *Organize, train, equip, and sustain assigned and attached Air Force Forces for in-theater missions*
 - *Maintain reachback to the US Air Force component rear and supporting Air Force units. Delineate responsibilities between forward and rear staff elements*
 - *Support operational and exercise plans as requested*
 - *Inform the Joint Force Commander of planning for changes in logistics support that would significantly affect operation capability or sustainability...*
 - **Develop program and budget requests that comply with combatant commander guidance on war-fighting requirements and priorities*
 - **Inform the combatant commander...of program and budget decisions that may affect joint operation planning*
 - *Provide lateral interface with Army, Navy, Marines, SOF and coalition partners*
 - *Establish force protection requirements*
- * Normally...retained by combatant command level Service component commander”*

The first bullet in the above chart points out why it becomes confusing when a NAF is assigned the AFFOR role. Organizing, training, equipping and sustaining the force are not NAF roles nor are they manned to do this. The lowest level of expertise for this type of effort in the Air Force is at the MAJCOM. The second bullet on reachback and delineating responsibilities between forward and rear staff elements in

regards to Combat Support is even more confusing. In peacetime, the Wings go directly to their MAJCOMs for most Combat Support reachback issues. As an example, NAFs do not track aircraft spare parts on a daily basis in peacetime and the whole logistics system is based on a Wing/MAJCOM relationship. The problem in a contingency with these first two bullets is it is most difficult for a NAF to begin working these issues during contingencies when established procedures are already in place that excludes them.

Air Force doctrine leaves it up to the MAJCOM as to which AFFOR duties are passed on to the NAF commander. However, this is a vague area that is not well addressed in standing mission directives. As an example, PACAF has only issued a formal Mission Directive to one of its NAFs.¹⁹ The end result is this attempt to make doctrine fit all types of scenarios causes confusion for a MAJCOM and NAF when they try to determine it's AFFOR Combat Support mission and develop appropriate staffing, training and exercise requirements.

Another area causing confusion is the simple question of who is in charge of Combat Support. According to Air Force doctrine, AFFOR Combat Support consists of the following functional areas:

AIR FORCE COMBAT SUPPORT FUNCTIONS²⁰		
ACQUISITION	LOGISTICS PLANS	SAFETY
CHAPLAIN	MAINTENANCE	SECURITY FORCES
CIVIL ENGINEER	MATERIEL MANAGEMENT	SERVICES
COMMUNICATIONS	MUNITIONS	SPACE SUPPORT TEAMS
COMPTROLLER	OSI	SUPPLY
CONTRACTING	PERSONNEL	TRANSPORTATION
HEALTH SERVICES	PUBLIC AFFAIRS	LEGAL
	MANPOWER	

When the COMAFFOR has an operational question, he turns to his senior operations person to work it with the expectation that he comes back with a fully coordinated answer that takes into account all operational functional areas. However, when it comes to Combat Support, the COMAFFOR has to determine what the issue is and then who should work it since there is no senior Combat Support leader. At the NAF level, many of these Combat Support areas are not represented and they rely on their MAJCOM or the host Wing for those support areas. A typical MAJCOM or NAF will have reporting to him many different senior officers in charge of Combat Support functions and questions from the Commander often requires cross-functional input.²¹ This type of setup results in the possibility the Commander receiving stove piped functional answers that has not been coordinated with the rest of the Combat Support community. This split of Combat Support responsibilities in peacetime normally works because immediate

responses are not required. However in a contingency, this dispersed responsibility results in greater demands on the commander to manage his staff. It is interesting to note that the Army gets around this problem at the warfighting level by having a deputy commander for operations and a deputy commander for support.

Until the release of the new AFDD-2, 17 February 2000, it was difficult to determine the specific roles of the AFFOR and JFACC. Unlike former documents, which merged the AFFOR and JFACC roles into one section, the new AFDD-2 separates the roles and missions for the AFFOR and JFACC. This update fixes some of the AWOS problems that will be pointed out in Section III. However, when it comes to Combat Support, the new AFDD-2 is similar to prior documents and states the AFFOR “manages the service authority issues—the beds, beans and bullets” but does not get into specifics.

The logical place for the specifics on Combat Support doctrine is in AFDD 2-4. However, as mentioned earlier, AFDD 2-4 is general in nature and does not provide any specific guidance. This leads to each MAJCOM and NAF setting up different Combat Support structures resulting in a different way of business wherever you go in the Air Force. This has tremendous training and response time implications.

COMBAT SUPPORT IS A THEATER-WIDE FUNCTION

It is unclear in doctrine as to who is responsible for Air Force Combat Support in a warfighting theater. This results in confusion at NAF and MAJCOM staff levels as it is unclear of the MAJCOM/NAF relationship for Combat Support. Air Force Doctrine states that “logistics and combat support should be integrated with operational planning system to support the concept of employment-driven logistics planning.”²²

This is confusing to a NAF staff because although they are overall responsible for operational planning for a specific region, they do not control all the Combat Support assets needed to wage a war. It is also confusing to a MAJCOM as they are responsible for providing Combat Support to an operation but the actual operational planning is usually conducted at the NAF level. Even when the MAJCOM has a NAF that is working for a different JFC, such as the Air Combat Command and Ninth Air Force relationship, the MAJCOM still coordinates the Combat Support efforts of multiple NAFs while working with the Air Staff and other MAJCOMs.

This is a key point as in today’s Air Force, no one NAF is in control of the Combat Support needed to fight a war. A warfighting NAF relies on their parent MAJCOM to develop theater support plans and to task other NAFs and coordinate with the Air Staff and outside supporting

commands to provide overall Combat Support to the operation.

Outlining the specific roles of the MAJCOM and NAF Combat Support staffs are recommended in Section V of this report and would help to clarify their roles and mission.

REVIEW

To review the main points of this section, US Air Force Doctrine clearly establishes an organizational structure that separates warfighting responsibilities (JFACC mission) and service specific responsibilities to include Combat Support (AFFOR mission). This is important for two reasons. First, the warfighting staff should not be bogged down with service related issues which detract from executing their wartime role. As a result, warfighting NAF's are not manned to perform as management headquarters to include most Combat Support functions yet are forced to assume this ill-defined role in a contingency. Second, it is possible that an Airman from another service may be the JFACC. In this second case, it is important the Air Force has an organizational structure that can take care of service and Combat Support needs when another service is in command of the overall air operation.

It is interesting that Air Force doctrine specifically states that the NAF is the senior war-fighting echelon in the Air Force. However, it does not state which organizational level is the highest AFFOR echelon in the Air Force. This issue will be addressed in Section V.

We will see in the next section the shortcomings of Combat Support doctrine during the Air War Over Serbia. This inadequate doctrine led to a Combat Support organizational structure that had to be changed at the worst possible time—after a war had already started.

¹ “Air Force Doctrine Document 2: Organization and Employment of Aerospace Power Briefing”, Air Force Doctrine Center Web Page, on-line, Netscape, 26 Mar 00, available from www.hqafdc.maxwell.af.mil/library/doctrine/afdd2brief.ppt: slide 2

² “The little red book” was developed by USAFE to educate the Joint community on how the Air Force organizes for war. Many of these concepts were incorporated in the newly released AFDD-2.

³ “Air Force Doctrine Document 2--Organization and Employment of Aerospace Power,” 17 Feb 2000: i

⁴ “Air Force Doctrine Document 2-4—Combat Support,” 22 Nov 1999: 25

⁵ “Air Force Doctrine Document 2--Organization and Employment of Aerospace Power,” 17 Feb 2000: 34

⁶ “Pacific Air Forces War Reserve Materiel Management Guide,” 26 Jul 96: 7

⁷ “Air Force Doctrine Document 2--Organization and Employment of Aerospace Power,” 17 Feb 2000: 54

⁸ “Air Force Instruction 38-101—Air Force Organization,” 1 Jul 98: 9. This document states “NAFs are tactical echelons that provide operational leadership and supervision. They are not management headquarters and do not have complete functional staffs. Many NAFs are responsible for MAJCOM operations in a specific geographic region or theater of operations. The number of persons assigned to a NAF headquarters varies from case to case, but should not exceed 99 manpower authorizations without an approved waiver from HQ USAF/XPM.”

⁹ Ibid, 5

¹⁰ “7AF Unit Manning Document,” Microsoft EXCEL Database, April 1996. Available from the author.

¹¹ The author visited both of these USAFE NAFs in September 1999. The Third Air Force regional planning flight is an intact unit reporting to the NAF Director of Logistics. The Sixteenth Air Force regional planning flight personnel has been absorbed by functional area into different NAF staff elements.

¹² “Air Force Doctrine Document 2--Organization and Employment of Aerospace Power,” 17 Feb 2000: 49, 54-56

¹³ Ibid, 49

¹⁴ “Air Force Doctrine Document 1--Air Force Basic Doctrine,” September 97: 69

¹⁵ Formerly US Atlantic Command (ACOM)

¹⁶ Ninth Air Force is the AFFOR to US Central Command. 12AF is the AFFOR to US Southern Command

¹⁷ “Air Force Doctrine Document 2--Organization and Employment of Aerospace Power,” 17 Feb 2000: 37

¹⁸ Ibid, 53

¹⁹ The author reviewed the PACAF Mission Directives index and could only find one that applied to a NAF (Eleventh Air Force in Alaska.) No Mission Directives for NAF staffs could be found in the USAFE Mission Directives index.

²⁰ “Air Force Doctrine Document 2-4—Combat Support,” 22 Nov 1999: 25

²¹ The author compared the Combat Support functions in AFDD 2-4 to the organizational charts for PACAF and USAFE. Both commands have 15 different staffs reporting directly to the MAJCOM commander in regards to Combat Support functional areas. In Seventh Air Force, the Commander has 9 different Combat Support staff sections reporting directly to him with another 3 supporting him from Wing level.

²² “Air Force Doctrine Document 2--Organization and Employment of Aerospace Power,” 17 Feb 2000: 76

SECTION III – AIR FORCE COMBAT SUPPORT DURING THE AIR WAR OVER SERBIA

The Air War Over Serbia (AWOS) in 1999 was a case of the Air Force fighting a Major Theater of War (MTW) sized operation¹ from a location where it was neither expected nor planned. As a result, AWOS is an excellent model to study for expeditionary support. This section will point out the shortcomings of Air Force Combat Support doctrine during the execution of this operation. Fortunately, the Air Force had superb Combat Support leadership who overcame doctrine and organizational shortfalls through adaptation and innovation. Just as fortunate was the availability of sufficient time to build and shape the theater Combat Support infrastructure to meet these unexpected demands.

NUMBERED AIR FORCE CONFIGURATION FOR AWOS

Sixteenth Air Force stationed at Aviano AB, Italy was designated both the JFACC and AFFOR for AWOS. As discussed in the previous chapter, it was doctrinally correct to designate the NAF to have these responsibilities. Unfortunately, this doctrine is flawed from a Combat Support viewpoint.

“The doctrine is clear regarding the integration of the COMAFFOR A-staff, JFACC staff, and JAOC staff. Unfortunately, the doctrine is inherently flawed.”²

During AWOS, the integration of JFACC/AFFOR command structures was immediately a problem for Combat Support operations. The AFFOR Combat Support staff was initially the Sixteenth Air Force logistics staff located at Aviano AB. However, as doctrine would dictate, the Sixteenth Air Force staff did not deploy to Vincenza, Italy to be the core JFACC staff. This resulted in separate Combat Support staffs for the AFFOR and JFACC. The JFACC was manned with augmentation from many sources and will be addressed in the next paragraph. As a result, the JFACC did not have a trained and cohesive Combat Support staff to provide it the information needed to build and manage the air campaign and the daily Air Tasking Order (ATO). Even had the AFFOR staff been sent forward to Vincenza, the operation became too large and complicated to perform both the AFFOR and JFACC Combat Support roles with a single group of people.³

JFACC STAFF

The JFACC staff was organized around the 5th Allied Tactical Air Force (ATAF) staff at Vincenza, Italy with heavy augmentation from the 32 Air Operations Squadron (AOS) from HQ USAFE along with augmentees deployed from throughout the Air Force. 5th ATAF had no U.S. Combat Support personnel assigned and the 32AOS only had a few low ranking Combat Support personnel. The bulk of the JFACC Combat Support staff came as individual augmentees from multiple locations. As

a result, the JFACC Combat Support staff and had never seen each other or trained together before being deployed to Vincenza.

“I arrived in the middle of the conflict. Prior to my involvement, I had absolutely no European experience.”⁴

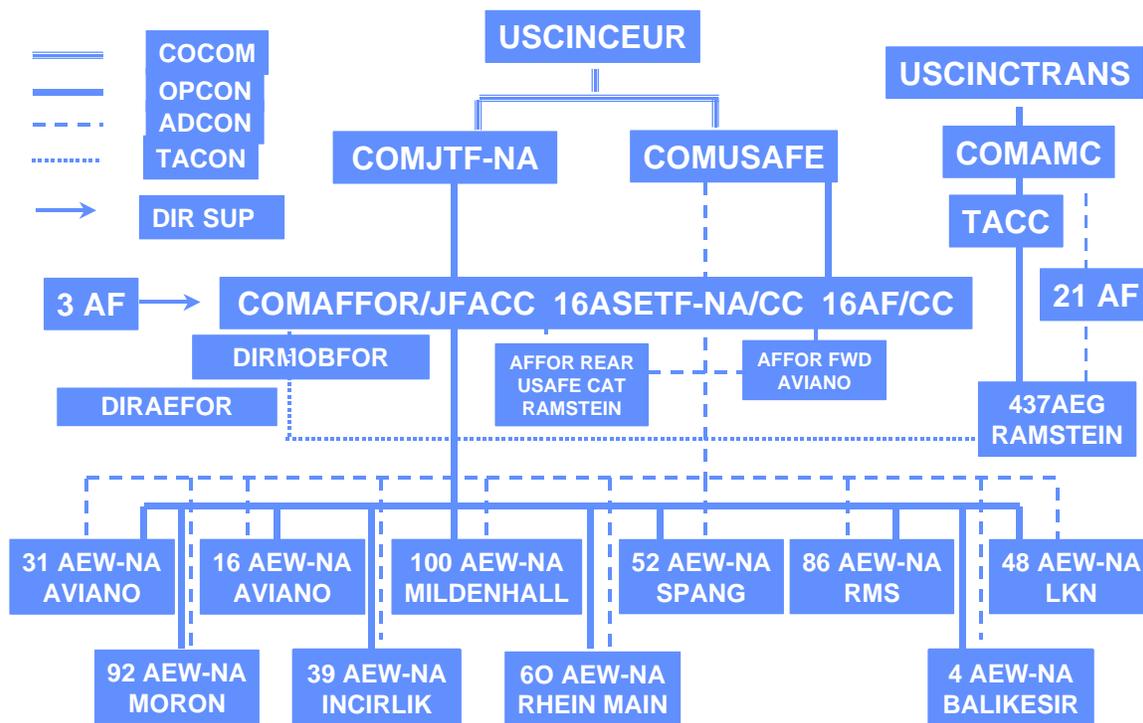
AWOS JFACC Director of Logistics at Vincenza, Italy

The Combat Support director was a Lieutenant Colonel who did not arrive until 4 May 99 which was five weeks into the war. One of his most pressing duties was to fill the Headquarters Commandant role of obtaining billeting and rental cars for the quickly expanding staff that grew to over 1,000 personnel. As a result, it took nearly two months from the start of AWOS before the JFACC staff understood their Combat Support role in the Air Tasking Order (ATO) process in order to make an impact on the operation.⁵

Overall, it is interesting to note that the Sixteenth Air Force Combat Support staff had the staffing to provide the core Combat Support staffing for the JFACC.⁶ However, they did not deploy to be the core JFACC Combat Support staff. They remained at home station to be an AFFOR staff for which they were not manned for, as we will see in the next paragraph.

AFFOR STAFF

The following chart shows just how large and complex AWOS became from a Combat Support viewpoint.



U.S. AIR FORCE AWOS COMMAND RELATIONS⁷

The span of control for managing Combat Support was tremendous. From an AFFOR perspective, Air Force assets consisted of 10 Air Expeditionary Wings (AEWs), over 150 units, spread over 22 bases with a flying mission of more than 500 sorties a day. Six of the ten wings were not in Sixteenth Air Force’s area of responsibility making it most difficult for Sixteenth Air Force to be the overall AFFOR for this operation. The command relation diagram shows an AFFOR forward and rear but this relationship did not happen until the war was already underway. Unfortunately, the responsibilities for the forward and rear Combat Support staffs were never defined.

“AFFOR forward and rear responsibilities were delineated as we went along in a haphazard fashion, which resulted in confusion and duplication of efforts in many cases as the management headquarters acted as the warfighter. Experience in ONA demonstrated that the Air Force doctrinal precept of dual hating the personnel to fill both the AFFOR and JFACC staff is an unreasonable expectation.”⁸

AFFOR COMBAT SUPPORT RESPONSIBILITY SHIFTS AFTER THE WAR STARTS

Throughout AWOS, the Sixteenth Air Force commander was the designated COMAFFOR but the staff he used to work COMAFFOR Combat Support issues changed as the war progressed. As the war started, the Sixteenth Air Force Director of Logistics at Aviano was the AFFOR A-4 responsible for most Combat Support missions. As the A-4, he performed Combat Support responsibilities following USAFE theater policies and guidance that had been exercised during previous European wide exercises and contingencies.⁹ In Germany, HQ USAFE initially used their full-time Crisis Action Team (CAT) to manage Combat Support issues in support of Sixteenth Air Force as the AFFOR and JFACC.

In accordance with standard procedures, the CAT was the central point for all Combat Support issues to be funneled into the USAFE staff. The CAT had a full-time five person Combat Support staff. Augmentation for the CAT Combat Support staff came from the USAFE staff, as had been standard practice.¹⁰

In early April, the Sixteenth Air Force commander requested and the USAFE commander approved designating the USAFE/LG as the AFFOR A-4. Four events occurred making Sixteenth Air Force unable to meet the AFFOR A-4 mission:

- ***There was no clear definition of what was expected of the Sixteenth Air Force Combat Support staff as an AFFOR.***
- ***The Sixteenth Air Force Combat Support staff was not large enough nor did they receive augmentation to meet the expanding mission. The initiation of planning for the PAPA BEAR “expanded force option” was a USAFE theater beddown planning issue well beyond Sixteenth Air Force’s capabilities.***
- ***The force laydown resulting from PAPA BEAR turned into a theater wide operation. A substantial number of the aircraft supporting AWOS flew from outside Sixteenth Air Force’s AOR. As a result, it was extremely difficult for Sixteenth Air Force to act as the AFFOR for forces outside of their AOR.***
- ***Due to the high level of visibility of AWOS, Sixteenth Air Force’s small staff suddenly was being overwhelmed with detailed requests for Combat Support information, especially aircraft and munitions status. ¹¹***

On 2 Apr 99, the USAFE/LG was dual-hatted as the AFFOR A-4 working for the AFFOR (Sixteenth Air Force/CC) while continuing to be the USAFE/LG reporting to the USAFE commander. This also meant the USAFE/LG was now wearing two AFFOR hats as the A-4 for AWOS and the A-4 for USAFE.

It was immediately confusing as there was no single concept of operations outlining how Combat Support responsibilities were to be spilt between USAFE and Sixteenth Air Force under the new

organizational setup. Adding to the confusion was the overall AFFOR staff was now split between USAFE and Sixteenth Air Force as the A1 (personnel), A2 (intelligence), A3 (operations), A5 (plans) and A6 (communications) were still at Aviano while the A-4 (logistics) was at Ramstein. Also, the role of the Combat Support staff in the USAFE CAT became unclear as the USAFE/LG staff began to establish Combat Support command and control procedures that bypassed the CAT which went against the way USAFE had trained to go to war.¹²

Despite an absence of a Combat Support concept of operations and unclear AFFOR and CAT responsibilities, it became quickly clear that the USAFE staff was in a better position than Sixteenth Air Force to be the “theater” AFFOR Combat Support staff. The most obvious benefit was having a larger staff to establish “command and control” cells to direct and control Combat Support activities. The enlarging scope of the operation and intense demand for information from higher and supporting headquarters resulted in the requirement to develop new reporting procedures and to centrally control critical assets at a level never previously required.

Another example of it being beneficial for USAFE to be the AFFOR/A4 was planning and control of the Theater Distribution System (TDS). Sixteenth Air Force did not have the staff or the theater wide picture to conduct this mission when they had the AFFOR A-4 mission.

After the USAFE/LG became the AFFOR A-4, USAFE made TDS a priority and brought in augmentation to help determine and establish TDS requirements. The importance of USAFE being the AFFOR became even more evident when USAFE became EUCOMs executive agent for overall planning of TDS for Europe.¹³

With the realignment of responsibilities, Sixteenth Air Force/LG concentrated on-site surveys and internal Italy support issues. Their in-country expertise was absolutely essential. They conducted numerous in-country site surveys for forces deploying to Italy for the PAPA BEAR deployment and coordinated complicated munitions movements and other support requirements with the Italian government. They were better able to concentrate on these missions once HQ USAFE picked up AFFOR duties that were theater wide. However, Sixteenth Air Force's staff was not large enough to conduct all the site surveys required in their AOR and had to rely on USAFE to conduct some of them.¹⁴

Although the USAFE/LG was in the best position to be the theater AFFOR A-4, the staff was not trained and equipped to perform this mission. Their doctrinal mission had been as a peacetime "management headquarters" working manning, training and equipping issues to provide combat ready forces to the CINC. Recent European exercises had all focused on the NAFs being both the AFFOR and JFACC. USAFE's NAFs were comfortable with providing their Combat Support

requirements and reports to the small Combat Support staff in the USAFE CAT. The CAT would then turn to the USAFE staff to work issues and to provide augmentation to the CAT as required.

This new command arrangement forced the USAFE/LG staff to reorganize into control cells and begin receiving reports and requests for support directly from Wing level bypassing the CAT. Unfortunately, the USAFE Combat Support staff had to continue conducting their peacetime mission. Although this was necessary in order to keep the command functional, it resulted in splitting the staff's time between wartime and peacetime planning.

“Other services bring a large HQ staff (i.e. Corp HQ) that is dedicated to the fight. The Air Force brings a small staff that still has a peacetime mission.”¹⁵

To make this even harder, the USAFE staff did not have adequate manpower, access to the Global Command and Communications System (GCCS), secure FAX machines, secure telephones and other reporting devices to perform their mission.

There were no facilities available to co-locate the USAFE Combat Support staff to facilitate working issues together as a team. This led to staff elements being separated from each other as they worked from their normal day-to-day workspaces spread out over several buildings at Ramstein AB. This facility problem was never fixed and resulted in

making it more difficult and timely to coordinate cross functional Combat Support issues throughout AWOS.

HQ USAFE leadership quickly moved to overcome their lack of personnel, training and equipment to be an AFFOR A-4. Augmentation was requested and immediately began arriving at Ramstein. The USAFE staff developed procedures and control cells to manage beddown issues on a theater basis, developed theater wide repair centers, started to develop a theater distribution system, centrally managed War Reserve Materiel, and centrally managed munitions. As a result, a Combat Support infrastructure emerged that supported the steadily increasing beddown of forces. They also rapidly obtained and became trained on how to use secure faxes, GCCS, and the Global Transportation Network (GTN). In addition, several daily staff meetings and briefing were created to help overcome the problem of not being able to co-locate the staff in one facility.

Developing control cells along with metrics was a key element in keeping abreast of the massive amount of information being generated by AWOS. These control cells and metrics provided the AFFOR A-4 the basic tools needed to take proactive measures to ensure airfields, aircraft, fuel and munitions were available when needed to meet combat operations.

The Control Cells had to develop new processes on the fly to help them obtain timely and accurate data to support their command and control decisions. Each of the cells used some degree of manual data gathering and analysis as automated systems were either not available or failed. As an example, the Air Force Combat Ammunition System could not support AWOS and the USAFE munitions staff developed manual systems for munitions management.¹⁶ Overall, their data gathering and analysis efforts resulted in varying degrees of success with respect to data accuracy and timeliness.

USAFE's ability to rapidly shape the Combat Support infrastructure for the expanding AWOS beddown was impacted by pre-war planning activities. Planning for shaping actions such as creating Centralized Intermediate Repair Facilities and the creation of Contingency High Priority Mission Support Kits had been done prior to AWOS to support units deploying to Operation Northern Watch in Turkey.¹⁷ For these concepts, USAFE was able to implement them quickly, often within days and weeks. Other actions that had not been thought through in peacetime took longer to accomplish. Establishing the Theater Distribution System and analyzing potential beddown sites are examples of shaping actions that took time because they hadn't been addressed at the theater level.¹⁸

AWOS HIGHLIGHTED COMBAT SUPPORT AFFOR ISSUES

AWOS provides the Air Force an opportunity to address several Combat Support doctrinal issues. These issues include the roles and missions of the AFFOR, which should drive how MAJCOM and NAF staffs organize and train to meet their AFFOR missions.

AWOS revealed that a lack of doctrine has led to MAJCOMs and NAFs being inexperienced in how to plan and execute Combat Support at the theater level for EAF. As we reviewed in Section II, there is little written in Air Force policy to govern the process of Combat Support in support of contingency operations. As a result, the Air Force has not developed training and education to develop Combat Support personnel that know how to plan and control at the theater level. This has also led to MAJCOMs and NAFs having to make their own determination of what an AFFOR is responsible for at each level of command. In addition, exercises have been held based on flawed AFFOR/JFACC relationships resulting in negative training for MAJCOM and NAF Combat Support staffs.

During AWOS, the unclear AFFOR roles and responsibilities led to delays in Combat Support maturing as a team effort between USAFE and its NAFs. Delays were experienced as the AFFOR A-4 responsibilities shifted from Sixteenth Air Force to the HQ USAFE/LG staff without a clear concept of MAJCOM/NAF responsibilities. As the air war

progressed and the activities of the AFFOR staff shifted from planning to controlling, other issues surfaced with respect to automated systems capabilities. The control cells established by the AFFOR A-4 to execute command and control of the CS infrastructure all experienced difficulties in modifying the information systems to respond to the changing information requirements.

One of the most important lessons of AWOS was that doctrine and policy is needed on how to manage the Theater Distribution System (TDS).¹⁹ Current doctrine addresses the need for rapid transportation to support the EAF but doesn't say how to do it. The EAF is totally reliant on a responsive theater movement system to allow units to rapidly deploy with the smallest footprint possible with the understanding that follow-on support such as aircraft spare parts, munitions and POL, will arrive when needed. AWOS demonstrated that doctrine does not provide guidance on how to develop requirements and incorporate them into the overall joint system. AWOS also demonstrated that in some cases, the Air Force must be prepared to accept theater distribution planning and execution responsibilities, even when not the executive agent.

Finally, AWOS raised serious questions about the ability of Numbered Air Forces to fulfill the AFFOR wartime responsibilities for large-scale operations. The shift of AFFOR A4 responsibilities from Sixteenth Air Force/LG to HQ USAFE/LG became necessary when the

size of the operations outgrew the capability of the Sixteenth Air Force/LG staff. The lack of adequate staffing forced the transition and prevented the Sixteenth Air Force/LG staff from fulfilling their doctrinal wartime responsibilities. If AWOS represents the expected size of future conflicts, the roles and staffing of the MAJCOMs and Numbered Air Forces have to be carefully outlined and sourced.

In the end, incomplete doctrinal guidance resulted in confusion for the Combat Support staffs involved in AWOS. The COMAFFOR and his staff had to determine AFFOR forward, rear, and JFACC responsibilities on the fly. Mandated manpower limits on NAF staffs further contributed to the problem. The USAFE/LG was given tremendous responsibility that was hampered by an unclear command chain.

AWOS turned out to be a Combat Support success²⁰ due to the adaptability of its leadership as well as outstanding officers and NCOs. However, it was much more frustrating and harder than it should have been because of a failure of doctrine. Although doctrine needs to be specific but adaptable enough to handle any situation, AWOS showed that Combat Support doctrine was insufficient leading to adaptations for almost every Combat Support wartime process.

Some of the doctrine issues from AWOS have already been fixed with the new release of AFDD 2 on 17 Feb 00. The new AFDD 2 now allows for a separate COMAFFOR and JFACC, a dual-hatted COMAFFOR

and JFACC, and expanded guidance on how the NAF would perform the JFC position if assigned this mission. However, Combat Support doctrine lessons learned from AWOS has not been addressed in doctrine to date by the Air Force. Section V of this report will provide recommended changes.

Now we will turn from looking at USAFE and examine how PACAF would go to war from a Combat Support standpoint.

¹ General Michael Ryan, "Serving Above and Beyond," U.S Air Force Web Page, on-line, Netscape, 14 Sep 99, available from www.af.mil/news/speech/current/spch15.html

² General John P. Jumper, "Kosovo Revealed: Air Force Doctrine Changes Required", unpublished: 15

³ Ibid, 14

⁴ Ibid, 1

⁵ "Interview of Lt Col Carroll," 4 Oct 99, conducted by Mr. J.R. Ewing, USAFE/SA and transcribed by Judy Velez: 1-19. Lt Col Carroll arrived at Vencenza on 4 May 99 to be the JFACC Director of Logistics for the Air War Over Serbia. This interview was conducted by USAFE to capture his experiences during his tour of duty at Vencenza.

⁶ IBID, p 13. Lt Col Carroll stated he had 10 U.S. personnel in the C-4 (logistics) division. Sixteenth Air Force logistics staff consists of more than 20 personnel.

⁷ General John P. Jumper, "The Limitations of Doctrine" PowerPoint Briefing, slide 44.

⁸ General John P. Jumper, "Kosovo Revealed: Air Force Doctrine Changes Required," unpublished, p 17

⁹ "Transcript of Interview with Lt Col Dennis Meyer", 27 Sep 99, conducted by Lt Col Grunch, RAND. Lt Col Meyer was the Sixteenth Air Force Deputy Director of Logistics during AWOS.

¹⁰ "Transcript of Interview with Capt Bill Mann," 3 Feb 00, conducted by Lt Col Grunch and Mr. James Leftwich, RAND. Capt Mann was Director of Combat Support for the USAFE CAT during AWOS.

¹¹ "Transcripts of Interviews with Staffs from HQ USAFE, Third Air Force and Sixteenth Air Force," conducted by Lt Col Grunch, RAND, 20-29 Sep 99 and 31 Jan – 3 Feb 00

¹² Ibid

¹³ "Transcript of Interview with Lt Col Pat Hunt," conducted by Suzanne Gehri (RAND), 4 Jan 00. Lt Col Hunt deployed to HQ USAFE during AWOS to develop a Theater Distribution System plan.

¹⁴ "Transcripts of Interviews with Sixteenth Air Force Combat Support Staff," conducted by Lt Col Grunch, RAND, 27 Sep 99

¹⁵ "Transcript of Interview with BG Terry Gabreski," conducted by Dr. Robert Tripp and Lt Col Grunch, RAND, 21 Sep 99. General Gabreski was the USAFE Director of Logistics and the AFFOR A-4 during AWOS.

¹⁶ HQ USAFE Logistics Directorate, "Kosovo After Action Report," 28 Dec 99: 30

¹⁷ Ibid, 1-3

¹⁸ “Transcripts of Interviews with USAFE Staff Members,” conducted by Lt Col Grunch, RAND, 20-29 Sep 99 and 31 Jan – 4 Feb 00

¹⁹ HQ USAFE Logistics Directorate, “Kosovo After Action Report,” 28 Dec 99: 21-25

²⁰ Ibid, i

SECTION IV – COMBAT SUPPORT IN A NOTIONAL KOREA SCENARIO

A notional conflict where North Korea attacks South Korea with very little notice is one of the Major Theater of War (MTW) scenarios used for defense force structure modeling.¹ An MTW of this type would place great demands on the Air Force Combat Support system and also on Joint and Combined systems. This section will show that many of the same Combat Support doctrine and organizational problems experienced in AWOS would also be present in a Korean scenario.

Seventh Air Force would be the AFFOR to US Forces Korea and the JFACC for the combined Air Component Command, which is the air component to U.S. and Republic of Korea Combined Forces Command in Seoul, Korea.² HQ PACAF would remain an AFFOR to CINCPAC and be overall responsible for Air Force Combat Support in the Pacific. Additionally, the three other PACAF NAFs would be heavily involved in AFFOR types of Combat Support issues.

A quick rundown is needed first to explain where Air Force units would be located in a Korean scenario. Similar to AWOS, as many forces as possible would be bedded down in South Korea in Seventh Air Force's area of responsibility. This beddown would be heavily dominated by tactical fighter aircraft similar to the beddown in Italy during AWOS.

However, the force requirement would likely become so large that support aircraft such as airlift, tankers and other aircraft would be bedded down outside of Korea by PACAF's other NAFs in Japan, Guam, and Alaska.³ As a result, we now have a theater wide Combat Support requirement in PACAF similar to the scenario in AWOS where more than half of the forces were bedded down outside Sixteenth Air Force's AOR.

In this scenario, the Seventh Air Force Commander would be the combined JFACC reporting to the Combined/Joint Forces Commander. He would use his combined Seventh Air Force and Korean Air Force staff to plan and execute the air war while having tactical control over all Air Force aircraft (as well as all other aircraft) flying in the Korean theater of operations regardless of the NAF that they launch from. The warfighting role of the Seventh Air Force commander is very clear. He is responsible for planning and executing the Air Campaign in a combined and joint environment.

The Seventh Air Force commander is also a COMAFFOR to the US Forces Korea Commander with Combat Service support responsibilities. However, where his responsibilities as an AFFOR end and where PACAF's AFFOR role begins is unclear and is not documented. Seventh Air Force would have specific types of AFFOR responsibilities in Korea such as coordinating beddowns, munitions movements, medical and security forces support within Korea. However, the other PACAF NAFs would

have many of the same type of AFFOR type responsibilities. HQ PACAF would have a delicate job of prioritizing Combat Support between Seventh Air Force as the lead warfighting NAF and with the supporting NAFs. Doctrine does not address how to share these responsibilities among a MAJCOM and multiple NAFs. As a result, it is difficult for PACAF and NAFs to understand their Combat Support mission within an AFFOR organization.

As we bore down into this scenario, we find that HQ PACAF and each of the NAFs have unique Combat Support taskings. In addition, HQ PACAF and the NAFs have to work together as an AFFOR team to provide overall theater Combat Support. Specific examples follow:

- The NAFs outside of Korea as well as Seventh Air Force are responsible for generating sorties in support of the JFACCs taskings. This requires each NAF to have the ability to manage and control the assets needed for combat generation to include spare parts, munitions, fuels, and maintenance personnel and equipment. Each of the NAFs is also responsible for the security of their personnel and numerous other Combat Support areas.
- Fifth Air Force (Japan) and Seventh Air Force (Korea) must work Combat Support country to country issues with the host government (in coordination with their in country USPACOM

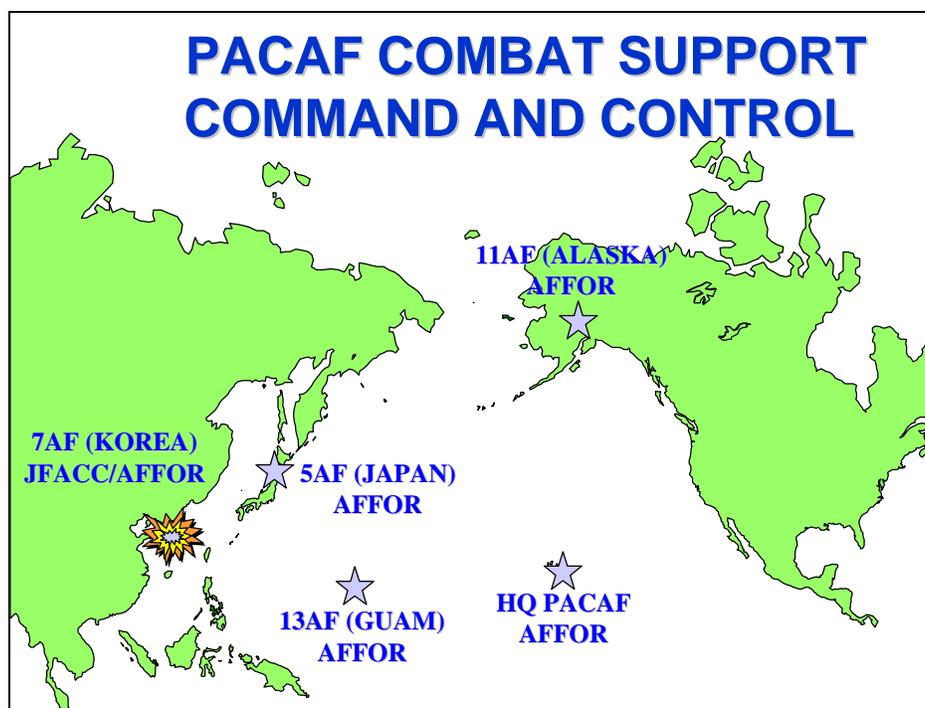
sub-unified command staff.) These issues include host-nation support, use of civilian airfields, contracting, base support planning, and security. However, HQ PACAF needs to be aware of these issues in order to conserve scarce Combat Support assets. As an example, if the Republic of Korea or Government of Japan agrees to provide a new area of support such as providing material handling equipment, PACAF must be aware of this. They can then divert incoming equipment from the United States to other areas in the theater that may be short this equipment.

- Eleventh Air Force (Alaska) and Thirteenth Air Force (Guam) have a large Combat Support mission to beddown aircraft as well as supporting enroute aircraft and personnel on the way to the Far East. However, they are dependent on HQ PACAF to be planning the overall availability and movement of the assets they need to conduct their mission.
- PACAF is responsible for coordinating the overall Air Force Theater Distribution System (TDS) requirements with USPACOM and its components. However, each NAF has portions of the TDS that they must coordinate within their area of responsibility to complement the overall theater system. This requires coordination with PACAF, the applicable area joint

command, other services, host country/state/territory officials, and commercial carriers.

- HQ PACAF coordinates the Combat Support activities of the NAFs and is the arbitrator for allocating resources when multiple NAFs have demands for critically short assets. The PACAF Combat Support staff also builds and validates the Combat Support portion of the Time Phased Force Deployment Data (TPFDD). As a result, PACAF is in charge of representing the NAFs to the theater joint command (USPACOM) when it comes to managing Combat Support unit deployments and sustainment flow both within PACOM and from other theaters.

As we see above, the AFFOR responsibilities are shared between HQ PACAF and four NAFs in a Korean scenario. As in AWOS, how these organizations are to share these responsibilities is not outlined in doctrine or in theater mission directives.⁴



WHO IS THE REAL AFFOR?

The end result of the above examination is that the Air Force has a very clear doctrinal vision of how to fight a war in Korea and organizationally is ready to meet it's mission. However, the Combat Support community in PACAF does not have adequate doctrinal guidance that outlines their AFFOR responsibilities at the MAJCOM and NAF level. This results in a difficulty for PACAF and it's NAFs to plan and execute Combat Support activities as a team. This also results in an inability for PACAF's Inspector General to evaluate PACAF's ability to perform a theater Combat Support mission, as there are no standards to apply.⁵ In addition, PACAF does not conduct exercises that stresses the importance of HQ PACAF and all of it's NAFs working as a Combat

Support team to support contingency operations.⁶ The end result is rapid Combat Support shaping actions could be delayed if a no-notice EAF deployment is required in the Pacific theater.

In the next chapter, we will outline Combat Support doctrinal and organizational fixes to the problems pointed out in AWOS and the notional Korean scenario.

¹ “Assessment of the May 1997 Quadrennial Defense Review,” The National Defense Panel, Department of Defense Link Web Page, on-line, Netscape, May 97, available from www.defenselink.mil:80/topstory/ndp_assess.html: 7. This article states the Quadrennial Defense Review issued in May 1997 primarily used Korea and Persian Gulf scenarios for force structure studies.

² “Air Force Doctrine Document 2--Organization and Employment of Aerospace Power,” 17 Feb 2000: 33-65

³ “Aircraft Beddown Worksheets,” RAND, Microsoft Excel spreadsheets, undated. Unclassified beddown models used by RAND shows that some of the forces deployed for a MTW sized deployment in support of Korea would have to be stationed outside of Korea due to airfield limitations.

⁴ The author reviewed the PACAF Mission Directives index and could only find one that applied to a NAF (Eleventh Air Force in Alaska.)

⁵ This is an observation from the author while assigned to Seventh Air Force from 1995-1998. Senior Seventh Air Force and PACAF leaders wanted to evaluate the readiness of Seventh Air Force to conduct its wartime mission. However, the PACAF Inspector General staff found it extremely difficult to develop Combat Support evaluation standards due to a lack of guidance for the NAF Combat Support staffs.

⁶ This is an another observation from the author during his 1995-1998 tour at Seventh Air Force. There were no theater wide exercises that required participation and interaction by Headquarters PACAF and all of it's NAFs.

SECTION V – RECOMMENDATIONS FOR IMPROVING AIR FORCE COMBAT SUPPORT DOCTRINE

Current doctrine is very clear on how we conduct warfighting operations but does not adequately address how we shape and organize Combat Support to support the warfighter. This final section will outline specific recommendations to improve Combat Support doctrine so that MAJCOMs and NAFs understand their role in the strategic shaping of Combat Support. In addition, it will recommend that doctrine be changed to reflect that Combat Support is a theater operation with the MAJCOM as the senior echelon for Combat Support. MAJCOMs and NAFs will then be able to determine their Combat Support wartime mission, develop augmentation requirements and inspection standards, conduct training and exercises, and the Air Force can get on with developing standardized Combat Support Command and Control systems for use throughout the Air Force.

RECOMMENDED CHANGES TO AFDD 2: ORGANIZATION AND EMPLOYMENT OF AEROSPACE POWER

The recent release of a new AFDD-2 resolves some of the JFACC and AFFOR Combat Support problem areas resulting from AWOS. Specifically, doctrine now specifically identifies the roles and responsibilities of the JFACC and AFFOR. In addition, it is now

recognized that, under certain conditions, the JFACC and AFFOR may require separate staffs.

The only changes to AFDD 2 that the author recommends are clarifying what AFFOR level is the highest echelon for providing Combat Support when conducting contingency operations and providing for a JFACC Headquarters Commandant.

As mentioned in section II of this report, Air Force doctrine is very clear that the NAF is the highest warfighting echelon in the Air Force. A similar statement is needed saying the “highest Combat Support echelon in the Air Force is the MAJCOM.” The logic behind this is NAFs are staffed to be the warfighter (JFACC) for a theater wide operation. In this case, one NAF is the lead warfighter with the MAJCOM and other NAFs in a support role. When it comes to the AFFOR role, MAJCOMs are staffed to be the lead in providing Combat Support for all regions within a theater. In other words, this new statement would recognize that the MAJCOM is responsible for shaping, planning and executing Combat Support while the NAF AFFOR staff is responsible for Combat Support operations only within their AOR. This would allow MAJCOMs and NAFs to understand their roles in the currently confusing AFFOR Forward and AFFOR Rear organizational setup.

The second recommendation may seem minor but is critical to ensure Combat Support staffs can focus on their theater wide mission.

There needs to be a Headquarters Commandant section for the AFFOR/JFACC organization responsible for internal staff support issues such as coordinating facilities, power, transportation, security, supply, messing, billeting and other staff functions. As shown in AWOS, the Combat Support staff was diverted from their wartime mission supporting the JFACC planning and execution process because they had to work Headquarters Commandant issues. Especially at the NAF level with limited manning, it is important that the Combat Support staff concentrate on big-picture support issues without getting bogged down with local support issues.

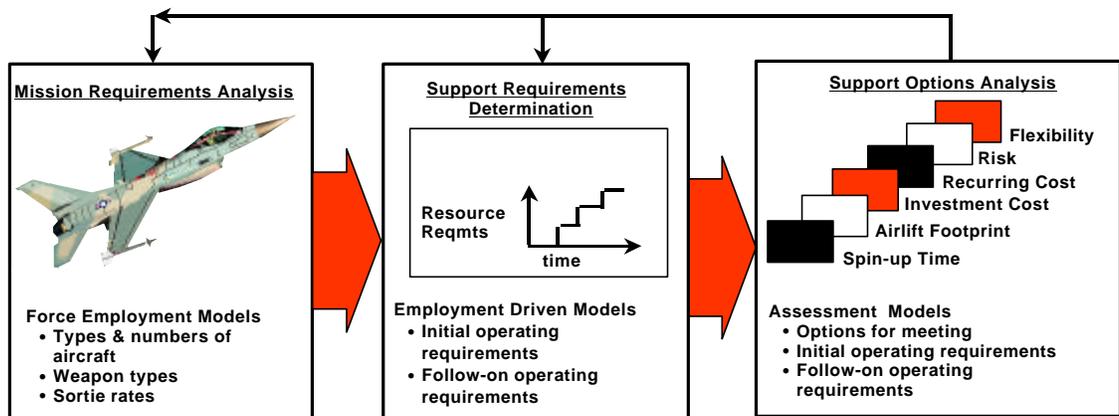
RECOMMENDED CHANGES TO AFDD 2-4 **COMBAT SUPPORT**

AFDD 2-4, Combat Support, is the logical place to describe in detail the Combat Support roles and missions for MAJCOMs and NAFs. A new area is needed that describes strategic shaping functions at the theater level to include who is responsible. In addition, Chapter Four (Command and Control Elements) should be expanded to account for MAJCOM and NAF AFFOR Combat Support relationships.

A new section is required in AFDD 2-4 that explains how the Air Force shapes a theater's Combat Support capabilities to support combat operations during contingencies. Specific recommendations on how this could be worded are included in the following paragraphs. Much of the

following discussion is based on a series of Rand's studies on how the Air Force can better support the EAF concept.

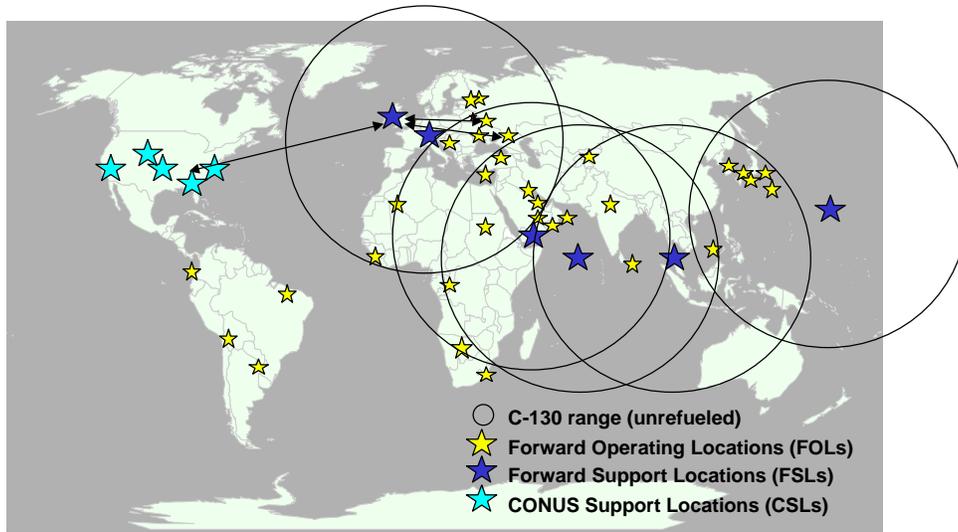
Determining the theaters Combat Support requirements for EAF operations and contingencies is accomplished as a function of strategic shaping. Strategic shaping is accomplished at the MAJCOM level in coordination with the Air Staff, appropriate Joint Commands and subordinate NAFs. Although the MAJCOM Combat Support community has the lead, strategic shaping takes close coordination with the operations and plans communities. In addition, the Air Staff Combat Support community should coordinate the actions of all the MAJCOMs to ensure a systematic approach is taken to identifying requirements, programming, funding, and developing policy for strategic shaping which includes elements included in the following chart.



**ELEMENTS OF THE STRATEGIC COMBAT SUPPORT
PLANNING FRAMEWORK¹**

The first step in this process is for the MAJCOM to identify centralized support sites at Forward Support Locations (FSLs) for responding to the most likely threat scenarios provided by the operations and plans community. The second step is developing a web of pre-identified Forward Operating Locations (FOLs) to support the rapid beddown of forces anywhere in the theater.

The MAJCOM operations and plans community, along with NAF participation, has the lead in identifying these locations with the MAJCOM Combat Support community providing analysis as to the benefits and disadvantages of each location. It is critical that the NAF Combat Support staffs are included in this process as they are the regional expert for area of operations. After the FSLs and FOLs are approved, it is the role of the MAJCOM Combat Support staff to follow through with the necessary actions to make these sites operational. With pre-identified FSLs and FOLs, a preplanned Combat Support infrastructure plan can then be developed to respond to any contingency providing reachback to CONUS Support Locations (CSLs), theater distribution support plans, and joint support procedures. The Air Staff coordinates the overall activities of the MAJCOMs and provides appropriate guidance to ensure a worldwide web of FSLs and FOLs are available to support EAF operations anywhere in the world.



POTENTIAL GLOBAL COMBAT SUPPORT NETWORK²

At execution, however, the infrastructure will likely need to be reconfigured or reshaped to ensure responsiveness to the specific operational requirements. In order to accomplish the reshaping or reconfiguring actions, three things must be in place at the MAJCOM level.

First, there must be a process or methodology for determining what reshaping actions must occur. This requires the Combat Support community to ensure shaping activities are part of the MAJCOM planning and crisis action system and that the plans and operations staffs understand the impact of strategic shaping on their decision process. The MAJCOM needs to develop an employment-driven logistics process that requires close coordination with the warfighting NAF Combat Support staff.

Second, the Combat Support infrastructure must be flexible and agile enough to respond to the reshaping actions in a timely manner. A critical key to this is a pre-planned joint Theater Distribution System that has been approved by the applicable joint command. In addition, MAJCOM Combat Support planners need to be trained and have access to GCCS to rapidly provide force and non-unit movement information into the TPFDD.

Thirdly, Combat Support systems are needed to provide a common Command and Control system at base level, wing, NAF, MAJCOM and Air Staff levels.

The process of shaping and configuring the Combat Support infrastructure doesn't stop after the planning phases are complete. As operations progress and campaign objectives are met, the operational concept evolves and changes. Accordingly, the Combat Support infrastructure must continue to be responsive. A shift in the target set selected by the operations strategy planners might force a shift in the types and quantities of munitions that are being stored at the forward operating locations. Shifts in operational requirements form the basis for Combat Support command and control decisions.

Overall, the above guidance would provide the Air Force's Combat Support community the information needed to shape a worldwide

infrastructure to support the EAF. However, execution of this planning requires MAJCOM and NAF Combat Support roles to be better identified.

RECOMMENDED CHANGES TO AFDD 2-4, CHAPTER 4:
COMMAND AND CONTROL ELEMENTS

Chapter 4 of AFDD 2-4 provides general Combat Support Command and Control concepts but provides no direct guidance for how Combat Support should function to support warfighting operations. The following paragraphs are suggested additions to chapter four that would help MAJCOMs and NAFs understand their wartime mission.

The MAJCOM has the lead in ensuring the warfighting NAF has the right Combat Support to conduct its mission. This includes developing theater wide Combat Support plans, Theater Distribution Systems, Forward Support Locations, and Forward Operating Locations to allow the theater to respond to any contingency. Although the Air Staff is responsible for developing the overall Global Combat Support System, MAJCOMs are also responsible for ensuring that theater systems can respond rapidly to reshaping actions. This system must be standardized and exercised at the Wing, NAF, and MAJCOM level while being able to provide the Air Staff, other MAJCOMs and the joint community the information they need to support warfighting operations.

MAJCOM and NAFs need to have a clear understanding of each other's AFFOR and JFACC Combat Support missions:

- As the JFACC is the theaters central point for planning and executing the overall air campaign, the MAJCOM wearing it's theater AFFOR hat, is the central point for planning and executing overall Combat Support for the war fighter. This point is critical in determining the relationship between MAJCOM and NAF Combat Support staffs in a contingency. The MAJCOM must shape the theater Combat Support infrastructure in peacetime and continue to do so in a contingency. Many of these shaping activities require coordination with the Air Staff, other MAJCOMs, and the regional joint commander and subordinate NAFs.
- Although a lead NAF may be designated an AFFOR, the Combat Support responsibilities of the NAF AFFOR staff are limited to within the NAF area of operations. Specific MAJCOM/NAF responsibilities will be outlined in MAJCOM standing mission directives for their NAFs.
- There may be multiple NAFs conducting AFFOR Combat Support missions in support of the lead NAF. The MAJCOM, acting as the theater AFFOR, is responsible for coordinating the Combat Support activities and priorities among the multiple NAFs. As an example, Seventh Air Force in Korea may be the lead NAF for an operation and declared an AFFOR. However,

NAFs in Japan, Alaska and Guam would also have certain AFFOR responsibilities and be responsible for their AORs to include generating combat sorties to support the JFACC. As a result, the MAJCOM is overall in charge of Combat Support for the theater and makes the hard decisions on which NAFs get priority for support.

- NAFs are not adequately manned to conduct all AFFOR Combat Support functions. As an example, NAFs are not manned in peacetime to be a management level headquarters and Wings coordinate directly with their MAJCOM on many management type issues. As much as possible, management level Wing/MAJCOM relationships should be maintained when a NAF is declared an AFFOR. The MAJCOM should have procedures already be in place to feed Combat Support information needed by the warfighter automatically back to the NAF in a contingency.
- MAJCOM and NAF Combat Support staffs are not manned to provide augmentation to all possible command scenarios. Combat Support augmentation may have to be provided to a JFC, liaisons to a JFC, JFACC, NAF AFFORs, MAJCOM AFFORs, and for a split JFACC/AFFOR operation. It is a MAJCOM responsibility, in conjunction with its NAFs, to

develop worse case Combat Support manning requirements at the MAJCOM and NAF level. Once determined, the MAJCOM should work through appropriate manpower channels to develop an augmentation plan.

PLACE ONE PERSON IN CHARGE OF COMBAT SUPPORT

Putting one person in charge of Combat Support at the AFFOR/JFACC level would greatly reduce the pressures on the Commanders time. As stated in Section II, there are many senior officers in charge of Combat Support at the NAF and MAJCOM level. This is appropriate for peacetime activities but slows the process in a focused warfighting command.

There may be many answers on how to do this but the US Army warfighting setup may hold an answer. The Army warfighting units, such as the Corp and Division, are organized along the lines of a Commander with two Deputy Commanders (Deputy Commander for Operations and Deputy Command for Support.) If the Air Force went to war this way, the Combat Support community would be more focused in working together as a team and responding to the Commander's requirements.

CONCLUSION

Worldwide employment of the EAF in hours and days requires an existing Combat Support infrastructure with the capability to adjust to

specific contingencies as they occur. In addition, MAJCOMs and NAFs need to have clear understandings of their Combat Support roles as part of the AFFOR command structures. This paper has shown the Air Force needs to improve its Combat Support doctrine in order to support the EAF concept and provided specific suggestions to meet these requirements. With updated doctrine, the Air Force Combat Support community would have guidance on how to work together as a team of teams at the AFFOR level. Updated doctrine would also help lead to a worldwide development of a Combat Support infrastructure. These two actions together would provide the Combat Support organizational structure and infrastructure needed to allow EAF deployments anywhere in the world in hours and days.

¹ Eric Peltz, Hyman Shulman, Robert S. Tripp, Timothy Ramey, Randy King, CMSgt John G. Drew, Clifford Grammich, "A Vision for Agile Combat Support", Air Force Journal of Logistics, Vol XXIII, Number 4, Winter 1999: 9

² Ibid, 11

GLOSSARY

A-4	Director for Logistics (AFFOR/JFACC staff)
AEF	Air Expeditionary Force
AETC	Air Force Education and Training Command
AEW	Air Expeditionary Wing
AFB	Air Force Base
AFDD	Air Force Doctrine Document
AFFOR	Air Force Forces
AFR	Air Force Reserves
AMC	Air Mobility Command
ANG	Air National Guard
AOR	Area of Responsibility
AOS	Air Operations Squadron
ASETf	Aerospace Expeditionary Task Force
ATAF	Allied Tactical Air Force (NATO term)
ATO	Air Tasking Order
AWOS	Air War Over Serbia
CAT	Crisis Action Team
CINC	Commander in Chief
CINCPAC	Commander in Chief, Pacific Command
C/JFACC	Combined/Joint Forces Air Component Commander
COMAFFOR	Commander, Air Force Forces
CSL	CONUS Support Location
EAF	Expeditionary Aerospace Force
EUCOM	European Command
FOL	Forward Operating Location
FSL	Forward Support Location
GCCS	Global Command and Communications System
GTN	Global Transportation Network
JAOC	Joint Air Operations Center
JFC	Joint Forces Commander
JFACC	Joint Forces Air Component Commander
JOPES	Joint Operational Planning and Execution System
JTF	Joint Task Force
LG	Director of Logistics at MAJCOM, NAF and Wing

MAJCOM	Major Command
MTW	Major Theater War
NAF	Numbered Air Force
PACAF	Pacific Air Forces
PAPA BEAR	A term used for the AWOS expanded force deployment
QDR	Quadrennial Defense Review
RAND	Research and Development Corporation
TDS	Theater Distribution System
TPFDD	Time Phased Force Deployment Data
U.S.	United States of America
USAFE	United States Air Forces in Europe
WRM	War Reserve Materiel

BIBLIOGRAPHY

“Air Expeditionary Force Battlelab Briefing”: U.S Air Force Air Expeditionary Force Battlelab Web Page, on-line, Netscape, 15 Mar 00, available from www.mountain.af.mil/aefb/download.htm

“Air Force Doctrine Document 1--Air Force Basic Doctrine,” Sep 97

“Air Force Doctrine Document 2--Organization and Employment of Aerospace Power,” 17 Feb 2000

“Air Force Doctrine Document 2: Organization and Employment of Aerospace Power Briefing”, Air Force Doctrine Center Web Page, on-line, Netscape, 26 Mar 00

“Air Force Doctrine Document 2-4—Combat Support,” 22 Nov 1999

“Air Force Instruction 38-101—Air Force Organization,” 1 Jul 98

“Expeditionary Aerospace Force Briefing”: US Air Force Expeditionary Air Force Web Site, slide 4, on-line, Netscape, 2 Apr 00, www.af.mil/eaf/master.ppt

HQ USAFE Logistics Directorate, “Kosovo After Action Report,” 28 Dec 99

Jumper, John P. General, “Kosovo Revealed: Air Force Doctrine Changes Required”, unpublished

Jumper, John P. General, “The Limitations of Doctrine,” PowerPoint Briefing, undated

“Pacific Air Forces War Reserve Materiel Management Guide,” 26 Jul 96

Peltz, E., Shulman, H., Tripp, R., Ramey, T., King, T., Drew, J.G., Grammich, C., “A Vision for Agile Combat Support”, Air Force Journal of Logistics, Vol XXIII, Number 4, Winter 1999

Ryan, Michael, E., General, “Serving Above and Beyond,” U.S Air Force Web Page, on-line, Netscape, 14 Sep 99, available from www.af.mil/news/speech/current/spch15.html

“Seventh Air Force Unit Manning Document,” Microsoft EXCEL Database, April 1996

The National Defense Panel, "Assessment of the May 1997 Quadrennial Defense Review," Department of Defense Link Web Page, on-line, Netscape, May 97, available from www.defenselink.mil:80/topstory/ndp_assess.html

"The Way Ahead," A report prepared for the Chief Information Officer, USAF, by the Global Combat Support System-AF Requirements Integration Tiger Team, 31 Aug 99

"Transcript of Interview with BG Terry Gabreski," conducted by Dr. Robert Tripp and Lt Col Grunch, RAND, 21 Sep 99.

"Transcript of Interview with Capt Bill Mann," 3 Feb 00, conducted by Lt Col Grunch and Mr. James Leftwich, RAND.

"Transcript of Interview with Lt Col Carroll," 4 Oct 99, conducted by Mr. J.R. Ewing, USAFE/SA and transcribed by Judy Velez

"Transcript of Interview with Lt Col Dennis Meyer", 27 Sep 99, conducted by Lt Col Grunch, RAND. Lt Col Meyer was the Sixteenth Air Force Deputy Director of Logistics during AWOS.

"Transcript of Interview with Lt Col Pat Hunt," conducted by Suzanne Gehri (RAND), 4 Jan 00.

"Transcripts of Interviews with Staffs from HQ USAFE, Third Air Force and Sixteenth Air Force," conducted by Lt Col Grunch, RAND, 20-29 Sep 99 and 31 Jan - 3 Feb 00

Tripp, R.S., Galway, L.A., Ramey, T.L., SMSgt Drew, J.G., RAND Corporation, DRR-1857-AF, *Enhancing the Effectiveness of Expeditionary Aerospace Forces Through Integrated Agile Combat Support Planning*, Santa Monica, CA, 1998.

Tripp, Robert and Ramey, Tim, "Leveraging Logistics to Enhance the Effectiveness of Rapid Response Air Expeditionary Forces," RAND Report PM-691-AF, Santa Monica, California, July 1997, 2-5.

Tripp R.S., Peltz, E., Shulman, H., Ramey, T., King, R., Drew, John G. CMSgt., Grammich, C., "A Vision for Agile Combat Support", Air Force Logistics Management Agency, Year 2000 First Quarter in Review

Underwood, David K., Lt Col and Bell, John E., Capt, "AEF Munitions Availability," Air Force Journal of Logistics, Vol. XXIII, Number 4, Winter 1999

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