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TACTICAL CONTROL OF AIR MOBILITY FORCES IN OPERATION ALLIED FORCE: IS THIS THE WAY THINGS SHOULD BE DONE?

by

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Abstract

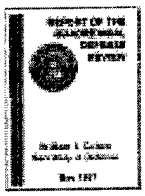
This project reviews the transfer of tactical control (TACON) of air mobility forces in ALLIED FORCE, the 1999 Air War over Serbia. The researcher addresses a doctrinal perspective as well as examines whether the current command and control (C^2) structure supports the doctrine. From the available information, the author finds that the current Joint and USAF doctrines not only adequately address TACON of air mobility forces, but also provide an alternative command relationship of Direct Support. However, the author finds that the current C^2 structure does not sustain the existing doctrine in every theater. In this way, the C^2 system only provides restricted Global Reach.

Current Joint and USAF doctrine establishes the option to transfer TACON of forces when it's wise to do so. Yet, TACON is unwise in some regions of the world because the existing C^2 capability is not sufficient. Direct Support provides a reasonable alternative, but improving the C^2 system will enhance both options. By strengthening the theater mobility planning staff and developing a consolidated dispatch center for theater as well as global mission management, air mobility forces can enhance support to the warfighter. This will simplify the C^2 system as well as present a consistent structure to every level from the supported Joint Forces Commander to the aircrew and mission support personnel. Revamping the C^2 system into a global resource will enable air mobility forces to better support doctrine through the transfer of TACON or provision of Direct Support independent of the area of operation.

Part 1

Introduction

"The burdens placed on U.S. strategic mobility forces will not become less demanding in the future. To the contrary, the potential demands of peacetime engagement, reduced infrastructure at overseas bases needed to support airlift en route to a crisis, the likelihood of smaller-scale contingencies worldwide, and the increased possibility of confronting nuclear, biological, and chemical threats all pose challenges...."



— 1997, Quadrennial Defense Review

Faced with the challenges of a more demanding future, the United States Air Force is reshaping itself into an Expeditionary Aerospace Force. Part of this effort includes reviewing its processes and doctrine. For air mobility forces in particular, future requirements dictate flexibility and therefore, investment in multi-theater capabilities and universally applicable doctrine. Contingencies since DESERT STORM have enabled Air Force leaders to begin to alter the way military professionals think about aerospace forces within the joint operations area (JOA). Operation Allied Force, the 1999 Air War over Serbia, provides an opportunity to review Air Force doctrine on the best way to support the Joint Forces Commander with assets capable of operating from outside the JOA.

Background

Any military action, from a crisis response to a major conflict, prompts military thinkers to review the operation looking for areas of possible improvement. These "lessons learned" not

only address the way the military functions today, but also form the strategy and plans for future campaigns. Ultimately these overarching theories form Air Force and Joint doctrine.

In 1999, Operation Allied Force pushed Serbian troops from Kosovo. Part of the operation included the transfer of tactical control (TACON) of US Transportation Command (USTRANSCOM) assigned forces to US European Command (USEUCOM) augmenting the theater's forces in the deployment of Task Force Hawk, the movement of US ground forces into Albania.[1] The transfer of TACON enabled the theater's command and control (C^2) system to schedule these USTRANSCOM assigned air mobility forces on missions without prior coordination. Importantly, the TACON relationship maintained USTRANSCOM's ability to recall these forces in case of another crisis, unlike the more traditional change of operational control (CHOP). This success generated a great deal of discussion about how best to incorporate the lessons learned and prepare for future operations.

Two prominent mobility experts have discussed the benefits of this arrangement. General Robertson, Commander in Chief of USTRANSCOM and Commander of Air Mobility Command (AMC) said the transfer of TACON was a "tremendous success story" and that "it's something we're going to have to go back and write into the doctrine, as to how that's done."[2] However, the General's vision of how mobility forces should operate in the future, is not supportable everywhere. As Lieutenant General Begert, Vice Commander of US Air Forces Europe (USAFE) cautioned, "...TACON will not work in every theater; it requires a mature theater with a robust air mobility system to be effective."[3] This begs several questions. Does the Air Force need to reemphasize the transfer of TACON in its doctrine? Should the Air Force define the characteristics of a mature theater and a robust air mobility system? How should the C^2 system be organized to support this strategy?

Project Overview

This study examines Joint and Air Force doctrine regarding the transfer of TACON, as it was applied during Operation Allied Force. Ultimately, this examination shows that the current doctrine already adequately incorporates the transfer of tactical control. The research framework follows the Caffrey Model, introduced at the USAF's Air Command and Staff College.[4]. The Model, based on the writings of historian I. B. Holley, cautions against changing doctrine directly after execution, without accounting for the history and theory which lead to the existing doctrine. The Caffrey Model indicates that changes in doctrine directly from recent experience alone spawns dogma. True evolutionary changes incorporate historical lessons, military theories, and doctrine into strategy and plans for the next execution.

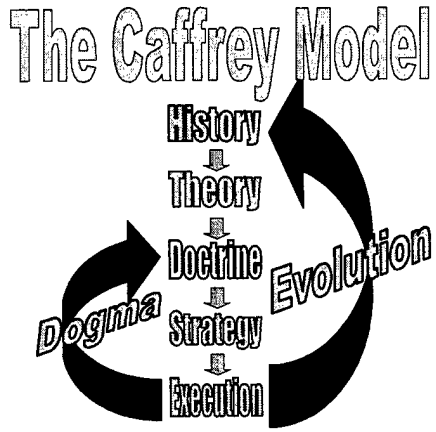


Figure 1. ACSC Model to Evaluate Changes to Doctrine

Rather than altering the "fundamental principles" which guide the employment of air mobility forces, the lessons of Operation Allied Force indicate the necessity for commanders to judiciously look at the warfighter's requirements weighed against assets available. Then, based upon historical lessons, theories about future operations, and doctrine, leaders must determine the most advantageous strategy for execution.

Part of the doctrine and strategy must be the organization of forces supporting the effort. In this process, leaders must use the history, theory, and doctrine to design the organization instead of allowing crisis reaction, individual personalities, or organizational loyalties to drive the structure. The organization or command relationships in doctrine include the options of tactical control and direct support arrangements for air mobility forces in joint operations when and where appropriate. The organizational structure should support the warfighter's need by logically incorporating these proven fundamental principles – form follows function.

Scope and Limitations of this Project

This paper deals with command relationships and the organization of air mobility forces supporting the US Commanders in Chief (CINCs). In doing so, the project highlights several key sections in Joint and Air Force doctrine as well as historical examples, which have influenced air mobility perspectives. Finally, the author proposes improvements to the current C^2 system. This paper does not address the technological details or financial aspects of changing the C^2 structure, but rather current capabilities, which should be incorporated into planning and developing the air mobility system. As one historian explains, discussions concentrating on technology may cause one, "to lose sight of what command is all about."[5] Importantly, air mobility forces entail airlift, air refueling, as well as mission support personnel, and equipment. Though the background example during ALLIED FORCE is the TACON transfer of airlift assets, the doctrinal discussions and C^2 implications should also apply to air refueling and mission support resources. Further, although the focus of this study is directed toward air mobility forces, there may be application for other inter-theater and space assets as well.

Notes

[1] Lieutenant General William J. Begert, "Kosovo and Theater Air Mobility," *Aerospace Power Journal* XIII, no. 4 (Winter 1999): 11-21.

[2] John A. Tirpak, "Airlift Reality Check," *Air Force Magazine* (December 1999), n.p.; on-line, Internet, 7 March 2000, available from http://www.afa.org/magazine/1299airlift.html.

[3] Begert, 18.

[4] Lieutenant Colonel Matthew Caffrey, USAFR, interviewed by author, 20 March 2000. Irving Brinton Holley, *Ideas and weapons: exploitation of the aerial weapon by the United States during World War I: a study in the relationship of technological advance, military doctrine, and the development of weapons* (New Haven: Yale University Press, 1953).

[5] Richard T. Devereaux, *Theater airlift management and control: should we turn back the clock to be ready for tomorrow?* Report no. M-U 43998-1A (Maxwell AFB, AL: School of Advanced Airpower Studies, AU Press, September 1994). Martin van Creveld, *Command in War* (Cambridge, MA: Harvard University Press, 1985), 275.

Part 2

History, Theory, and Doctrine: A Foundation for Discussion

*"Military doctrine presents **fundamental principles** that guide the employment of forces...doctrine deals with the fundamental issue of **how best to employ the national military power to achieve strategic ends.**"*

— Joint Pub 1

Ideally, Joint and Air Force Doctrine should apply to every theater rather than reinventing "how best to employ...military power"[1] for every situation. Moreover, doctrine must be more than a quick reaction to the most recent experience. These fundamental principles should incorporate history, theory and existing doctrine as well as support the military strategy and plans for execution.

The Evolution of Mobility Perspectives

Maximum Use of Limited Resources - the History

Much of air mobility history plays like a tennis match between decentralized control advocates and centralized control campaigners. As early as the 1930's, leaders struggled with the application of air mobility forces. At that time, Brigadier General Augustine W. Robins was Chief of the Army Air Corps' Material Division. He thought dispersing limited air mobility assets to various airfields and commanders would be an "inefficient and ineffective use of the aircraft."[2] General Robins argued that air mobility assets should be managed from a central

location to maximize the capability of these limited resources. The Chief of the Air Corps, General Oscar Westover, "disagreed and dispersed the aircraft."[3] It was a point for the decentralized side.

Based on his experiences in World War II, Major General Harold L. George, Commander of Air Transport Command, asserted:

> Any reasonable analysis of the requirements of this war must readily recognize the necessity for a 'many theater' system of air transportation, flexible enough to be mobile and with direction centralized enough to recognize the comparable requirements of many theaters.[4]

Here was a point for the centralized side. Yet, the match continued.

In the next major operation – the Berlin Airlift, the point went to the decentralized. This time, the decision was made to transfer the operational control to the geographic commander. In 1948, USAF Headquarters directed that the US Air Forces Europe (theater focus) would exercise operational control of C-54s from the Military Air Transport Service (global focus).[5] Given the huge success of the Berlin Airlift, theater advocates would argue that theater control should have been the model to follow.

The argument of how best to capitalize on the limited resources continues today. It is at the crux of the debate on which commander should control inter-theater or global forces. The specific viewpoint, not surprisingly, depends on the advocate's expertise. Typically, theater experience breeds a geographic focus and advocates for decentralized, theater control for responsive support. Meanwhile, global operations develop people with a functional perspective, advocating centralized control to meet demands across many theaters.

Effective Versus Efficient - the Theory

The expression, "where you stand on the issue depends upon where you sit," live, or work, is definitely applicable to the question of air mobility control. Theater air mobility experts say centralized control is not responsive enough for crisis response in the theater.[6] Early in Operation Allied Force, coordination required nineteen phone calls to schedule a C-17 against a validated requirement.[7] For the theater, centralized control is not effective. Centralized control advocates point to other industries, such as a global airline where centralized control maximizes the use of limited resources.[8] From a global perspective, theater control is not efficient.

Importantly, the transfer of TACON later in Operation Allied Force represents a balance in the debate. The geographic CINC's organization managed the C-17s under theater TACON, while the global CINC maintained a link to these forces, through TACON, in case world events required a shift to another theater. The theater made effective use, while the centralized control could recall the assets not being efficiently used or in case of a higher priority contingency. This is the great benefit discussed by General Robertson and Lieutenant General Begert in their comments on Allied Force. This is why some people are looking at changing Air Force doctrine to emphasize TACON.

Doctrine Influencing Air Mobility Operations

United States Military doctrine has a hierarchical organization. Joint doctrine provides authoritative guidance when more than one Service (Air Force, Army, Marines and Navy) operate together. Service doctrine establishes the fundamental principles for each service's employment of forces, and lower levels within each service's doctrine provide more specific guidance. There is cross communication between the levels of doctrine. As such, Joint doctrine includes elements of the various service doctrines, but the information sometimes differs

between the levels and the services. For air mobility operations, information from Joint, Air Force, and Air Mobility doctrines applies.

Joint Doctrine.

Joint doctrine offers authoritative guidance for US Armed Forces.[9] Chapter III of Joint Pub 0-2, *Unified Action Armed Forces* goes into detail describing and defining the levels and relationships of command:

> "Command is central to all military action....[10] TACON is the command authority over assigned or attached forces or commands, or military capability or forces made available for tasking, that is limited to the detailed and usually local direction and control of movements or maneuvers necessary to accomplish assigned missions or tasks.[11]

In other words, the Joint doctrine defines TACON as specific permission to task certain forces. The Joint Force Commander (JFC) can direct and control the movement of those forces assigned or attached. If the JFC does not own a capability or forces, another commander, with the capability or forces, can make them available for tasking. Incumbent in this transfer is the capability of the gaining commander to manage the TACON-transferred forces.

For example, US European Command (USEUCOM) has specifically assigned air mobility forces (C-130s and KC-135s) for theater operations. During Operation Allied Force, USEUCOM controlled these forces through its Air Force component, US Air Forces Europe (USAFE).[12] Because USEUCOM does not have assigned or attached forces capable of moving the larger equipment in Task Force Hawk, moving Army forces into Albania, US Transportation Command (USTRANSCOM) made this capability (C-17s) available for tasking. USTRANSCOM transferred TACON of the C-17s to USEUCOM to support Allied Force. USEUCOM tactically controlled these forces through its Air Force component, USAFE. Thus,

USAFE's command and control (C^2) system scheduled the C-17s for USEUCOM.[13] Just as important as the transfer of TACON, was USEUCOM's ability to manage the forces.

Unified Action Armed Forces provides an alternative command relationship relevant to the actions in ALLIED FORCE. Support, as defined in Joint doctrine, has four categories, General, Mutual, Direct and Close. Of these, Direct Support provides the gaining commander immediate control over the supporting forces:

> A support relationship is established by a superior commander between subordinate commanders when one organization should aid, protect, complement, or sustain another force...[on] a mission requiring a force to support another specific force and authorizing it to answer directly the supported force's request for assistance.[14]

In the C-17 example, the Secretary of Defense could have established a Direct Support relationship between USEUCOM and the USTRANSCOM C-17s required to complement USEUCOM assets delivering Task Force Hawk. The C-17s would have answered directly to USEUCOM for the duration of the supporting effort. Both TACON and Direct Support relationships can be applied in instances when a Commander in Chief, such as USEUCOM, establishes a Joint Task Force.

The US establishes a Joint Task Force to blend forces from each of the Services (Army, Air Force, Navy, and Marines) into a temporary team for a specific mission or operation. Importantly, Joint doctrine enables the Commander of a Joint Task Force (CJTF) to organize these forces as necessary to accomplish the assigned mission. Yet, Joint doctrine includes a warning against altering the Service designed structures. "The intent is to meet the needs of CJTFs, while maintaining the tactical and operational integrity of Service organizations...The first principle in joint force organization is that CJTFs organize forces to accomplish the mission based on their vision and concept of operations."[15] In other words, the CJTF should organize his or her forces with knowledge of the Service's organization. In this way, each Service should

design the optimal organization and concept for employing its forces to best support Joint Operations. Applying the Caffrey model, this means that the Air force should incorporate Service and Joint doctrine into the organization's strategy and plan for execution.

This structure and plan for execution should be relatively stable across each of the different theaters and JTFs for two important reasons. First, a reliable organization reduces uncertainty and variations for the forces to learn. Knowing what form to expect and how to get things done in the chain of command eliminates confusion for people deploying to different contingencies. This is particularly important for air mobility personnel, who may be supporting multiple contingencies. Second, a consistent presentation of forces to the Joint Forces Commander (JFC) is important for the Air Force, because it educates the other Services on what to expect from the Air Force. Explaining to a JFC the capabilities resident in a Carrier Battle Group gives the JFC a specific idea of the number and capabilities involved. The Air Force is attempting to present its capabilities in a similar manner. An Air Expeditionary Force (AEF) will present a defined set of capabilities available to meet CINC deployment requirements.[16] Establishing a uniform organization to support different contingencies in different theaters will benefit the Joint Commander as well as the supporting Air Force personnel. A uniform presentation also simplifies the integration of air mobility forces into the JTF.

The Joint Publication 5-00.2*: Joint Task Force Planning Guidance* further explains that "Complex or unclear command relationships and organizations can be counterproductive."[17] As the Air Force looks at possible changes to doctrine and command relationships, such as TACON and Direct Support, the Air Force needs to incorporate the important ideas highlighted in Joint doctrine. "Unity of effort, centralized planning, and decentralized execution are key considerations."[18] So, TACON and Direct Support relationships are defined in Joint doctrine and

the Commander of the Joint Task Force should rely on the Service doctrine for the command structure to exercise this control. In the case of air mobility forces, the service is the Air Force.

Air Force Doctrine

Air Force Doctrine Document 2 (AFDD 2), *Organization and Employment of Aerospace Power* defines and describes operational level concepts to build a consistent baseline for more the employment of aerospace forces. This document also attempts to standardize the organization of Air Force resources with respect to the *Joint Task Force Planning Guidance.* Air Force support for a JTF flows through the Commander of Air Force Forces (COMAFFOR).[19] To standardize command relationships at lower levels, AFDD 2 explains, "...the COMAFFOR normally exercises OPCON [operational control] over all assigned and attached US Air Force forces."[20] In this way, the Air Force can organize the command structure up through the COMAFFOR, and the JFC has one point of contact for the theater controlled Air Force resources.

However, Air Force Doctrine Document 2 adds a caveat for forces (such as inter-theater mobility and space assets) which must maintain a global focus. "Where appropriate, the JFC and COMAFFOR should be given TACON over these assets to integrate the additional capabilities they [inter-theater or global assets] provide to the joint force."[21] In an attempt to clarify the command relationship, AFDD 2 explains that the mobility forces attached to the Joint Task Force will normally " be TACON to the JFC, delegated to the JFACC [Joint Forces Air Component Commander], and exercised through the DIRMOBFOR [Director of Mobility Forces]."[22] Aside from a softer (*normally* as opposed to *should*) version of General Robertson's comments with respect to TACON in Allied Force, this does little to provide a consistent structure for global forces. When should forces with global ranges and

missions be assigned, TACON, or OPCON to the theater or the CJTF? When and where is it appropriate?

Air Mobility Doctrine.

Supporting AFDD 2, Air Force Doctrine Document 2-6, *Air Mobility* repeats the theme of transferring control, when and where appropriate, with "In some circumstances...TACON will normally be delegated to the JFC, exercised by the COMAFFOR/JFACC, and executed through the DIRMOBFOR."[23] The DIRMOBFOR is charged with integrating inter- and intra-theater mobility operations to ensure effectiveness. This is an important link balancing global and theater perspectives of efficiency and effectiveness. Still, exact circumstances are not defined.

Related Doctrine.

Existing Air Force doctrine for other inter-theater forces reinforces the argument for the use of TACON. The doctrine in AFDD 2-1.2 *Strategic Attack* explains that some Air Force forces, such as inter-theater mobility and space assets "must maintain a global focus, thus preventing the transfer of operational control [OPCON] to the JFC and COMAFFOR."[24] Instead, *Strategic Attack* recommends that "where appropriate" TACON should be transferred to the JFC and COMAFFOR to integrate these forces into the joint force.[25] This TACON transfer matches the Operation Allied Force example of the USTRANSCOM assigned C-17s augmenting USEUCOM's theater airlift.

Level of Detail in Doctrine

Doctrine is basically the wisdom of past experience coupled with the ideas and theories of how best to employ military forces to achieve specific objectives. How detailed does the

wisdom need to be? The more detailed, the more likely it will limit creative ideas. As General Patton explained, "Never tell people how to do things, tell them what to do and they will surprise you with their ingenuity."[26] Yet, going too far the other direction increases the chances that the doctrine will not have value for specific situations. In the past few years, the Air Force has placed more emphasis on codifying its wisdom. As existing doctrine already supports the transfer of TACON, does the Air Force need to define "a mature theater with a robust air mobility system…" in doctrine?[27]

There are two major problems in attempting to create such a definition. First, and most importantly, "a mature theater with a robust air mobility system," is not the sole criteria for when and where it is appropriate to transfer TACON. It might be wise for the Commander of USTRANSCOM to transfer TACON of one C-17 to a geographic Commander in Chief (CINC) even if the theater is not robust with air mobility expertise. CINC USTRANSCOM could send an air mobility expert to help the theater manage the mission. On the other hand, that same theater could not manage thirty C-17s. When and "where appropriate," keeps the decision rightfully with the Commander assigned these forces in the first place.[28] The second major problem is that any definition of capabilities, just as computer memory or speeds, becomes dated rapidly. Imagine if the doctrinal definition required high frequency radio connectivity. Where would the doctrine place satellite connectivity of today? The doctrine does not codify enduring wisdom when linked to technology or technology dependent definitions, such as "a robust air mobility system."[29]

Clearly, these examples of Joint and Air Force publications demonstrate that doctrine, addressing actions in ALLIED FORCE, already exists. Yet, that has not been the way it usually happens, which led to General Robertson's desire to emphasize the use of TACON transfer. The

General's vision for future operations, "...as to how that's [transfer TACON] done" bumps against Lieutenant General Begert's reality – TACON "requires a mature theater with a robust air mobility command and control (C^2) system." [30] None of the instances in Joint or Air Force doctrine address theater C^2 capabilities except within the concept of "where appropriate." The decision of what capabilities are required to transfer TACON properly rests with the commander transferring control. The commander considering a transfer of TACON has a responsibility to ensure that the forces can be well managed.

So how then does the Air Force realistically evolve towards General Robertson's vision of support to the warfighter? The Air Force does not need to change its doctrine, nor should the Air Force limit itself with specific definitions of a mature theater with a robust air mobility system. Rather than changing doctrine, "the principle fundamental on how best to employ mobility forces," the Air Force should devise a strategy to enable commanders to maximize the strengths of available forces in various situations. [31] The strategy needs to account for the history, theory, and doctrine, with a long-term vision. The Air Force needs to incorporate the details in its strategy and plans for execution to produce evolutionary change.

Notes

[1] Joint Pub 1 *Joint Warfare of the Armed Forces of the United States*, 1995, vi.

[2] Keith A. Hutcheson, *Air Mobility: The Evolution of Global Reach*. (Vienna, VA: Point One Publishing): 5.

[3] Ibid.

[4] Kennedy, Betty R., *Air Mobility En Route Structure: The historical Perspective, 1941-1991*, special report, (Scott AFB, IL: Headquarters Air Mobility Command, 1993), 6.

[5] Ibid.: 11.

[6] Briefing, DIRMOBFOR Class, Air Mobility Warfare Center, subject: Director of Mobility Forces, Roles and Responsibilities (version 7.1), February 1999.

[7] Ibid.

[8] Major Randy A. Kee, "Air Mobility Entering the 21st Century: Integrating Efforts for Rapid Global Mobility," *Air Mobility Symposium: 1947 to the Twenty-first Century* (Fort Dix, NJ., Air Mobility Warfare Center, 1997), 205-225.

[9] Joint Pub 0-2 *Unified Action Armed Forces*, 1995, i.

Notes

[10] Ibid. III-1.

[11] Ibid. III-9.

[12] Lieutenant General William J. Begert, "Kosovo and Theater Air Mobility," *Aerospace Power Journal* XIII, no. 4 (Winter 1999): 11-21.

[13] Ibid.

[14] Joint Pub 0-2, *Unified Action Armed Forces*, 1995, III-10 – III-11.

[15] Joint Pub 5-00.2, *Joint Task Force Planning Guidance and Procedures*, 13 January 1999, II-1.

[16] Briefing, Headquarters USAF Expeditionary Aerospace Force Implementation Division (XOPE) subject: Expeditionary Aerospace Force Implementation, Sep 1999.

[17] Joint Pub 5-00.2, *Joint Task Force Planning Guidance and Procedures*, 13 January 1999, II-1

[18] Ibid.

[19] Several instances of AF Doctrine interchange COMAFFOR and JFACC because it is assumed the AF will have the preponderance of aerospace forces, when the COMAFFOR would be dual-hatted as the JFACC.

[20] Air Force Doctrine Document 2, *Organization and Employment of Aerospace Power*, 28 September 1998, 44.

[21] Ibid.

[22] Ibid.: 58.

[23] Air Force Doctrine Document 2-6, *Air Mobility*, 25 June 1999, 20.

[24] Air Force Doctrine Document 2-1.2, *Strategic Attack*, 20 May 1998, 37.

[25] Ibid.

[26] United States Air Force Academy *1986 Contrails* (Colorado Springs, CO., 1986) n.p.

[27] Lieutenant General William J. Begert, "Kosovo and Theater Air Mobility," *Aerospace Power Journal* XIII, no. 4 (Winter 1999): 18.

[28] Air Force Doctrine Document 2-1.2, 37.

[29] Begert, 11-21.

[30] John A. Tirpak, "Airlift Reality Check," *Air Force Magazine* (December 1999), n.p.; on-line, Internet, 7 March 2000, available from http://www.afa.org/magazine/1299airlift.html.; Begert, 11-21.

[31] Joint Pub 1, 1995, vi.

Part 3

Strategy and the Plan for Air Mobility Execution

"If we do not properly account for air mobility, all strategy is doomed to fail and all planning is for naught."

— Brigadier General Wald, USAF Director of Strategic Planning[1]

Joint and Air Force doctrine allow for the judicious use of TACON and Direct Support relationships. However, the specific details of how to execute these relationships should not be in doctrine, but rather in the strategy and plans. Operation Allied Force demonstrated the importance of a robust air mobility system. If we are to improve this structure and fulfil General Robertson's vision, there are several critical concepts, which need to be addressed.

Geographic Versus Functional Perspectives

The US military has two types of combatant commands. The Commanders in Chief (CINCs) of these combatant commands have either geographic or functional areas of responsibility. A geographic command, such as USEUCOM, covers US military actions in Europe and most of Africa.[2] A functional command has responsibilities that do not have geographic boundaries. USTRANSCOM, for example, is charged with being the single manager of the Defense Transportation System (DTS) around the globe.[3] These

differing areas of responsibility (AORs) require different perspectives. The geographic CINC determines the highest priority mission and focuses his or her efforts and resources within a specific area of the globe. The functional CINC must be able to operate in any region of the world depending on the highest priority mission as enumerated in the Joint Chiefs of Staff (JCS) priority system. These priorities do not always match. In this researcher's experience, decisions made to support geographic priorities sometimes appear less efficient in a functional or global perspective, while functional choices seem less than effective in a geographic focus.

By way of example, look at the augmentation of USEUCOM forces with KC-135s during ALLIED FORCE. USTRANSCOM assigned KC-135s changed operational control (OPCON) to USEUCOM. This command relationship meant that during the weeks when diplomatic efforts required a halt in Operation Allied force bombing, the KC-135s were not available to USTRANSCOM for other missions.[4] As General Tunner explained in *Over the Hump*, there is nothing more frustrating than seeing an idle airplane and being "unable to do anything about it."[5] USEUCOM maintaining OPCON of the KC-135s was not the most efficient use from a global perspective, but in a geographic perspective, allowing the KC-135s to do other missions could have meant the aircraft were not available to fly the next ALLIED FORCE missions. Clearly, if we are to learn from ALLIED Force, the air mobility strategy must be responsive to both geographic and functional perspectives.

Unity of Command - Unity of Effort

Joint Pub 1 explains that the principles of war categorize universal truths in warfare.[6] Further, the principles of war help military thinkers develop the fundamentals of joint warfare.[7] Unity of command is one of these principles. From an airman's perspective, "unity of command ensures the concentration of effort for every objective under one responsible commander."[8] The critical focus of unity of command is to create unity of effort.[9] By putting one commander in charge, everyone has a focal point for guidance as well as final decisions. Everyone works for the same decision-maker in a common direction. The key is developing unity of effort.

The next question then becomes must the JFC *command* forces to achieve unity of effort? Although Joint and Air Force doctrine discuss unity of command to ensure unity of effort, the desired result is the unity of effort and not unity of command for its own sake.[10] This is especially true for inter-theater and global forces. These forces typically cross through various CINCs' areas to support a specific joint operation. The theater perspective says that the JFC must have unity of command over these forces to ensure unity of effort in the joint operation. The functional perspective asserts that the JFC does not need unity of command, but unity of effort. With the JFC's intent and direction, these forces can provide a concentration of effort toward a common objective without sacrificing functional support to other areas of the globe. As long as these forces understand the JFC's intent and leaders learn to accept unity of effort rather than unity of command, the USAF does not artificially limit its capabilities.

Look again at the previous KC-135 example, but apply a less stringent command relationship. In this scenario, USTRANSCOM assigned KC-135s could have provided

Direct Support to USEUCOM. This command relationship would have meant that the KC-135s answered directly to USEUCOM's requests for assistance, but the establishing directive could have included retasking criteria for USTRANSCOM.[11] USTRANSCOM could have incorporated a stipulation allowing these air mobility forces to support other operations when not required for ALLIED FORCE.

In much the same way, other inter-theater or global forces support several operations at one time. Inter-theater bombers, information specialists, or assets in space can provide capabilities to more than one region of the globe. These forces can provide greater utility to the larger US military operation when commanders can accept unity of effort rather than more stringent unity of command. The strategy the Air Force develops to deal with its more demanding future must leverage the existing doctrine to capitalize on these resources rather than limit the range of global assets in restrictive command relationships.

An Evolutionary Strategy

Most of the projections about future operations emphasize that the Air Force will need to be more "expeditionary," with smaller support requirements, operating in lesser-developed locations around the globe.[12] In other words, the future will be many ALLIED FORCE type operations without the benefit of USEUCOM's robust theater. With this in mind, the Air Force needs a strategy and a plan to execute the existing doctrine in any geographic region. Rather than building "robust air mobility system[s]" everywhere, the Air Force should build a system supporting the expeditionary outlook provided in *Joint Vision 2010* and *Air Force 2025* documents.[13]

Joint Vision 2010 and *Air Force 2025* are templates for adapting military capabilities for the future.[14] They emphasize the use of networked organizations to provide flexibility and share information through high tech systems. Although the current air mobility command and control system has made some attempts to share information between units, it does not provide a network of organizations. Instead, the long-term plans build three airline dispatch style centers.[15] One center will control theater assets for US Pacific Command (USPACOM). A second dispatch center will be in USEUCOM for its assigned and attached assets. The third dispatch center will manage USTRANSCOM's global mission and provide support to all other geographic CINCs without dispatch centers. The Tanker Airlift Control Center (TACC) will plan, and execute missions for USTRANSCOM, while USPACOM and USEUCOM will each have an Air Mobility Operations Control Center (AMOCC) performing similar functions for the theater forces.

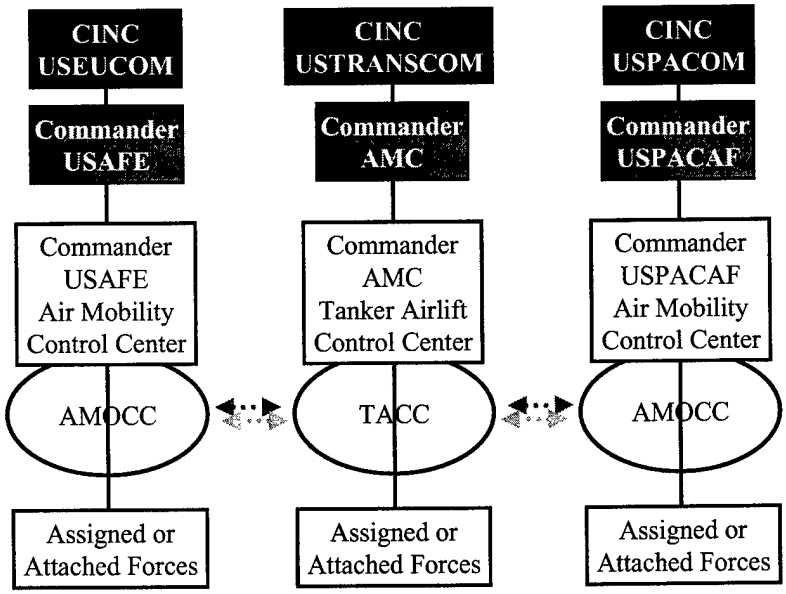


Figure 2. Three Separate Control Centers[16]

Figure 2 shows the three centers for USEUCOM, USPACOM, and USTRANSCOM.

Unfortunately, this concept stratifies the air mobility system. It neither supports the long-term vision, nor does it advance the capabilities of the air mobility system. Instead of developing organizations that are responsive to both geographic and functional perspectives, this system creates several divisions. There are geographic regions with AMOCCs, geographic regions without, and the functional area under USTRANSCOM. Rather than create an environment of trust and cooperation, these separate units will create seams to be worked. In place of leveraging the existing doctrine, the system delivers a patchwork of capabilities and restrictive command relationships. The strategy needs to modify the system to account for the history, theory, and doctrine, with a long-term vision.

Modifying the Mobility C^2 System

Part of the *Air Force 2025* concept advocates networking organizations through split and distributed operations. Distributed and split operations both deal with geographically separated organizations. With split operations, the total organization is under a single commander, for unity of command. Distributed operations are a formalized process between different groups under different commanders, but providing unity of effort. [17] Both focus on a small forward team to reduce support requirements and a larger, more robust team based "in-garrison" with more permanent facilities and support. "The bulk of the planners and controllers at home station… receive inputs from the JTF leadership, plan, integrate, and feed to a consolidation cell to task and control the effort, all using distant communications technology."[18] The network involves a small group of mobility experts deploying with the JTF. This team advises the JTF staff and builds the concept of

operations based on the JTF requirements. The team then coordinates the concept of operations and requirements with a centralized dispatch center. With the mobility team's inputs, the centralized dispatch completes the detailed plans, schedules missions, integrates with the JTF's Air Tasking Order, and manages the air mobility missions for the forward team. The C^2 system becomes a network of light but capable forward cells connected to a robust consolidated center. This same consolidated center incorporates the theater experts' inputs to plan, schedule, and manage theater assets for the geographic CINCs.

Distributed operations enable all the theaters to incorporate mobility experts into their staffs without paying a manning price for a full AMOCC. The consolidated dispatch operation takes care of the computer system data entry and minute-by-minute mission management. In a sense, the theater staff "contracts out" for the dispatch functions and keeps the mobility planners and local experts to advise and work requirements and issues.

Advantages of a Consolidated Dispatch Center

In addition to aircrew support advantages from a centralized dispatch center, there are two big benefits: efficiency and effectiveness. Efficiency stems from economies of scale. For example, if every 10 aircraft require 1 facility based communications link and two AMOCCs are running 10 to 15 missions, then they both need two sets of the equipment. Bringing the two centers into the same location reduces the number of communication links from four (two in each center) to three. Two centers with 15

missions equal 30 missions, which one center can manage with only three communications links. The same principle applies to the personnel positions as well.

The effectiveness comes from the theater liaisons. Keeping mobility planners and local experts "in-theater" strengthens the air mobility knowledge base for the warfighter. Eliminating the computer system data entry tasks enables these experts to focus on solving theater and air mobility unique issues. Some of the major commercial airlines incorporate a similar structure with front offices in large international cities to work local coordination issues while the dispatch centers work the actual flight schedules.[19] This enables the airlines to be light and flexible "in theater" and invest in the high tech computer and communication systems in a relatively safe and stable location in the US.

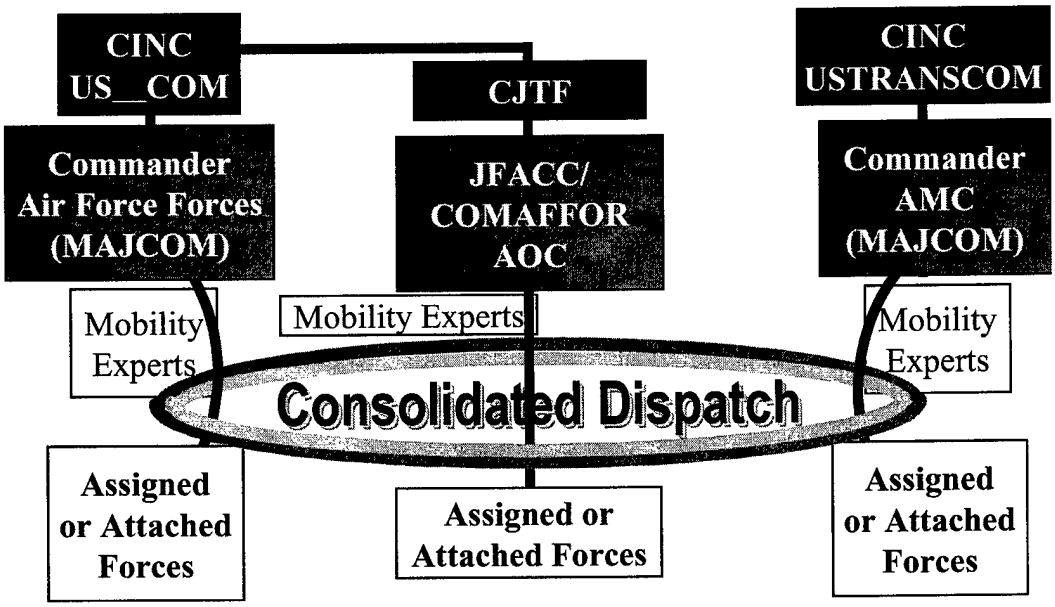


Figure 3. Example of Consolidated Dispatch Center.[20]

Figure 3, shows the forces assigned or attached to US___COM (fill in the blank, USEUCOM, USPACOM, etc.), the Joint Task Force, and USTRANSCOM. These

resources remain under the CINC's Control, but can easily be used in support of other commanders because the consolidated dispatch provides system wide visibility of all air mobility resources. The commander of US___COM retains control of the forces and tomorrow's ability to respond to another crisis. Consolidated dispatchers plan and manage the missions based on the local mobility experts' guidance to execute the CINC's or JFC's vision for the crisis or fight.

For example, theater planners might better solve an African humanitarian contingency involving primarily deployments from Europe and CONUS.[21] They work the overall guidance, translating the JTF vision into the air mobility effort. Instead of deploying extra personnel to augment the JTF's mobility staff or to increase the data entry capability of the AMOCC, people in the consolidated dispatch center manage these functions remaining in-garrison. A few of the theater's mobility experts deploy forward with the JTF's AOC, taking enough communications and planning support to relay requests and requirements back to the consolidated dispatch center. This arrangement networks the commander in the field through the forward team of experts to the robust, global air mobility system. The capability to transfer TACON or provide Direct Support will not be theater specific.

The consolidated dispatch organization blends with the *Joint Vision 2010* and *Air Force 2025* concepts, to provide a range of benefits.[22] Because the dispatch center is permanent, the investment in communications capability is not spent for each individual theater or contingency. The dispatch center reduces "the strategic-tactical duplication of theater C^2 facilities."[23] Both the strategic and theater C^2 functions flow through the consolidated dispatch center. This system also creates a mechanism for the "judicious

use of strategic airlift in-theater when needed to supplement the tactical effort" by easily incorporating TACON transfer or Direct Support relationships.[24] Allowing a C-17 to support a theater requirement through a consolidated dispatch system no longer limits USTRANSCOM's visibility of these assets, or ability to recall the aircraft. The CINC has not given away tomorrow's ability to respond to today's problem.

Disadvantages of a Consolidated Dispatch Center

Just as the CINC's are reluctant to give up control over specific forces for fear they might not be able to get them quick enough in times of crisis, mobility managers will be reluctant to give up control. A commander has less direct power when some of the functions associated with their mission are not located within "walking distance." The power to reach out and touch a poor performer declines as the distance increases. With dispatchers several time zones away from the commander, a consolidated dispatch center will not appeal to many. Although this can be overcome with improved communication equipment and training, it will be difficult to convince some of return on their investment in the new process.

Consolidating the dispatch functions into one location will increase demands on the quality and experience of theater mobility planners. As the distance between the planners and the dispatchers grows, the requirement for clear communication of ideas grows. The experts must be more capable of zero defects planning. Again, communication improvements and training can offset this disadvantage. This type of structure enables effective operations based on local expertise and efficiencies of a globally consolidated dispatch center.

Operation Allied Force

Recall the KC-135 example from early in Operation Allied Force. In spite of the two-week lull in requirements, these resources were not available to support another contingency. With a consolidated dispatch center, not only could USTRANSCOM have shown USEUCOM the ability to return to ALLIED FORCE, but also USEUCOM could have provided the KC-135 support instead. USEUCOM would have had control over the missions through the consolidated dispatch center.

Notes

[1] Keith A. Hutcheson, *Air Mobility: The Evolution of Global Reach*. (Vienna, VA: Point One Publishing, 1999), 41. Keith A. Hutcheson, *Air Mobility Command: Backbone of America's Defense* (Vienna, VA: VII Publishing, 1998), 2.

[2] Armed Forces Staff College Pub 1 *The Joint Staff Officer's Guide*, 1997, 2-28

[3] Ibid.

[4] Briefing, Air Mobility Operations Course, subject: The Tanker Airlift Control Center. (Fort Dix, NJ: Air Mobility Warfare Center, June 1999)

[5] Lieutenant General William H. Tunner, *Over the Hump* (New York: Duell Sloan, and Pearce, 1964), 119.

[6] Joint Pub 1 *Joint Warfare of the Armed Forces of the United States*, 1995, III-1

[7] Ibid., viii

[8] Air Force Doctrine Document 1 *Air Force Basic Doctrine*, September 1997, 12

[9] Joint Pub 3-0 *Doctrine for Joint Operations*, 1995, A-2.

[10] Joint Pub 1 *Joint Warfare of the Armed Forces of the United States*, 1995, III-1

[11] Joint Pub 0-2 *Unified Action Armed Forces*, 1995, III-10 - 11.

[12] Headquarters Air Mobility Command, *Air Mobility Strategic Plan* Section 1.1 (1999), n.p.; on-line, Internet, 17 March 2000, available from http://amc.scott.af.mil/

[13] Lieutenant General William J. Begert, "Kosovo and Theater Air Mobility," *Aerospace Power Journal* XIII, no. 4 (Winter 1999): 11-21.

[14] Chairman, Joint Chiefs of Staff, *Joint Vision 2010*, (Washington, D.C.: Government Printing Office 1996), http://www.dtic.mil/doctrine/jv2010. Chairman, Joint Chiefs of Staff, *Joint Vision Implementation Master Plan: CJCSI 3010.02* (Draft), (Washington DC: Government Printing Office, 1998), http://www.dtic.mil/doctrine. Boo Dodgen, *Concept of Operations for Expeditionary Aerospace Force Distributed Operations for Command and Control*, (Langley AFB, VA., Science Applications International Corporation, AFC2TIC/EAF C^2 Baseline Team, 1999)

[15] Headquarters Air Mobility Command, *Air Mobility Strategic Plan* Section 1.7.5, 1999. Briefing, Air Mobility Operations Course, subject: The Tanker Airlift Control Center. (Fort Dix, NJ: Air Mobility Warfare Center, June 1999)

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[16] Jeffrey L. Hupy, *Command and Control of Mobility Forces: Analysis of the Organizational Structure,* Report no. ADA372441 (Wright-Patterson AFB, OH: Air Force Institute Of Technology, School of Systems and Logistics, June 1999) 4.

[17] Dodgen, 1999.

[18] Major Randy A. Kee, "Air Mobility Entering the 21st Century: Integrating Efforts for Rapid Global Mobility," *Air Mobility Symposium: 1947 to the Twenty-first Century* (Fort Dix, NJ., Air Mobility Warfare Center, 1997), 214.

[19] Alxendar T. Wells, *Air Transportation* Third Edition, (Belmont, CA: Wadsworth Publishing, 1994), 242.

[20] Hupy, 1999, 37.

[21] Kee, 1997, 213.

[22] Dodgen, 1999.

[23] Richard T. Devereaux, *Theater airlift management and control: should we turn back the clock to be ready for tomorrow?* Report no. M-U 43998-1A (Maxwell AFB, AL: School of Advanced Airpower Studies, AU Press, September 1994), 20

[24] Ibid.

Part 4

Conclusion

"If we do not build a transportation system that can meet our needs of tomorrow, then it doesn't matter much what kind of force we have because it won't be able to get there."

— Gen. Shalikashvili, Former JCS Chairman[1]

To continue General Shalikashvili's analysis, if we don't build the organizational structure to leverage our capabilities, we won't have a transportation system that can meet the needs of tomorrow. Operation Allied Force demonstrated the success of transferring TACON when appropriate. The operation also highlighted the importance of a robust air mobility system. If doctrine is to codify the "fundamental principles of the best way to employ national military power," shouldn't we have the capability for it to work in every theater? [2] Current Joint and Air Force doctrine establishes the option to transfer TACON or provide Direct Support when it's wise to do so.[3] The doctrine provides the best employment through the judicious use of TACON and Direct Supporting relationships. The details of how to, or when it would be judicious should not be etched in doctrine, but rather integrated into the strategy and plans.

Revamping the C^2 system into a global capability will enable mobility forces to provide robust air mobility system to support every theater. The consolidated dispatch center alleviates the competing issues between the theater and global perspective, while it supports unity of effort. The planning function and air mobility experts remain with the CINC's command structure,

while the centralized dispatch center manages the plan for the commanding organization. The networked organization is not hierarchical in itself, but rather data linked and sharing information. Finally, the idea of a consolidated dispatch center data linked to the theater planners' or JTF's network mirrors the *Joint Vision 2010* and *Air Force 2025* concepts of the future.

Notes

[1] Keith A. Hutcheson, *Air Mobility: The Evolution of Global Reach.* (Vienna, VA: Point One Publishing, 1999), 47

[2] Joint Pub 1 *Joint Warfare of the Armed Forces of the United States*, 1995, iv.

[3] Air Force Doctrine Document 2, *Organization and Employment of Aerospace Power*, 28 September 1998, 12.

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