

Total Mobility Flow: A Post-Kosovo Role for the DIRMOBFOR

by

Nonie C. Cabana

Introduction

"Air Mobility played a crucial role by enabling and sustaining the air war that ultimately forced Milosevic to NATO demands."

Lt General William J. Begert.¹
HQ USAFE, Vice Commander

The CINC did not have a total mobility flowmaster fusing all the strategic mobility triad (airlift, sealift, and prepositioning) during Operation Allied Force (OAF). He had a Director of Mobility Forces (DIRMOBFOR) whose focus centered on airlift coordination. A sealift and prepositioning coordinator was missing. This situation resulted in a stovepiped and incoherent total mobility flow in the CINC's theater of operations. Simply put, there was a lopsided use of airlift in comparison with sealift and prepositioning assets.

To capitalize on OAF's experience, this paper investigates a post-Kosovo role of the DIRMOBFOR to integrate the total mobility system, which would enable the CINC to enhance force build up and force closure capability in the future. It contends that two critical factors were not effectively accomplished during OAF, which degraded the CINC's achievement of his objectives. First, the multiple task force organizations established to support different missions and the separation of the DIRMOBFOR and the Joint Forces Air Component Commander (JFACC) to simplify working relationships disrupted unity of command. Second, there was no "single flowmaster" which fused the entire strategic mobility triad.

The actors playing key roles in OAF are the Director of Mobility Forces (DIRMOBFOR) and the operational commanders (CINC, Joint Force Commander, Commander Joint Task Force, and component/functional commanders). The DIRMOBFOR exercises coordinating authority between the Airlift Control Center, Air Mobility Element, Joint Movement Center, and the Air Operations Center in order to expedite the resolution of the airlift problem.² The DIRMOBFOR's duties and authority will be as directed by the Commander, Air Force Component Commander (COMAFFOR) or Joint Forces Air Component Commander (JFACC) to satisfy the objectives of the Joint Force Commander.³

On the other hand, the operational commanders are responsible for accomplishing the CINC's military objectives. They are the operators that can either make the DIRMOBFOR's tasking easy or difficult depending on how the theater command and control (C2) is organized.

There is general agreement that airlift is the preferred choice of the strategic mobility triad among the operational commanders to rapidly deliver combat power or humanitarian relief to any world trouble spots. Specifically, we are referring to deployment, sustainment, simply doing good things for American citizens or humans of any nationality needing help. Colonel Coy, OAF Deputy DIRMOBFOR affirmed this preference when he said: "Airlift is like candy...Everybody wants some...I want it now... I want it all."⁴ Unfortunately, there is insufficient candy to pass around to satisfy everyone. Thus, use of other lift assets such as sealift is important to compliment airlift shortages.

When the Cold War ended, the United States Air Force formulated its "Global Reach, Global Power" vision. Essentially, "global reach" represented our Mobility Air Forces' (MAF) strategic capability to deploy, sustain, and redeploy warfighters and their equipment to any part of the globe. "Global power" reflected the Combat Air Forces' (CAF) contribution to the equation. Today, the Air Force's vision is the ability to deploy an Aerospace Expeditionary Force (AEF), to any brewing conflict or contingency in a moment's notice to support the CINC's air power requirement.

Historically, the MAF has proven its mettle when confronted with conflicts or contingencies. This was done under the able leadership of commanders sporting a variety of titles: Commander of Airlift Forces (COMALF) during the Cold War; Commander of Mobility Forces (COMMOBFOR) during Operations Desert Shield/Storm; and Director of Mobility Forces (DIRMOBFOR) following Desert Shield/Storm, and in particular during (OAF).

Lineage of Mobility Air Forces

Many would begin the lineage of MAF with the "Hump Airlift" experience in Asia. Lieutenant General William Tunner controlled theater airlift distribution within China, while General Claire Chennault commanded the air combat forces in China.⁵ Tunner believed that his controlling airlift both into and within China facilitated most effective utilization of assets. Conversely, Chennault argued that as Burma airlift assets periodically performed air distribution within China, he should control and direct those aircraft once they arrived in his theater. However, external developments caused by increased offensive maneuvers from the Japanese forces compelled Chennault to fully concentrate on combat operations, thus allowing Tunner to retain sole control of the airlift.⁶

During the Berlin Airlift (1948-1949), General Tunner served as the theater airlift commander and worked under the Commander-in-Chief, United States Air Forces in Europe (CINCUSAFE). Tunner informally coordinated with the strategic airlifters of the Military Air Transport Service (predecessor of Military Airlift Command (MAC), and today's Air Mobility Command).⁷

In the Korean conflict, the MAF was supported by a divided airlift system that operated as part of a divided strategic theater airlift system. That is, the Army and the Air Force operated their

own airlift system, which compounded this division. In other words, unity of control was almost nonexistent. This inefficient practice was discouraged when the Secretary of the Air Force was designated as the single Airlift Manager for the DOD.⁸

The Vietnam War repeated the Korean conflict airlift experience. For example, overlap of responsibilities and functions in the aerial ports was an operating standard. The commissioning of the Corona Harvest Report advocating a single airlift manager subsequently stopped this practice in 1974.⁹

Single airlift control, as practiced by the Military Airlift Command between 1974 and 1992, produced seamless airlift that resulted from a system featuring airlift experts who operated at each intra- and inter-theater. They understood the airlift system's role in transporting men and equipment from the U.S. based "fort" to the theater "foxhole."¹⁰ During this period, the COMALFs resided in the European and the Pacific theaters. In Europe, there existed a 322nd Airlift Division, Ramstein Air Base, Germany, dual-hatted as COMALF during contingency. The COMALF worked for the JFACC or Commander-in-Chief United States Air Forces in Europe (CINCUSAFE). Similarly, the 834th Airlift Division, Hickam AFB, HI, performed these same functions. This COMALF worked for the JFACC or Commander-in-Chief Pacific Air Force (CINCPACAF). Nonetheless, the post Cold War drawdown and reorganization eliminated the COMALF structure.

Background

In 1999, NATO executed Operation Allied Force to stop Milosevic's "ethnic cleansing" in Kosovo. To achieve OAF's objective, a massive deployment of aircraft, troops, and cargo was required and a high tempo sustainment operation was established to put "teeth" into the OAF commitment. Airlift and tanker assets made this effort possible. (See **Figures 1 and 2**).¹¹



Figure 1. (Data obtained from DIRMOBFOR's Working Brief)

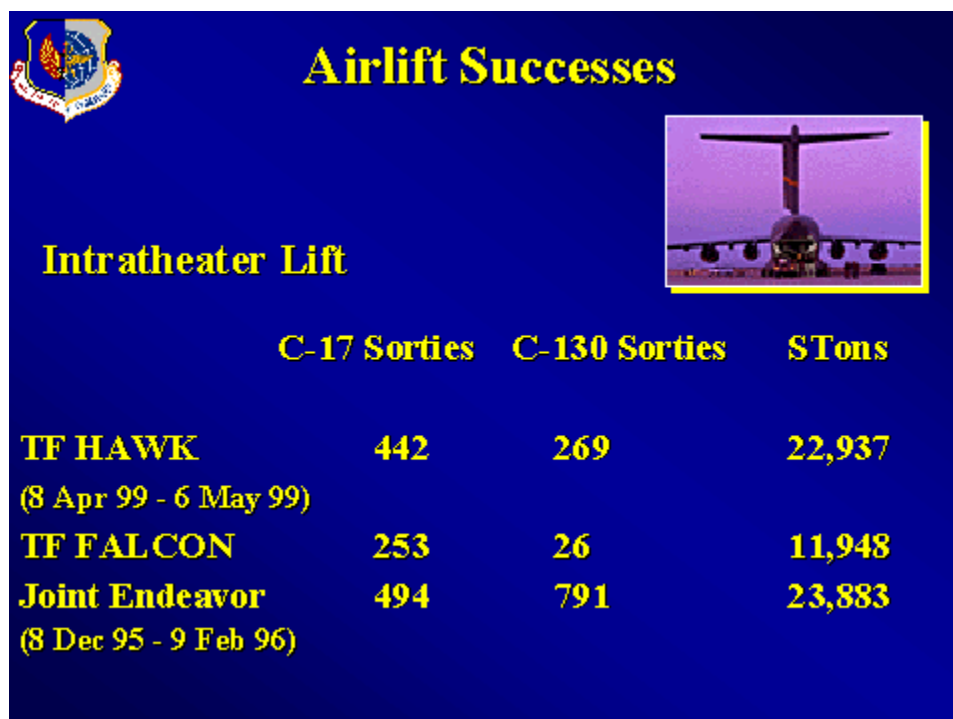


Figure 2. (Data obtained from DIRMOBFOR's Working Brief)

During OAF, the Director of Combined Air Operations Center (DIRCAOC) resided in Vicenza, Italy. The JFACC empowered the DIRCAOC to integrate all the air operations via the Air Tasking Order (ATO). Hence, the DIRMOBFOR had to maintain dialog with the DIRCAOC to achieve airlift integration in the air operations scheme.

On the other hand, the DIRMOBFOR, in concurrence with the COMAFFOR, elected to run his operations within United States Air Forces in Europe's Air Mobility Operations Control Center (AMOCC) at Ramstein Air Base, Germany. This decision was reached because it had the strongest connectivity and reachback capability, and held status as the major airlift hub within the region.¹² Reachback is defined as an extensive use of sensor platforms deploying forward while their data reduction and analysis components remained at the home base.¹³ Also, Ramstein's experience and lessons learned from Operation Joint Endeavor supporting humanitarian relief for Bosnia made it a mature theater's command and control node.¹⁴

The airlift contributions to OAF were unprecedented. General Robertson, USCINTRANS, in comparing the use of airlift during Operations Desert Shield/Storm and Allied Force, noted that: "in ODS 9.6 % of the cargo moved by air, whereas in OAF 62.4 % of the cargo moved by air."¹⁵ Sealift was used to move USAF Red Horse construction equipment, USN Seabee equipment, humanitarian airlift cargo, ammunition from CONUS to overseas and within the theater of operations.¹⁶

Operation Allied Force airlift unquestionably broke the model of the traditional deployment and sustainment ratio of 10 % airlift and 90 % sealift that was typical since post World War II. NATO attributed this unprecedented shift in airlift allocation to the reliance of senior leaders on an air campaign to decrease casualties as much as possible. Some may contest that this shift was caused by users' unintended pursuit of using airlift before sealift. Such a priority was understandable because of the instinct to go with the fastest mode when under pressure to meet deadlines. But there was a price to pay.

Analysis

"One Boss, One Team, and One Mission"

Unlike the Berlin Airlift and MAC era where there was a clear distinction of a single airlift "boss," the OAF DIRMOBFOR had multiple masters to please. Some may argue that OAF was more complex than the Berlin Airlift because it involved an air superiority campaign, force build-up, and humanitarian operations. Others may contend that the MAC era may have smoothly resolved this dilemma because of a "single boss" arrangement. A single boss normally simplifies unity of effort.

While the DIRCAOC was busy fighting the air campaign that lasted for 78 days under one boss, the DIRMOBFOR was not as fortunate. To support both the CAF's and the MAF's needs, the DIRMOBFOR had to split his Air Mobility Division (AMD) into two operating locations. One was AMD Forward, located in the NATO's Regional Air Movement Control Center (RAMCC) Vicenza, Italy, to integrate airlift operations with the Air Tasking Order

(ATO). The other was AMD Rear, which was imbedded in the Air Mobility Operations Center (AMOCC) Ramstein Air Base, Germany, to coordinate the main effort of air logistics support in the region.

This C2 arrangement could have spoiled the DIRMOBFOR's role as the contingency airlift "flowmaster." Tasked to support demanding and politically sensitive multiple Joint Task Force (JTF) logistics airlift operations, the consequences to the DIRMOBFOR could have been devastating. He was tasked to satisfy the air logistics requirements for operations comprising multiple JTFs. The support included humanitarian relief operations (JTF Shining Hope), Kosovo Forces support (JTF Falcon), major military operation to stop Serbian atrocities in Kosovo (JTF Noble Anvil), and Apache helicopter deployment to Tirana (TF Hawk). He also administered varied distinguished visitor program support (Operational Airlift Support) missions and maintained selective air routes for continuous sustainment.¹⁷

Needless to say, this multi-support requirement was a coordination nightmare. Each of these complex operations required the DIRMOBFOR to master the balancing act of serving as airlift flowmaster and as a diplomat to satisfy all the customers' needs.

Was there a lesson to be learned from airlift history? For OAF, DIRMOBFOR was not located with the JFACC, much the same conditions as in China, but coordination of airlift was clearly his responsibility, unlike the situation with Tunner and Chennault. From a C2 or airlift management perspective, it was very difficult for DIRMOBFOR to support multiple and concurrent task force operations. That is, the DIRMOBFOR was expected to provide equal support to each of the JTF's missions because each mission bore equal importance in order of support in light of political and military constraints from higher headquarters.

It would have been simpler for the DIRMOBFOR to prioritize MAF assets if there had been a single JFC synchronizing the actions of the operational commanders. At least, if this concept of operations had been adopted, it could have streamlined and simplified the airlift request process.

A possible solution might have been for SACEUR to designate his Allied Forces South (AFSOUTH) to serve as the JFC for all JTFs and components/functional commanders. For example, when the DIRMOBFOR was challenged to concurrently support other JTFs such as Falcon and Shining Hope with equal importance in mission priority, the C2 issue became more complicated and complex. Specifically, the DIRMOBFOR had to serve multiple masters with different objectives. This type of environment violates two of the nine principles of war—simplicity and command unity.

Integration of Air Operations Center

In fairness, under the OAF circumstances and mission demands, the CINC's decision to separate the DIRMOBFOR from the DIRCAOC allowed the JFACC to concentrate his main efforts on the battle. He did this by integrating all the elements of the combat power

at his disposal, including theater air defense, combat air refueling, airborne surveillance and command and control aircraft.

Equally important, the separation enabled the COMAFFOR to sustain air logistics support to a myriad of JTF customers. But what was sacrificed by allowing this separation to occur?

According to service and joint doctrines, the JFACC and COMAFFOR can be a single, "dual-hatted" position. However, during OAF, the CINC decided to keep the JFACC separated from the COMAFFOR. In so doing, the JFACC effectively focused on the fight with minimum disruptions associated with air logistics support and service administrative control. The JFACC executed the air campaign through his DIRCAOC responsible for ensuring the air and space planning and execution processes. In other words, he planned, directed and executed the joint air operations in support of the Joint Force Commander's operational objectives.¹⁸ In contrast, the JFACC and the COMAFFOR wore the same hat, which simplified unity of effort for the DIRMOBFOR to support air logistics operations during ODS.

Conversely, the DIRMOBFOR did not have the opportunity to work under one roof and one boss. He became a "man with many homes and masters, who made frequent visits to the AOR to ensure air logistics support was uninterrupted and the coordination chain was not broken. The complexity of this C2 airlift scenario could have caused Tunner to turn in his grave!

To compensate for this handicap, the DIRMOBFOR had to muster all his talents to capitalize on the existing infrastructure. In particular, he used the hybrid approach of integrating AMC's Air Mobility Element/Air Mobility Division staff with USAFE's AMOCC staff to integrate airlift operations as much as possible.¹⁹ He also applied the AMD Forward and AMD Rear, in conjunction with the NATO's Regional Air Movement Control Center (RAMCC) and AMOCC, to support the JTF Noble Anvil's air logistics sustainment for the airfight as well as others.

To meet such challenges in the future, a DIRMOBFOR must not only satisfy the airlift demands and constraints imposed by multiple operational commanders, he must also be adroit enough to integrate the coordination efforts of his AMD Forward and AMD Rear. Failure to do so may invite chaos or, worse yet, mission failure.

Reliance on Airlift Support Exceeded Its Capability

The OAF mobility experience was an anomaly in that it was predominantly an airlift effort. The multiple and concurrent airlift operations to support deployment/redeployment, humanitarian relief operations and air campaign sustainment could have reached their culminating point if there had been competing airlift requirements to support another theater of operations.

The Air Force has made it clear in a mobility study that its airlift capability can only support one major theater war (MTW). According to TRANSCOM officials, the US military has one major-theater-war [airlift] force to fight a two-major-theater-war strategy.²⁰ For instance, during OAF, the AMC-tasked mobility forces spent 2/3 of the total airlift assets!²¹

Should CINCs be alarmed by this stretched airlift capability? According to the Report to Congress on Kosovo/Operation Allied Force, the proper use of all means of strategic lift, supported by earlier assessment of ground and sea infrastructure, might result in faster force closure in future deployments.²² Accordingly, BG Bishop's (OAF DIRMOBFOR) joint transportation experience and familiarity with the theater's geography and staff allowed him to effectively recommend usage of other modes of transportation when they were practical and economical.²³ However, Bishop's effort was not enough to achieve a proper balance of all facets of mobility triad. Simply put, overreliance on airlift in OAF affirmed that some operators were unaware of other parts of the strategic mobility triad. The CINCs should suggest TRANSCOM perform a feasibility study of expanding the DIRMOBFOR's new role into one of total mobility flowmaster. Presently, no system exists to fuse all lift aspects into a coherent enabling force in a theater. The closest structure in the CINC staff having an interest on this issue are the Joint Movement Center, Joint Operational Execution System also known as "Jopesters." and the TRANSCOM LNO (liaison). However, these staffs normally handle issues at the operational level and they may not have the operators' tactical view on the battlefield to level the playing field. One possible solution to alleviate this shortfall is to integrate a Military Sealift Command and Military Traffic Management Command Liaison with the DIRMOBFOR staff to ensure sealift considerations are equally weighed in as airlift. In short, the mobility triad is fragmented, stovepiped, and needs a quick fix to achieve efficiency. An airlift model using the DIRMOBFOR template should be explored for sealift and prepositioning elements to perpetuate an integrated mobility system—responsive, agile, and flexible to the CINC's needs.

What if the air campaign had lasted over 180 days versus 78 days? Would airlift capability continue to deteriorate? When factoring in C-141s and C-5s aging because of overuse, reliability problems, and less forward operating base presence, one could envision a "broken" air mobility system!

Even when all C-17 and C-5 aircraft are fully operational, the warfighters need to continue to capitalize on using sealift because the C-141s are overworked and have reached their life expectancy. The Air Force has retired 77 C-141s, but about 120 still remain in active duty fleet and 47 in the Reserve.²⁴ By October 1999, only 24 of 163 C-141s and 22 of 126 C-5s were available for missions.²⁵ Fortunately, OAF was already over, thus keeping these poor reliability rates from making a tremendous mission dent. The C-5 mission capable rate has gotten so bad that it compelled TRANSCOM to make two C-5s available for each mission to ensure it has one plane that works.²⁶

Undoubtedly, this condition could pose a daunting challenge for a CINC when requesting forces for his AOR in response to the National Command Authority's mandate. To

compensate for this shortfall in organic airlift support, the SECDEF, through CINCTRANSCOM, may have to activate the Civil Reserve Air Fleet to meet a major theater crisis. Another possible alternative is maximizing the use of other strategic triad to reduce the airlift footprint.

The Air Force has about 40 plus C-17s in the inventory and Congress has approved the purchase for a total of 135.²⁷ This number, however, challenges the flexibility of the MAF to satisfy the CINCs needs. In the words of General Robertson the "USAF "trading" 217 C-141s for 135 C-17s in a one-for-two swap, will cause problems. Despite the C-17's lifting capacity, one airplane can not be in two places at the same time. What we have is a significant loss of flexibility and capability in peacetime to serve the customers."²⁸

An OAF success story was AMC's transfer of TACON of 12 C-17s to the Commander, USAFE during the deployment of both Task Force Hawk and Task Force Falcon.²⁹ No doubt, this TACON transfer allowed the DIRMOBFOR to improve his airlift effectiveness, efficiency and synergy. The transfer was made possible because USAFE was considered a mature theater with the right reachback and C2 connectivity as well as its previous experience from Joint Endeavor operations. This practice can best be done on a sortie-by-sortie basis when the airlift use is most effective and economical. This demonstration of operational art enabled the MAF team under the able leadership of the DIRMOBFOR and his team to achieve a mission success rate of 93.6.³⁰

Suppose the DIRMOBFOR had resided in the CAOC under the leadership of the JFACC. Would he have been as successful as working for the COMAFFOR? Some say he would have been more successful because he would have better adhered to the singleness of control fundamental: aerospace power is most effective when it is focused in purpose and not needlessly dispersed.³¹ Others would contest that it does not matter whom he works for; he will get the job done if he is empowered to handle all the logistics airlift under well-defined C2. The real issue is not whom he works for. It is about the principle of achieving unity of effort by streamlining the C2 layers.

Facing the Future

One JFC

The CINC needs one JFC to effectively, efficiently, and synergistically employ airlift resources. Equally important, a perpetual link between the DIRMOBFOR and the JFACC/COMAFFOR should be pursued to strengthen the JFC's role as a single boss for all airlift apportionment and priority. Moreover, by linking the DIRMOBFOR to the JFACC, the CINC's/CJTF's Joint Movement Center (JMC) staff now has a dedicated entry point for logistical air movements. A potential value added exists if CINCs and TRANSCOM adopt the proposed DIRMOBFOR's expanded role as the theater's total mobility flowmaster during contingency. The benefit from this expanded role should provide the CJTF a dedicated entry point for all logistical movements in his joint area of operations.

Separation of the AMOCC and DIRMOBFOR could work if the reachback capability continues to improve. However, separation of the DIRMOBFOR and the JFACC should be avoided as much as possible to integrate all aspects of air operations. They should be collocated to ensure CINC/JFC airlift needs are effectively met. This system worked well during the pre-ODS and ODS period.

The warfighters should exploit the strategic mobility triad to relieve the airlift optempo. According to the new US Army vision, the Army intends to create a rapid deployment force capable to put combat force anywhere in the world in 96 hours after liftoff...³² On the same fashion, the USAF plans to move five aerospace expeditionary forces in 15 days.³³ Surely, this vision is ambitious and calls for full employment of the strategic mobility triad as well as wider accessibility to host nation support and contingency contracting.

Mobility Flowmaster

To meet this rapid deployment vision, the CINCs should consider growing and nurturing a DIRMOBFOR capable of infusing the strategic mobility triad into a coherent and responsive system. Simply put, the CINCs need more than an airlift flowmaster. They need a total mobility flowmaster capable of coordinating all the elements of the triad to improve force closure. Similarly, the services' Foreign Area Officers and embassies' country teams should capitalize on the host nation infrastructure support to complement the triad's critical factors. When appropriate and relevant, this new role should be integrated into a joint training and joint professional military education to increase situational awareness of the mobility triad.

Recommendations

There is no question that decreased airlift capability and forward operating bases pose a challenge to the operational commanders. Innovation and increased discipline in enforcing current doctrine could ease their concern. In summarizing the previous analysis, here are several recommendations worthy of exploration:

- a. *Designate a single JFC when possible to command a major operation.* The JFC's role as a single point of contact would allow the DIRMOBFOR to prioritize and apportion his limited airlift assets. He does this by supporting the supported commanders' airlift requirements on a particular day and on a specific mission specified by the JFC through the JFACC.
- b. *Make DIRMOBFOR and JFACC inseparable.* Collocation of JFACC and the DIRMOBFOR under one roof should be pursued whenever feasible to optimize and simplify working relationships. A total reliance on reachback capability approach lacks the human-touch factor that works well when working under the same roof instead of communicating via electrons across the pond.
- c. *Educate and train warfighters in the strategic mobility triad.* The fusion of airlift, sealift and prepositioning produces an effective lift capability for the operational commanders. Not everyone can be "first in line" for airlift.

- d. **Expand the DIRMOBFOR's role as total mobility flowmaster.** This new expanded role for the DIRMOBFOR should allow the CINC to enhance force build-up and force closure because it would ideally maximize all the strategic mobility triad elements.

After a half century of airlift, the possibility of airlift misapplication still lurks. Operation Allied Force nearly caused the airlift system to reach its culminating point in a relatively minor conflict. A total team effort from the participants averted this potential downfall. The DIRMOBFOR's utility to the operational commanders can be achieved by properly applying a unity of effort and unity of command principles. The concept of "one boss, one team, and one mission" will streamline and synchronize airlift support. Linking the JFACC and DIRMOBFOR together in the AOC would effectively match limited assets against unlimited requirements. Educating and training airlift users on the viability of the entire strategic mobility triad may help ease airlift optempo.

Conclusion

The OAF's experience confirmed that all instruments of the strategic mobility triad were not fully engaged because there was no single mobility flowmaster dedicated to integrate the triad into a coherent, agile, and responsive system. In short, there was no DIRMOBFOR-like model for sealift and prepositioning similar to the airlift piece. This situation created a "window of opportunity" for an integrated mobility system. Clearly, a CINC needs a DIRMOBFOR who can effectively leverage not only the airlift piece, but also the full spectrum of strategic mobility triad. This expanded role should provide the CINC another tool to enhance force build up and force closure capability in the future.

Endnotes

1. William J. Begert, "Kosovo and Theater Air Mobility," *Aerospace Power Journal*, Winter 1999, 16.
2. Joint Chiefs of Staff, Joint Techniques, Tactics and Procedures for Airlift Support to Joint Operations (Joint Pub 4-01.1) (Washington DC, July 20, 1996), II-10.
3. Ibid.
4. Colonel Coy, Deputy DIRMOBFOR OAF, Working Brief, Air Mobility Warfare Center Course, "DIRMOBFOR," 2000, AMWC, Courseware, Fort Dix, NJ, Mar 00.
5. William H. Tunner, "Over the Hump," *Duell Sloan and Pearce*, 1964, 116-124.
6. Ibid, 116-124.
7. Ibid, 186-190.
8. Betty R. Kennedy, "Evolution of Roles and Missions Authorities Vested in AMC and USTRANSCOM, 1941-1994," *Background Paper at Headquarters Air Mobility Command Historian's Office*, November 30, 1994, 3-4.
9. Richard T. Devereaux, "Theater Airlift Management and Control: Should We Turn Back the Clock to be ready for Tomorrow," *School of Advanced Airpower Studies Thesis*, September 1994, 12.
10. Randy A. Kee, "Historical Lessons From Air Mobility Operations," *Aerospace Power Journal Air Chronicles*, maxwell.af.mil/airchronicles/cc/research/bridge/chp3.htm, 4.

11. Colonel Coy, DIRMOBFOR's Working Brief, March 2000.
12. Dennis D Angelo, Ramstein Air Base, Germany, telephone interview with author, April 17, 2000.
13. Report to Congress, "Kosovo/Operation Allied Force After-Action Report, January 31, 2000, 55.
14. Dennis D'Angelo, Air Mobility Division Rear Chief, Air Mobility Operations Control Center, Ramstein Air Base, Germany, telephone interview with author, April 17, 2000.
15. John A. Tirpak, "Kosovo Retrospective," *Air Force Magazine*, April 2000, 1.
16. Jay Standring, Military Sealift Command Headquarters, telephone interview with author, June 5, 2000.
17. Dennis D'Angelo's Interview.
18. Joint Chiefs of Staff, Department of Defense Dictionary of Military and Associated Terms (Joint Pub 1-02) (Washington DC, April 15, 1998), 20.
19. Dennis D'Angelo's Interview.
20. Bryant Jordan and Sean Naylor, "too Heavy," *Army Times*, September 6, 1999, 14.
21. Begert, 11-21.
22. Report to Congress, "Kosovo/Operation Allied Force After-Action Report, January 31, 2000, 41.
23. Dennis D'Angelos' Interview.
24. Bryant Jordan, "Guard Wants C-141 Reprieve," *Air Force Times*, November 8, 1999, 16.
25. Ibid.
26. William Matthews, "Weapons and Warfare," *Air Force Times*, October 25, 1999, 18.
27. Ibid.
28. John A. Tirpak, "Kosovo Retrospective,:" *Air Force Magazine*, April 2000, 1.
29. Begert, 11-21.
30. Colonel Coy, DIRMOBFOR's Working Brief.
31. Kee Aerospace Power Journal Air Chronicles.
32. George Seffers and Robert Holzer, "Focus on better sealift, airlift," *Marines Times*, May 8, 2000, 24.
33. Bruce Rolfsen, "One measure of strength: How Fast can Air Force move?" *Air Force Times*, May 8, 2000, 20.

Bibliography

Begert, Lt Gen, William J. "Kosovo and Theater Air Mobility," *Aerospace Power Journal*, Winter 1999.

Coy, Colonel. Deputy DIRMOBFOR OAF, "Working Brief." *Air Mobility Warfare Center Course*, "DIRMOBFOR"2000, AMWC, Courseware, Fort Dix, NJ, March 2000.

D'Angelo, Colonel Dennis. Air Mobility Division Rear Chief, AMOCC, Ramstein AB, Germany, telephone interview with author, 17 April 2000.

Devereaux, Richard T. "Theater Airlift Management and Control—Should We Turn Back The Clock to be Ready for Tomorrow?", *School of Advanced Airpower Studies Thesis*, Maxwell AFB AL: Air University Press. September 1994.

Jordan, Bryant. "Guard Wants C-141 Reprieve." *Air Force Times*, November 8, 1999.

Jordan, Bryant and Naylor, Sean "too Heavy," *Army Times*, September 6, 1999.

Kee, Major (S), Randy A. "Historical Lessons From Air Mobility Operations." Maxwell AFB AL. *Aerospace Power Journal Air Chronicles*, airchronicles/cc/research/bridge/chp3.html.

Kennedy, Betty R. "Evolution of Roles and Missions Authorities Vested in AMC and USTRANSCOM, 1941-1994." Scott AFB IL: *Background Paper at Headquarters Air Mobility Command Historian's Office*, November 30, 1994.

Leiser, Dr. Gary. "Oral History with Brigadier General Tenoso, COMALF in Saudi Arabia During Desert Shield/Storm." Travis AFB CA: *Twenty Second Air Force Historian's Office*, 28 May 1991.

Matthews, William. "Weapons and Warfare." *Air Force Times*, October 25, 1999.

McPeak, General Merrill, A. *Selected Works*. Maxwell AFB AL: Air University Press, 1995.

Report To Congress, "Kosovo/Operation Allied Force After-Action Report, January 31, 2000.

Robertson, General Charles, T. "Kosovo Retrospective." *Air Force Magazine*, March 2000.

Rolfson, Bruce, "One measure of strength: How fast can Air Force move?" *Air Force Times*, May 8, 2000.

Seffers, George/Holzer, Robert, "Focus on better sealift, airlift," *Marines Times*, May 8, 2000.

Tirpak, John A. "Kosovo Retrospective." *Air Force Magazine*, April 2000.

Tunner, Lt Gen, William H. "Over the Hump." New York: *Duell Sloan and Pearce*, 1964.

U.S. Joint Chiefs of Staff. "Department of Defense Dictionary of Military and Associated Terms." (Joint Pub 1-02) Washington DC, 15 April 1998.

Joint Chiefs of Staff, Joint Techniques, Tactics and Procedures for Airlift Support to Joint Operations (Joint Pub 4-01.1) Washington DC, July 20, 1996.

Disclaimer

The conclusions and opinions expressed in this document are those of the author cultivated in the freedom of expression, academic environment of Air University. They do not reflect the official position of the U.S. Government, Department of Defense, the United States Air Force or the Air University.

This article has undergone security and policy content review and has been approved for public release IAW AFI 35-101.
