

AIR MOBILITY:
THE STRATEGIC USE OF
NONLETHAL AIRPOWER

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ABSTRACT

Strategic air mobility is traditionally viewed as a support or enhancement force. As such, it serves to support combat forces, through their deployment and sustainment, as the combat forces seek to achieve national security objectives through lethal means. US Air Force doctrine recognizes air mobility forces only as an “enhancement” force, and additionally, US military command relations are established between combatant commands that almost always relegate the mobility commander to the supporting role. Air mobility can, and has, performed missions that do not support traditional combat operations. These operations represent the direct application of nonlethal airpower to achieve national security objectives.

The Berlin Airlift (1948-1949) and the airlift to resupply Israel (October 1973) both serve as prime examples of using air mobility forces to directly pursue national security objectives. These operations were also characterized by command relations that contributed, at least in part, to a less efficient and effective operation than otherwise might have been achieved. Predictions for the future seem to indicate that operations involving the direct application of nonlethal airpower, in the form of air mobility, will remain an important part of the US national security strategy.

In the changing international political environment, there is some evidence to suggest that the traditional use of the US military for conventional combat operations may become less commonplace. In its place, there may be a growing demand for the US military to serve the national security strategy through more nonlethal operations. Air mobility may play an increased role in serving these evolving national security strategies. Air Force doctrine should openly recognize the role air mobility can play in directly helping to achieve national security objectives. This recognition could contribute to a broader fundamental foundation for forming theories of airpower employment. This may

lead to more diverse options for the nation's decision-makers as well as a sounder base for Air Force structure, size, and composition.

Finally, recognition of the direct role air mobility forces can play in achieving national security objectives could lead to new criteria for establishing command relations. Consideration of the operation's primary objective, required expertise, and resources should play a role in determining which combatant commander is best suited to direct the operation. Other combatant commanders can then be tasked to support the operation as required. In certain situations, and under specific circumstances, the mobility commander may best serve the operation as the “supported” commander.

Changing Air Force doctrine and examining military command relations probably will not result in large-scale changes to military structure and operations. Recognizing the concept of air mobility as a form of nonlethal airpower directly pursuing national security objectives can, however, contribute to a better foundation for airpower theory and a more logical process for determining command relations that could result in more efficient and effective future operations.

About the Author

David G. Estep grew up in LaCrescenta, California and graduated from Crescenta Valley High School in 1974. He entered the USAF Academy during the summer of 1974 and graduated in 1978 as a distinguished graduate. His first assignment was as the Officer in Charge of the USAF Academy French Exchange Program until January 1979, when he entered Undergraduate Pilot Training at Williams AFB, Arizona. Upon graduation in November 1979, Second Lieutenant Estep was assigned as an Instructor Pilot, at Williams AFB, in the T-37 aircraft. While at Williams AFB, he served as a Squadron Instructor Pilot and a Wing Standardization and Evaluation Pilot. In 1984 Captain Estep was assigned to fly C-5s at Travis AFB, California where he served as an Aircraft Commander. He was selected to be an Olmsted Scholar in 1986 and studied International Law and International Relations at the University of Dijon, Dijon, France until his graduation in 1988. Upon graduation he then attended the John F. Kennedy School of Government, Harvard University, Cambridge, Massachusetts, from which he graduated with a Masters Degree in Public Administration in 1989. Following his graduate education, Major Estep was reassigned to C-5s at Travis AFB where he served as an Instructor Aircraft Commander and Assistant Squadron Operations officer. In 1992 he was selected for Air Command and Staff College (ACSC) at Maxwell AFB, Alabama, which he completed in June 1993. Following ACSC, Lt Col Estep attended the School of Advanced Airpower Studies at Maxwell AFB, Alabama. His follow-on assignment is to the Commander's Staff Group, Headquarters, Air Mobility Command, Scott AFB, Illinois. Lt Col Estep is married to the former Susan Campbell and has three children, Cassandra, Kyle, and Corey.

Chapter One

Introduction and Overview

Air power includes a nation's ability to deliver cargo, people and war making potential through the air to a desired destination to accomplish a desired purpose.

General Henry H. Arnold

Today in the rapidly changing world of emerging democracies, the United States remains the only superpower.¹ While definitions of “superpower” vary, the United States in this sense stands today as the only nation capable of exerting economic, military, and political power in support of national security objectives within the international arena, on a far reaching, large-scale, and sustained level.² A vital component of national power wielded by the US lies in its military strength, and the flexible, responsive nature of the airpower component of that military force. “Traditional” views towards applying military force focus on its lethality, and by association, lethal airpower. This classic view envisions airpower used to destroy or paralyze selected targets, to in one way or another, (or through one mechanism or another), cause the adversary to conform to American intentions. In these traditional scenarios, air mobility, which includes airlift and air-refueling, provides the necessary support for the lethal application of military force, but national security objectives can also be directly supported by non-lethal applications of airpower.³ In these specific scenarios, where the air mobility function, in and of itself, can accomplish the national security objective, it can no longer be viewed merely as a support element. Air mobility can be, and often is, utilized in a direct role to achieve national security objectives, and as such it is a form of nonlethal force application. Air Force doctrine and the United States military definitions of command relationships between “supported” and “supporting” commanders need to change to reflect this fact.⁴

This paper explores two distinct aspects of air mobility employed as strategic nonlethal airpower. First, is the treatment of strategic air mobility by United States Air

Force doctrine and second, the command relationships established by the services during military operations. In regards to Air Force doctrine, one finds that official Air Force doctrine does not recognize the use of strategic air mobility to directly pursue national strategic objectives. Air mobility is merely a force enhancer or support element. Historical evidence tends to indicate that strategic air mobility has been used in the past to directly pursue national security objectives, and air mobility will most likely continue to be used in that same way in the future.⁵

The second aspect of air mobility addressed by this paper concerns command relationships. IF strategic air mobility can in fact be used in more than a support or enhancement role, and IF an operation involves the use of air mobility to directly pursue US national interests in a nonlethal role, THEN it may be in the best interests of the operation, under specifically prescribed circumstances, to name the mobility commander (CINCTRANS) as the supported commander.

To examine these two aspects of strategic air mobility, (doctrine and command relationships), this paper will first explore the changing international environment and how that environment has affected US national security strategy. This evolving strategy leads to the possible roles of military force, and more specifically the use of airpower, in both traditional and nonlethal roles. The prospective uses of air mobility as nonlethal airpower, and its possibly increased importance, leads to an examination of Air Force doctrine and US military command relationships.

A historical review will show that the using nonlethal airpower to achieve national security objectives is not a new concept. These past operations employing nonlethal airpower, such as the Berlin airlift and the 1973 resupply of Israel, were affected by cumbersome and ambiguous relationships between air mobility forces and the operations they supported. More recently, operations in Somalia revealed that in operations with certain attributes of nonlethal airpower, there are hints that these same problems of the past are still present today. These case studies highlight that strategic air

mobility, as nonlethal airpower, can serve more than a support or enhancement role. They also help demonstrate how the supported versus supporting command relationships affect operational performance. Finally, these examples help focus on the possible future importance of strategic air mobility as nonlethal airpower, along with viable doctrinal changes and its implications for command relationships.

The Emerging International Environment and US National Security

Fully understanding the importance of nonlethal airpower in supporting US national security objectives, requires a knowledge of the evolving international environment. There are two major themes that are widely accepted in the world of international relations today. First, the world has rapidly changed over the past few years, and second, the US remains the only nation capable of claiming a “superpower” status able to act in the international arena⁶. The former Soviet Union has largely withdrawn from active intervention in international affairs as it attends to its severe internal economic and political problems. This relative withdrawal by Russia, coupled with the fall of other communist regimes and the quest for new institutions of government by countries formerly under the influence of the past two superpowers, provides a unique opportunity for the US to promote the trend towards democracy.⁷ In the words of James Schlesinger, America faces “new instabilities and new priorities” and it must be willing to deal with a more unstable and less defined set of relations in international politics.⁸ The “New World Order” that President George Bush declared in September of 1990 is coming to fruition, but the exact nature of that world and its implications are unclear. At the minimum, the US must remain constructively involved in world affairs if it is to protect its interests and provide hope for struggling democracies striving for maturity⁹.

Protecting American interests, in some form or another, is the overarching objective of the US national security strategy. Defining which interests are important and “vital” enough to warrant US action is not always easy or straightforward. There is a

“realist” school that argues the US should limit its policies to thwarting specific threats to immediate security concerns.¹⁰ This approach, tends to limit the US outlook to a short term, specific issue bias, which at times, in pursuit of the short-term goal, comes into conflict with the broader, long-term general interests defined in the United States National Security Strategy document.¹¹ There are several primary interests of the United States. These include securing the United States “as a free and independent nation, and the protection of its fundamental values, institutions, and people”, “an open international trading and economic system”, and “global and regional stability.”¹² An additional primary commitment of the United States is to the nurturing of fragile democracies with open and representative political systems. In this regard the National Security Strategy clearly states, “It is in our national interest to help the democratic community of nations continue to grow while ensuring stability.”¹³ This commitment to general principles, among which is the fostering of democracies, perhaps helps indicate a broad national security strategy for the United States to follow. Promotion of democracies tends to focus on a broad spectrum of security concerns that may not be of vital interest when taken individually. Specific situations involving economic stagnation, political instability, and human tragedy, when combined as a whole however, may need to be addressed through specific US operations. These types of problems adversely affect growth towards stable democracy, and intervention operations to alleviate them may serve American interests, both in real political benefits and strategic ramifications.¹⁴ This orientation towards broad policies helps show that in general terms the United States must realize that, “politically we are challenged to help ensure the successful transition of newly emerged and emerging democracies and success in these efforts is vital to world stability.”¹⁵

The US should actively promote and foster maturation of democracies, for they tend to engender a community of nations that is less prone to go to war or resort to violence in settling disputes.¹⁶ The key word in the analysis is “mature”. While

established democratic national systems tend to be more peaceful and cooperative, during the maturation process towards democracy, societies are often marked by instability, chaos and violent conflict. Again the United States National Security Strategy recognizes this potential for widespread instability and the resulting “potential for smaller but still highly destructive conflicts between nations and within nations.”¹⁷“ The need for stability in the world to further the prosperity of all nations is accepted by the US, which is committed to the proposition that “every effort must be made to overcome chaos and create and sustain stability in a democratic international order.”¹⁸ With the need to promote democracy and world stability established as one of several primary objectives of the United States, the remaining question is how to go about that process.

Nations have at their disposal various instruments with which to pursue foreign policy objectives. The use of political, economic and military instruments must all be chosen with care to suit a particular situation. Alberto Coll envisions the role of the US as one of a “grand facilitator” of democratic reform. He argues forcefully and convincingly that the US should play the role of “holder of the balance” much like Great Britain did during the eighteenth and nineteenth centuries. The grand facilitator must also be able and willing to perform the function of coordinator, cajoler, and occasionally, the initiator in maintaining international stability.¹⁹ The goal of promoting democracy carries with it an implication that providing an environment within which democracy can mature is a primary objective. Forcing a preference for democracy where it does not exist is at best difficult, and usually counterproductive.²⁰

Promoting democracy does not mean exporting it, and except in rare instances, democracy does not work when foreign models of government are imposed by external military force.²¹ This observation tends to indicate that economic and diplomatic tools can best serve US interests and that the military instrument may be a less effective way to actively achieve democratic ideals. There is, however, a role for the US military in promoting democracy. The military can help create a stable and secure environment

within which democratic institutions can mature. The United States should continue its support to improve regional and United Nations efforts in seeking diplomatic solutions to conflict, humanitarian assistance, and peace-keeping capabilities. The military may be used in noncombat roles to effectively foster an environment for stable growth. This focus might contribute to the early avoidance of open conflict, rather than allowing hostilities to expand into a serious national threat.²² Using the military to assure peace and stability through nonlethal means, instead of emphasizing its “lethal force” aspect, dictates a reassessment of the future role the military may be called upon to play.

The Military Instrument of Power and Airpower

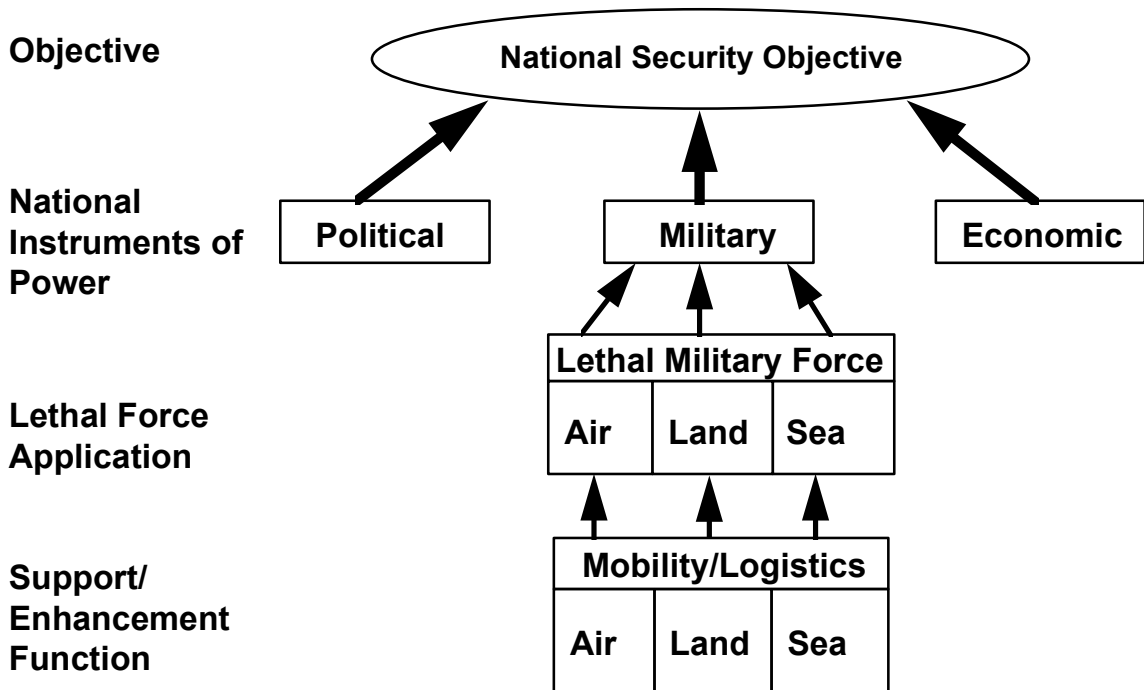
As stated in the National Military Strategy of the United States, “The fundamental objective of America's armed forces will remain constant to deter aggression and, should deterrence fail, to defend the nation's vital interests against any potential foe.”²³ This fundamental objective leads to a military doctrine that is largely oriented towards the threatened or actual lethal application of force to defeat an enemy. This emphasis appears in the strategic principles for current US military strategy, which states:

Once a decision for military action has been made, half-measures and confused objectives extract a severe price in the form of a protracted conflict which can cause needless waste of human lives and material resources, a divided nation at home, and defeat. Therefore, one of the essential elements of our national military strategy is the ability to rapidly assemble the forces needed to win -- the concept of applying decisive force to overwhelm our adversaries and thereby terminate conflicts swiftly with a minimum loss of life.²⁴

This traditional view of military force fits well into scenarios where the deterrence or termination of open hostilities is the primary objective of the military operation. This primary objective is by no means wrong or misplaced, however, an overriding emphasis on the lethal aspect of military force should not result in the exclusion of other possible uses of military power. Current policies and emphasized measures of merit tend to indicate that the exclusion of due consideration of nonlethal

roles for the military may have taken place. While the military strategy addresses the other functions that the military may be called on to perform: drug interdiction, security assistance, overseas deployments, allied training exercises, and humanitarian assistance, the primary focus for force sizing, acquisition and training still remains tied to the lethal role of traditional military employment.²⁵ Military power is measured in terms of the lethality and coercive impact it brings to the battlefield. In the 1994 Annual Report to the President and the Congress, former Secretary of Defense Les Aspin described the proposed defense structure in terms of how it could halt an invasion, build US combat power, and defeat an enemy.²⁶ In these traditional scenarios, the mobility and logistics functions were force “enhancers” that supported the forces pursuing the primary objective. (See Fig. 1)

TRADITIONAL SCENARIO: THE PRIMARY NATIONAL SECURITY OBJECTIVE IS ACHIEVED THROUGH LETHAL MILITARY FORCE



In this scenario, the primary objective is achieved through the traditional use of military force. Non-lethal forces support the operation through initial deployment and sustainment to allow the combat forces to achieve the primary objective.

Figure 1

This focus on lethality, and the ability to defeat an enemy militarily, is completely justified in traditional military employment scenarios involving combat. In these instances the primary focus on deterrence or termination of an openly hostile conflict is primary. These scenarios are based on the assumption, as supported by history, that repelling a major threat to the United States would likely involve armed conflict. The capability to conduct successful combat operations is an essential attribute of all the military services, and this primary focus on lethality is true for airpower as well as US military forces in general.

The Air Force, as a key military component, must be capable of fighting and winning. Airpower possesses unique capabilities for applying combat power. Its “inherent speed, range, and flexibility” make it an extremely versatile military instrument and in certain situations it is an ideal vehicle for applying lethal force.²⁷ The Air Force has traditionally focused on lethality in defining its roles and missions. Most roles for airpower are related to their ability to control, apply, or multiply combat force.²⁸ The role of air mobility is emphasized almost exclusively in terms of how it can serve as a “force enhancer”. This attitude is also seen in the Secretary of Defense's report from January 1994, that stresses airlift as a support function for deployed combat forces. The role of airlift is one “which is especially critical to deploy forces and materiel required for the first weeks of an operation.”²⁹ Air mobility serves to multiply combat effectiveness and is viewed as a means to transport and sustain the “lethal” forces necessary to pursue the combat portion of national security objectives. In most traditional applications of military force, this focus on lethal airpower and its relationship to the supporting role of air mobility is well founded. This emphasis however, brings with it the danger of defining airpower, and its potential to serve national security interests, in an overly narrow sense. As Air Force Colonel James B. Smith observes:

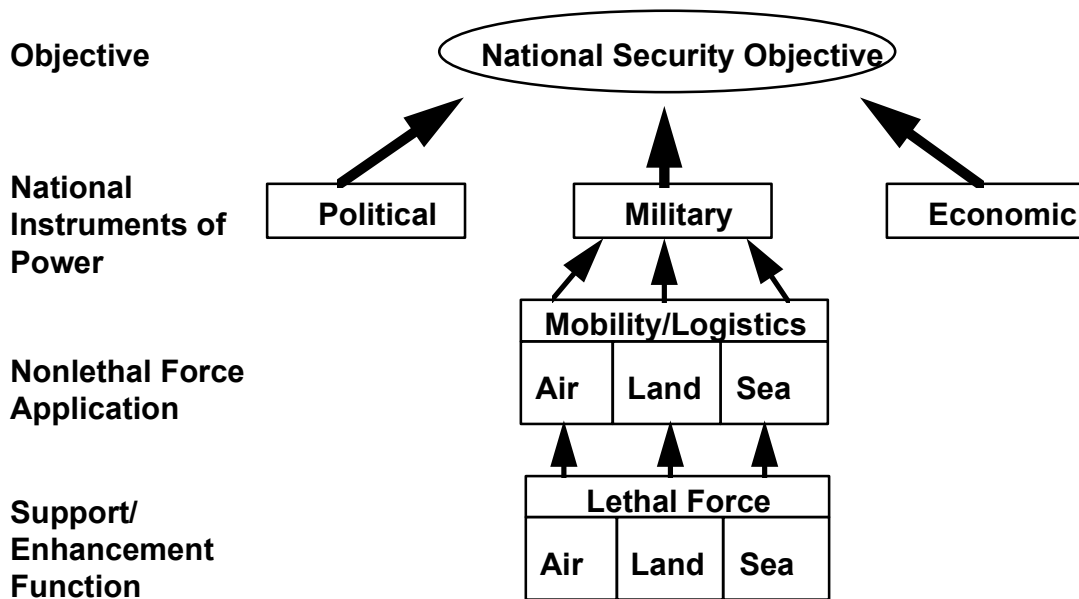
Certainly airlift is crucial in the enhancement of combat power. But it can be more than that. Within the framework of AFM 1-1, airlift is

always considered in a supporting role. Where this doctrinal analysis falls down is the failure to recognize areas where airlift could take the lead role.³⁰

Under certain circumstances, national security objectives may be best served when the role of air mobility is not one of support and enhancement.

In some instances, air mobility alone may be directly utilized to achieve national security objectives. When the air mobility mission, (the application of airlift and air mobility forces), in and of itself directly serves the national security objective, it is not an enhancer, but rather a direct application of nonlethal airpower. (See Fig. 2)

NON-TRADITIONAL SCENARIO: THE PRIMARY NATIONAL SECURITY OBJECTIVE IS ACHIEVED THROUGH NONLETHAL MILITARY FORCE



In this scenario the primary objective is achieved through the nonlethal application of force (air mobility). Lethal forces support the operation by providing security within which the main operation can take place.

Figure 2

As previously shown, the US is committed to conduct these nonlethal operations to foster democracy throughout the world. It is possible in the emerging international environment that the application of military force may move away from past traditional models of combat and lethal operations, and enter into situations that are complicated by

broader long-term objectives, intricate international coalition concerns, and a reluctance to use lethal force. Past distinctions between open war and peace are likely to become more blurred and “long standing missions, such as humanitarian assistance, must now be undertaken in the midst of civil war and anarchy. Peacekeeping and peace enforcement are more complex than ever.”³¹ These factors point to the likelihood that the nonlethal use of airpower may become more commonplace.³² In these specific situations calling for the employment of non-traditional uses of military power, the traditional relationship between the supporting and supported commander may become indistinct as well.

Command Relationships

Evolving national security concerns continue to focus on the promotion of democratic institutions in the world. This emphasis may result in a subtle shift towards the non-traditional employment of military forces in more nonlethal roles. As doctrine needs to evolve and acknowledge that military force can, given the situation, achieve national policy objectives through nonlethal means, so too must the command relationships and operational structure of the US military. To assess the role of command relationships, they must be understood in relation to the overall structure of military operations. This includes how command structure works in traditional scenarios of combat operations as well as scenarios where nonlethal applications of airpower may be utilized to directly serve national security objectives.

As shown in figure 1 the traditional military employment of force emphasizes combat forces to achieve national security objectives. Emerging from this focus is the organizational structure that produces Unified Commanders, sometimes referred to as the “warfighting CINCs”. Five of these commanders, who may be drawn from any of the services but in practice are either Army or Navy officers, have their areas of responsibility (AORs) defined in general geographic terms.³³ These are the theater commanders and their geographic areas of responsibility create distinct lines of demarcation within which the designated commander exercises “combatant

command”.³⁴ These unified commanders exercise command over forces from all services within their AOR. When a contingency arises, and the national command authorities select the use of military force for that contingency, the theater CINC commands the operation within his AOR. The theater CINC has a joint staff, comprised of officers from all the services, whose duty it is to “ensure that the joint commander understands the tactics, capabilities, needs and limitations of the component parts of the force.”³⁵ This system provides a relevant template for traditional applications of lethal force. It provides the theater CINC with the necessary forces from the services that he can task to carry out his contingency operations plans. Today, the theater CINC is invariably designated as the supported CINC with all others outside of the geographically determined AOR relegated to the supporting role.³⁶ The supporting commands will aid, protect, sustain, and complement the supported command in accordance with a directive requiring such action.³⁷ This system, though often cumbersome and hard to manage, at least provides a logical foundation for combat operations. This set of relationships makes sense when there is a lethal threat requiring the military to respond in traditional ways by applying direct military power against an enemy. Significant problems can occur, however, when this traditional model is used in a non-traditional scenario where nonlethal power is employed in pursuit of national security objectives within the AOR.

In addition to the theater combatant commanders, whose responsibilities are defined by geographic areas, there are combatant commanders who have worldwide functional responsibilities not bounded by any single area of operations³⁸ These CINCs can exercise operational and combatant command over forces in certain situations. In military operations involving traditional lethal force, the CINCs commanding functionally designated commands almost always serve a supporting role. These forces are used to support and enhance the combat forces under the theater CINC who is directly pursuing national security objectives via traditional military means. In applying nonlethal airpower to directly pursue national security objectives via air mobility,

however, United States Transportation Command (USTRANSCOM) and Air Mobility Command (AMC) are the primary commands called upon to perform the operation. Their commands have no geographically specific AORs. In these situations, where the primary objective is to be accomplished through nonlethal air mobility operations, there is a potential for conflict over who should exercise combatant command over the forces, and which commander is supporting another.

In normal command relationships, airlift forces are usually controlled within a theater by a Director of Mobility Forces (DIRMOBFOR). Joint publications state that “The theater CINC normally exercises operational control of the DIRMOBFOR.”³⁹ With airlift in a supporting role this arrangement makes sense. In a situation where the primary objective is being sought directly through a strategic application of air mobility the airlift is no longer a supporting function but rather a direct application of nonlethal force. It seems more logical in these specific situations for the theater CINC to be the “supporting” commander and the CINCTRANS to be designated as “supported” within the theater.

This distinction of which CINC is designated as “supported” is important because, “unless delimited by the directive that establishes the support relationship, the commander of the supported forces will have the authority to exercise general direction of the supporting effort.”⁴⁰ In other words, the supported CINC has the authority to task and direct all supporting activities. The designation of “supported” gives that CINC the formal authority to task all supporting commanders. With the formal authority to task and exercise general direction of the operation, it makes sense that the CINC who possesses the preponderance of expertise, resources and capabilities applicable to achieving the primary objective be designated the supported commander. He, and his staff, are best suited to determine the strategy to pursue as well as the support requirements from other commanders. In the situation where the primary objective is being directly pursued through strategic air mobility as nonlethal airpower, the combatant

commander of those forces should most likely be CINCTRANS, who would then be supported by other CINCs, including the theater CINC within whose AOR the operation is taking place.

While the evolving international environment and US national security objectives indicate a possibly increased role for air mobility in nonlethal operations in the future, this is not the first time air mobility may be used to achieve national security objectives. As this work will reveal, examples occurred in the evolution of US strategic military airlift in which airlift accomplished national security goals.

Notes

¹ Arguments concerning the superpower status of the United States center largely on what the implications of this status entail, not the actual status itself. Justification to this claim can be found in an interview with Zbigniew Brzezinski, "The Lone Superpower," *New Perspectives Quarterly*, Spring 1991, 60-61.

² While all assessments of this capability are relative, there are several convincing arguments to support this claim. See; David R. Gergen, "The Burdens of a Superpower," *U.S. News and World Report*, December 14, 1992, 110; "Yes, You are the Only Superpower," *The Economist*, February 24, 1990, 11-12; Peter McGrath, "The Lonely Superpower", *Newsweek*, October 7, 1991, 36-37.

³ Air Force Manual 1-1, Volume 1, *Basic Aerospace Doctrine of the United States Air Force*, March 1992, 7.

⁴ The designation of "supported" and "supporting" commanders is used to delineate tasking authority as well as combatant and operational command. The supporting commander is usually subordinate to the supported commander. This relationship requires the supporting commander to respond to the taskings of the supported commander. For further definitions and implications carried with this designated authority see, JCS Pub 2, *Unified Action Armed Forces (UNAAF)*, The Joint Chiefs of Staff, Washington DC, December 1986, 18-22.

⁵ There are differing definitions of the term "strategic air mobility" when discussing the subject. Some use the term strategic to define the airframe actually employed such as the C-5 and C-141 being strategic airlift due to their inherent long-distance, large cargo capacity qualities. Airlift doctrine (as it exists) defines strategic as being the lift conducted intertheater (as opposed to intratheater). It specifically refutes the use of a particular asset as defining "strategic lift" (See, Joint Pub 4-01.1, *Airlift Support to Joint Operations*, August 15, 1993, I-2 - I-3). This paper defines strategic air mobility more in terms of effect than assets used or distances traveled. If the air mobility force is being used in a manner that directly achieves a strategic effect in terms of national security policy or national objectives, then that particular operation was a "strategic" use of air mobility.

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- ⁶ “Yes, You are the Only Superpower,” *The Economist*, February 24, 1990, 11.
- ⁷ Morton H. Halperin, “Promoting Democracy,” *Foreign Policy*, no. 91 (Summer 1993): 105.
- ⁸ James Schlesinger, “New Instabilities, New Priorities,” *Foreign Policy*, no. 85 (Winter 1991): 3.
- ⁹ For further background see Owen Harris, Ian Buruma and Richard Barnet, “Defining the New World Order,” *Harper's Magazine*, May 1991, 59-64.
- ¹⁰ Larry Diamond, “Promoting Democracy,” *Foreign Policy*, no. 87 (Summer 1992): 29.
- ¹¹ The United States government annually publishes a document outlining its objectives and interests throughout the world. These objectives begin with broad concepts of security and protection of United States institutions and ideals. It further outlines specific interests within certain areas of the globe and in relations with other nations and international organizations. For more information see the most recent publication, *National Security Strategy of the United States*, January 1993.
- ¹² *National Security Strategy of the United States*, January 1993, 3.
- ¹³ *National Security Strategy of the United States*, January 1993, 6.
- ¹⁴ Larry Diamond, “Promoting Democracy,” *Foreign Policy*, no. 87 (Summer 1992): 29.
- ¹⁵ *National Security Strategy of the United States*, January 1993, 1.
- ¹⁶ For more complete information on the peaceful tendencies of mature democratic institutions see Zeev Maoz and Bruce Russett, “Normative and Structural causes of Democratic Peace, 1946-1986,” *American Political Science Review* 87, no. 3 (September 1993): 624-638, and also Bruce Russett, “Peace among Democracies,” *Scientific American*, November 1993, 120.
- ¹⁷ *National Security Strategy of the United States*, January 1993, ii.
- ¹⁸ *National Security Strategy of the United States*, January 1993, 1.
- ¹⁹ Alberto R. Coll, “America as the Grand Facilitator,” *Foreign Policy*, no. 87 (Summer 1992): 57.
- ²⁰ Larry Diamond, “Promoting Democracy,” *Foreign Policy*, no. 87 (Summer 1992): 27.
- ²¹ Larry Diamond, “Promoting Democracy,” *Foreign Policy*, no. 87 (Summer 1992): 27.
- ²² *National Security Strategy of the United States*, January 1993, 19.
- ²³ *National Military Strategy of the United States*, January 1992, 6.
- ²⁴ *National Military Strategy of the United States*, January 1992, 10.
- ²⁵ The measure of military power used for US forces is based on the number of army divisions, fighter wing equivalents, carrier and surface battle groups, and Marine expeditionary force equivalents; all are lethal force measurements of capability on the battlefield. See *National Military Strategy of the United States*, January 1992, 19.

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- ²⁶ Les Aspin, *Annual Report to the President and the Congress*, (Washington D.C.: Secretary of Defense, January 1994), 14.
- ²⁷ AFM 1-1, Vol. 1, *Basic Aerospace Doctrine of the United States Air Force*, March 1992, 5.
- ²⁸ For the complete layout of Air Force categories of roles and missions see AFM 1-1, Vol. 1, *Basic Aerospace Doctrine of the United States Air Force*, March 1992, 7.
- ²⁹ Les Aspin, *Annual Report to the President and the Congress*, (Washington D.C.: Secretary of Defense, January 1994), 15.
- ³⁰ Col. James B. Smith, "Airlift: Time to look beyond the supporting role." *Air Force Times*, August 30, 1993, 37.
- ³¹ *National Security Strategy of the United States*, January 1993, 1.
- ³² The employment of nonlethal force encompasses a broad range of missions and assets. These missions can include psychological operations, special forces operations, use of sound waves, and many more. This paper specifically looks at strategic air mobility as a form of nonlethal airpower. This is not to imply that it is the only form of nonlethal airpower, nor is it to assert that it is the most important for every situation requiring nonlethal force.
- ³³ The current five geographic CINCs are: US America Command (USACOM recently replaced US Atlantic Command), US Central Command (CENTCOM), US European Command (EUCOM), US Pacific Command (PACOM), US Southern Command (SOUTHCOM). See, Les Aspin, *Annual Report to the President and the Congress*, (Washington D.C.: Secretary of Defense, January 1994), A-4.
- ³⁴ Armed Forces Staff College Pub 1, *The Joint Officer's Staff Guide*, 1991, 2-23 - 24.
- ³⁵ Armed Forces Staff College Pub 1, *The Joint Officer's Staff Guide*, 1991, 2-37.
- ³⁶ Specific data concerning the exact ratios, in nonlethal scenarios, where geographic CINCs have been designated as the supported commander is classified. The overriding prescriptions found within Joint Publications and DOD directives, however, indicate that rarely, if ever, is the geographic CINC not designated as the supported commander for any operation within his AOR.
- ³⁷ JCS Pub 2, *Unified Action Armed Forces (UNAAF)*, The Joint Chiefs of Staff, Washington DC, December 1986, 3-18.
- ³⁸ Armed Forces Staff College Pub 1, *The Joint Officer's Staff Guide*, 1991, 2-23. These combatant commands, designated by functional roles, are: US Special Operations Command (SOCOM), US Strategic Command (STRATCOM), US Space Command (SPACECOM), US Transportation Command (TRANSCOM), see Les Aspin, *Annual Report to the President and the Congress*, (Washington D.C.: Secretary of Defense, January 1994), A-4.
- ³⁹ Joint Pub 4-01.1, *Airlift Support to Joint Operations*, August 15, 1993, III-5.
- ⁴⁰ JCS Pub 2, *Unified Action Armed Forces (UNAAF)*, The Joint Chiefs of Staff, Washington DC, December 1986, 20-21.

Chapter Two

The Berlin Airlift 1948-1949

The Soviet blockade of Berlin was a ruthless attempt to use starvation to drive out the Western Powers thus re-creating in Europe the fear which favored Communist expansion. The airlift prevented the blockade from accomplishing its purpose. The firm stand of the Western Powers in undertaking the airlift not only prevented terror from again engulfing Europe, but also convinced its free people of our intent to hold our position until peace is assured.

General Lucius Clay

On June 20, 1948 the Soviets walked out of the Kommandatura, the allied quadripartite ruling council in Berlin. Three days later they announced the indefinite and complete closure of all overland and canal access through any portions of Soviet-controlled East Germany by releasing the following message:

Berlin, June 23. Transport Division of the Soviet Military Administration is compelled to halt all passenger and freight traffic to and from Berlin tomorrow at 0600 hours because of technical difficulties. It is impossible to reroute traffic in the interests of maintaining rail service, since such measures would unfavorably affect the entire railroad traffic in the Soviet Occupation Zone⁴¹.

A second message that same day read:

Water traffic will be suspended. Coal shipments from the Soviet Zone are halted. The Soviet authorities have also ordered the central switching stations to stop the supply of electric power from the Soviet Zone and the Soviet Sector to the Western Sector. Shortage of coal to operate the plants is the reason.⁴²

The symbolic center of all German culture and political power, the city of Berlin, was isolated from the Western Allied Powers. The free sector of West Berlin, the section administered by the three allied powers consisting of the United States, Britain and France, had essentially become an isolated garrison surrounded by communist occupiers who planned on using the threat of starvation and the coming winter freeze for political

coercion.⁴³ This blockade of Berlin was one of the opening salvos in the Cold War. The US faced a decision that would determine the future of US-Soviet relations. The course of action chosen could have altered the balance of power in Europe and determined which force, democracy or communism, would fill the power vacuum left as a result of the German defeat in WW II.⁴⁴ The US response to the blockade was guided by the thought that its vital national security interests were at stake in Europe. The airlift provided the means, through strategic nonlethal airpower, for the city to endure the blockade while negotiations through diplomatic channels solved the impasse and avoided another war in Europe.

Background

The Allied forces of the Second World War were united against a common enemy. The defeat of Germany, and the subsequent issues of post war Europe, strained the tenuous allied relationships, and troubles between the Soviet Union and the Western Allies became pronounced. By the Spring of 1947 it seemed apparent that the hope for a restored, peaceful Europe with free, self-determined governments, was not to be.⁴⁵ The US, as a result laid the groundwork for exerting its influence over the future destiny of portions of Europe through the Truman Doctrine.

On March 12, 1947, President Harry S. Truman, in a declaration to the US Congress stated, "I believe that it must be the policy of the United States to support free peoples who are resisting attempted subjugation by armed minorities or outside pressures."⁴⁶ Though this statement directly related to the overt hostile actions taken by communist guerrillas in Greece and Turkey, it also applied to the attempts by communist organizations to influence the political process and gain power in post-war Western Europe. A second portion of the Truman doctrine addressed the issue of economic assistance to those countries struggling to recover from the ravages of the war. The economic program would evolve into what is now known as the Marshall Plan. Unveiled by the Secretary of State George C. Marshall, in a speech at Harvard University on June

5, 1947, this plan “was an American policy not directed against any country or doctrine, but against hunger, poverty, desperation and chaos. It provided, in effect, a much softer and more conciliatory follow-up to the first part of the Truman Doctrine.”⁴⁷ Despite the “softer” tone, the plan really sought to thwart communism through economic strength and solidify democratic governments in Europe.⁴⁸

The central issue in Europe remained the future of Germany. Differences between the Soviets and the Western Allies developed into harassment and minor skirmishes that the president of France came to call, “a war of pinpricks”.⁴⁹ Pressure from the Soviets was put on the allies to allow the complete governing of Berlin by Moscow. The Kommandatura became a propaganda stage at times, allowing the Soviets to fabricate and protest allied actions that were not in accordance with the “post war agreements”⁵⁰. The Soviets also used various tactics to harass Allied attempts to administer their western sectors of Berlin. This included stopping western convoys and canal traffic for “technical difficulties,” “improper” manifests, and other excuses. This constant harassment and the implementation of partial blockades led allied officials to suspect that the Soviets would not be content until they had forced the Western powers from Berlin.⁵¹ In anticipation, they began in early 1948 to lay in reserves of food and supplies on the chance that the partial blockades became complete.⁵²

Incidents became more frequent, and by the spring of 1948 the Allies flew their first airlift missions on a limited basis.⁵³ The results were mixed but the flights openly demonstrated the importance of the air route link to the west to the Soviets. Harassment of air traffic now also became a problem. In April of 1948 a Soviet fighter “buzzed” a British transport, struck it in mid-air, and killed all on board. The results of the inquiry showed the Soviet pilot at fault and the resulting public outcry in all Allied nations added to the tensions between the two sides. The incident also impressed the Soviets by the strength of public reaction in the US and Britain and, “there was every likelihood that the Russians would try to avoid such happenings again.”⁵⁴ Relations between the Soviets

and the Allies were clearly headed for a showdown and the issue of currency reform would trigger the complete blockade.

In June of 1948, the Allies, in response to a Soviet announcement of a unilateral currency reform for East Germany, indicated they intended to issue West German Deutschmarks to the western sectors of Berlin. This move cut the economy of West Berlin entirely from association with the communist bloc and in effect recognized West Berlin as a separate entity from the eastern sectors of the city and East Germany.⁵⁵ Implicit in this action was also the intention of the Western Allies to create a separate West German state. Immediately following this move, the Soviets demanded recognition of their unilateral right over all economic issues in Berlin and the allies refused to recognize that right. The four power negotiations ceased and within 24 hours the Soviets announced the complete blockade of Berlin.

The Decision and Objectives

The Allies were not totally surprised by the blockade. General Clay had written to Washington in April of 1948 convinced that further, more extensive attempts to dislodge the Western Allies from Berlin would be coming.⁵⁶ He also forcefully argued for the importance of Berlin and the need for a commitment from the US to maintaining a presence there.

We have lost Czechoslovakia. Norway is threatened. We retreat from Berlin. When Berlin falls, western Germany will be next. If we mean to hold Europe against Communism, we must not budge. We can take humiliation and pressure short of war in Berlin without losing face. If we withdraw, our position in Europe is threatened. If America does not understand this now, does not know that the issue is cast, then it never will and communism will run rampant. I believe that the future of democracy requires us to stay.⁵⁷

President Truman agreed with Clay's assessment. He had already indicated the US commitment to Europe through the Truman Doctrine and the Marshall Plan. His position on the specific issue of staying in Berlin was left to no one's doubt when he

declared, “We must stay in Berlin; we have only to discuss the means through which this purpose can be accomplished.”⁵⁸ The various options had to be weighed and chosen with care.

There were basically three options available. The first was to abandon West Berlin to the Soviets; the second, use armed force to re-open rail, road, and canal communications with the city; or finally, attempt to resolve the impasse through diplomatic negotiations. The first option had been eliminated by virtue of the public commitment, made by President Truman and the United States, to staying in Berlin. The German citizens of West Berlin had openly shown their defiance of the Soviet threat through demonstrations and rallies. When they issued an impassioned plea for the rest of the world to aid them “in the decisive phase of the fight for freedom,” abandonment by the United States was out of the question.⁵⁹ In Europe, General Clay lobbied for the option of employing an armed convoy. In his estimation the Soviets would not openly challenge the convoy and their bluff would be called with a resulting re-opening of overland routes to Berlin.⁶⁰ Truman remained unconvinced of the benign nature of the Soviet forces stationed in East Germany and felt that even the slightest risk of war was unacceptable, especially considering the size of the Soviet army remaining in eastern Europe.⁶¹ The President believed that the only real option was to attempt diplomatic means while resupplying the city by air until the crisis could be resolved. The air corridors into Berlin were the only access agreed to in writing between the Soviets and the Western Allies, and in light of the mid-air incident in April, the Soviets would likely be reluctant to impede Allied air access. An airlift presented the best option of sustaining Berlin while the least provocative to the Soviets. By the end of June, the airlifting of supplies to Berlin had already begun, though no one envisioned the duration or level of effort it would come to require..

On July 19, 1948, Truman, in a meeting with other top US government officials, reaffirmed his policy of the previous month. The US would continue to relieve Berlin via

the airlift while simultaneously pursuing a diplomatic solution with Moscow.⁶² The importance of the airlift was reinforced by a Department of State Policy Statement:

Berlin has become an important symbol of the determination of the U.S. and the other Western powers to contest the Soviet claim to mastery of Germany and of Europe; withdrawal would be a great blow to Western prestige in Europe and to the strategic position of the U.S. and its associates *vis-à-vis* the USSR.⁶³

The objectives were clear. The airlift was to resupply the needs of the Allied forces and administrators, the German civilian population, Berlin's municipal needs, and also provide supplies for industry and the city's economy.⁶⁴ By this time, the Soviets had shown no inclination to lift the blockade in the immediate future so the airlift's projected duration was indefinite. The airlift provided a means for the continued survival of the city while demonstrating to the Soviets, the citizens of Berlin, and the rest of the world Allied resolution. There was clearly a need for airlift expertise and more airframe assets if there was to be any hope for a successful operation. The needed assistance would come from MATS.

Organization and Execution

The Early Days

The complete closure of land access produced an immediate Allied response. Within the European theater, General Clay asked Lieutenant General Curtis LeMay, USAFE Commander, if his aircraft could carry coal and other similar bulk cargo.⁶⁵ LeMay replied that they could and Clay's instructions were to start hauling it to Berlin. So began the airlift.⁶⁶ Initially the requirements were stated haphazardly and for the first few days flights were continually added until all of the available C-47s in USAFE were used. The fact that all aircraft available in the theater were quickly being pressed into service prompted a call for more aircraft from elsewhere, especially the C-54 which could carry three times the load of a C-47.⁶⁷ USAFE had initiated a contingency plan it had outlined earlier for providing air support to Berlin. This plan had been conceived in

April when it had become apparent the Soviets might try to impose a complete blockade.⁶⁸ As the airlift began to gather momentum, however, the need for formalized organization and planning caused LeMay to look for an officer to direct the effort. He approached Major General Joseph Smith who reluctantly accepted the job. Smith stated that all he would need was a few staff officers and they would be able to handle the operation.⁶⁹ The magnitude of the task ahead was still unclear, as C-54s from MATS began arriving, Smith's Airlift Task Force settled down to begin operations.

The airlift capability available in Europe was limited to the 60th and 61st Troop Carrier Groups. They were comprised of less than 50 operational C-47 aircraft and 160 pilots.⁷⁰ These outfits were trained and equipped to carry personnel and their light equipment, not bulk cargo. The aircraft were hastily modified and stripped of non-essential equipment and the pilots began flying the air corridors into Berlin. This use of USAFE aircraft, augmented by MATS C-54s and pilots, was sufficient to demonstrate US resolve but inadequate for the needs of the city of Berlin. By mid-July, the airlift was delivering only 1,540 tons on the best days and the minimum subsistence level for those in Berlin was estimated at 4,500 daily.⁷¹ The long term answer for the airlift required more expertise and resources, and with the reaffirmation of a long term commitment by Truman in July, that expertise was to be found at MATS headquarters.

MATS and The Long Haul

In early 1948, the Military Air Transport Service (MATTS) was a new command. Its genesis is found in an airlift consolidation decree issued in February 1948 and it formally began operations on June 1, 1948.⁷² The command had a preponderance of aircraft from the old Air Force Air Transport Command (ATC), but also had two squadrons from the Naval Air Transport Service (NATS). This joint command had been formed under protest by the Navy and it took a directive from the Secretary of Defense James Forrestal for the consolidation to take place.⁷³ The SECDEF created MATS to eliminate redundancies in the transport routes flown by the two services and to aid in

centralization of airlift resources. The command was still undergoing strained relations and growing pains at the time of the Berlin crisis, and as a result, its commander, General Laurence Kuter, departed on a trip to the Pacific at the beginning of July to attend to problems on the route structure in that part of the world.⁷⁴ Meanwhile MATS aircraft from Alaska, Hawaii, and the continental United States rapidly deployed to the European theater, while simultaneously a decision was reached in Washington in mid-July to send the Deputy Commander of MATS, Major General William Tunner, to run the airlift.

The decision to call on Tunner resulted from his successful efforts in the China-Burma-India (CBI) theater during WW II. He had commanded the operations to resupply General A.C. Wedemeyer's army forces in China, entirely by air, by flying over "The Hump." General Wedemeyer had been impressed with the results in the CBI and he lobbied through Washington channels to get Tunner appointed to run the Berlin airlift. His argument supported Tunner as the only man with the knowledge and experience to pull off a successful operation.⁷⁵ The result was that on July 26, General Tunner received a call from General Hoyt S. Vandenberg, Chief of Staff USAF, and was given 48 hours to notify members of the MATS staff he wanted to accompany him, then deploy to Europe and run the operation. He selected about twenty officers and left to undertake the duties of the provisional Task Force Headquarters under the control of HQ USAFE.⁷⁶

In Europe, the news that MATS was coming to "run the show" was not welcome. General LeMay had appointed General Smith and felt him to be perfectly competent to run the airlift.⁷⁷ Tunner arrived and General LeMay gave him a cold welcome.⁷⁸ Tunner and his staff set about sorting out the problems they found in theater, and, in Tunner's own words, found they had stumbled into a "real cowboy operation" lacking in focus and organization. Schedules were not being adhered to, loading operations were haphazard, and crews were spending large amounts of time attending to administrative duties that had little impact on the mission. There was an abundance of spirit and enthusiasm but little organized direction. He was careful not to openly criticize what had already been

accomplished and instead went about building an integrated system to include facilities, training and personnel policies, ground and flying operations, and other required resources.⁷⁹ Tunner and his staff, with the help of numerous USAFE personnel, transformed the airlift from a temporary measure to an operation that was to supply the entire needs of the city of Berlin for an indeterminate period of time.⁸⁰

During the first few weeks after Tunner's arrival, operations were streamlined and efficiency was stressed at every movement point. As a result, the airlift, without increasing the equipment or resources, greatly increased the tonnage simply through superior organization and operations at both terminals.⁸¹ Aerial ports were established and designed for expedient cargo handling at both ends, facilities for both living quarters and organizations were found and renovated, and trained personnel arrived from throughout the MATS system to augment and replace USAFE personnel unfamiliar with airlift operations. Flying crews were trained in the CONUS at a replica airlift training center established in Montana and understood the strict air corridor procedures upon arrival in theater.⁸² Air traffic controllers were also brought into the system to keep the aircraft flying despite bad weather, and maintenance personnel also worked around the clock. All of these parts contributed to the whole airlift system and the operation was a success.

By May of 1949, the airlift delivered over 9,000 tons on a daily basis and the total hauled for the entire operation exceeded 2,323,000 tons.⁸³ This average of over 7,250 tons per day was more than enough to supply the city of Berlin and the Soviets knew it. In January of 1949, Joseph Stalin released a series of statements to the foreign press. These statements no longer tied the issue of lifting the blockade to currency reforms or opposition to the creation of a West German government. By dropping these two issues as preconditions to ending the blockade, the Soviets indicated a new willingness to negotiate an end to the crisis. Their blockade had failed to force the Allies out of Berlin and it appears that they decided to accept a limited defeat rather than risk military action

to disrupt the airlift.⁸⁴ The four powers of France, Great Britain, the United States, and the Soviet Union conducted negotiations which agreed to the simultaneous dropping of any access restrictions by either side to the city of Berlin. The agreement further stated that, “The council of Foreign Ministers should be convened to discuss matters arising out of the situation in Berlin, and matters affecting Germany as a whole”.⁸⁵ On May 12, 1949, after these negotiations with the Western Allies on the future of the divided Germany, the Soviets lifted all restrictions on overland and canal access to the city. Strategic, nonlethal airpower, by providing time for a diplomatic solution, had helped win the day, but it had not done so without problems.

Organization and Command Relations

The airlift was successful only as the result of tireless efforts by thousands of people. The abbreviated account cited above, of how General Tunner, his staff, and the resources in both equipment and personnel provided by MATS, enabled the airlift to succeed, obviously understates the difficulties encountered and overcome. Some obstacles were natural, such as the weather and fatigue. Others were created by the enemy in the form of radio beacon jamming, aerial harassment, and political propaganda. Finally, some were internal to the operation's organization. The organizational structure in Europe placed a MATS commander, General Tunner, in theater working for a geographic CINC, General LeMay, who coordinated operations and assets both inside and outside the theater. This relationship also made the MATS commander, General Kuter, subordinate to LeMay.

The preponderance of equipment, personnel, and expertise involved in the airlift belonged to Kuter's MATS. Upon arrival in Europe, however, these assets were transferred to USAFE and had to compete for support and resources with other USAFE units not involved in the airlift. General Tunner, when assessing his relations with the USAFE commander, recounted problems in the areas of facilities, personnel & training, and operations.

In terms of facilities, MATS aircraft, equipment, and personnel came to Europe and overwhelmed the available facilities in Western-occupied Germany. Over 12,000 personnel arrived and faced inadequate housing, support, and work facilities.⁸⁶ It took over six months for airlift personnel to be housed and provided adequate facilities.⁸⁷ This delay in acquiring adequate facilities was largely due to constant competition with other units who were true USAFE units. Even the air bases had problems. Rhein Main and Wiesbaden air bases “required constant arbitration on problems involving the responsibilities and priorities in work of the base units and tenant airlift units.”⁸⁸ The airlift forces struggled to get a proportionate share of resources at the facilities. A final finding by USAFE in looking at the airlift operation recommended, “the Airlift Task Force commander should be allotted a proportionate share of all facilities.”⁸⁹

Problems also surfaced in terms of personnel and training. The majority of personnel directly supporting the airlift came into Europe on a temporary duty basis from MATS. Administration and personnel policies, along with the operational and administrative control of MATS personnel, still resided largely with USAFE.⁹⁰ In the initial stages of the airlift in the fall of 1948, USAFE personnel were rotated through various support positions. These people were untrained and unfamiliar with airlift operations. From support personnel to aircrews, they performed well in their assigned tasks but not to the level of MATS specialists trained in these particular operations. The personnel policies that retained USAFE personnel in positions within the airlift structure were partially driven by need for and scarcity of personnel but also because USAFE wanted to retain some control over the operation and not allow it to be completely taken over by MATS.⁹¹ This mixture of untrained USAFE personnel with MATS units hampered operations and results generally revealed that, “attainment of efficiency is retarded unless airlift units are provided in fully equipped, supported, and trained condition.”⁹² Personnel rotation policies were also poorly managed.

People deployed to Europe with little time to settle personal affairs or make arrangements for their families. Their initial 90 day deployment time period grew to over six months.⁹³ MATS personnel were absorbed into USAFE via permanent change of station transfers, and even General Tunner officially became a USAFE resource when he received transfer orders on October 31, 1948.⁹⁴ Attempts to resolve this problem of indeterminate tour lengths through rotations with trained replacements were frustrated by the command organization placing MATS personnel under USAFE administrative control. Initially General Tunner reports that his relationship with General LeMay was not friendly, but it grew to at least a cordial association. General Tunner also communicated directly with General Kuter (MATS Commander) back in the US to coordinate training requirements for aircrews and support personnel flowing to Europe. In October of 1948 General LeMay was replaced by General John H. Cannon, who immediately began to assert his “right” to run the airlift operation.⁹⁵ He informed General Tunner that from that point forward, Tunner was not to communicate directly with any outside support agencies. All requests and needs had to be routed through USAFE HQ, causing a bureaucratic maze that hampered the ability to coordinate personnel replacement and training⁹⁶. The staff at USAFE HQ was not trained in airlift and their ability to receive and interpret correct requirements for the airlift from the task force, and then pass that information to MATS in Washington, was limited. As a result, clear statements of need were not transmitted, and the personnel problems of dismal rotation policies and inadequately trained replacements were never satisfactorily resolved.⁹⁷

Operations also suffered from organizational difficulties. The airlift effort was to be successful in the final measure only if the operations delivered the required tonnage of needed supplies. In airlift, perhaps more than any other type of aerial operations, efficiency directly relates to effectiveness and success. The mission levied upon the Airlift Task Force by the USAFE commander was simply to “insure that the maximum

number of missions are flown and that optimum over-all efficiency of operation is maintained.”⁹⁸ This required coordination of all aspects of operations, from ground cargo movement to maintenance, flight operations and air traffic control. The system that eventually evolved required strict adherence to flight profiles, “flow” control of air traffic, and air traffic control procedures.⁹⁹ Conflicts arose over who had the authority to control air traffic at air bases involved in the airlift. The final evolution placed that control in the hands of the Airlift Task Force commander, but earlier USAFE had tried to retain control over all aspects of flight operations in Europe. The airlift operations demonstrated that in a nonlethal environment, where the overwhelming majority of primary traffic is mobility related, and strict air traffic procedures are in effect,

The Airlift Task Force commander must have operational control over AACS (Airways and Air Communications Service) ATC (Air Traffic Control) centers, and complete control of all air traffic enroute and in the vicinity of the Airlift operating bases. It has been proved that Air Traffic Control Centers are an instrument essential for control, but actual operational control must be maintained in these centers by the Airlift Commander's representative.¹⁰⁰

This finding does not imply that the airlift commander should control ALL air traffic anywhere in the theater. It does however indicate that in the immediate area of bases primarily involved in airlift, and along routes of flight where strict flight operations and flow controls are required for a successful operation, the airlift commander should have control of the units providing the inflight services.

Finally, in operations the need for maintenance and parts to keep the aircraft flying was also severely impacted by General Cannon's severing of the direct link from the Airlift Task Force to the Air Materiel Command. The requirement to go through USAFE HQ created additional command layers that delayed requisitioning parts and technical changes. The airlift could no longer clearly and directly voice its requirements to Air Materiel Command and this limitation impeded airlift efficiency. Operations, personnel, and facilities were all affected by the subordinate status of the Airlift Task

Force to USAFE and it impacted the overall command authority of the Airlift Task Force Commander.

The final requirements for the commander of the Airlift Task Force were detailed in the “lessons learned” from the operation. They included “necessary funds for construction, civilian personnel, and morale activities be provided the Combined Airlift Headquarters”, as well as operational and command authority that stated, “Commander of the Combined Airlift Forces should be given operational control of all participating elements.”¹⁰¹ While some of the individual recommendations are dependent on specific circumstances of an operation, in aggregate the basic message conveyed pointed to the need for more authority to be vested in the commander who actually directed the operation.

In the case of the Berlin Airlift, the subordinate position and absorption of MATS resources and personnel into USAFE caused General Tunner to forward requests to LeMay in the hopes of getting more support and resources. Tunner was given the responsibility to conduct the airlift with little authority to task needed support operations. He was unable to exercise full control over his own operation in the beginning, and only through arbitration and constant badgering was his staff able to bring the full power of their expertise to bear on the airlift operation. In such a situation, the commander with the expertise, resources and trained personnel best suited to achieving the primary objective could have been recognized as the supported commander. He could have received full responsibility and authority for the operation and, as the supported commander, he could have directed and tasked the other commands involved to support him as required. This added ability to direct other supporting commands would have greatly enhanced the efficiency --and effectiveness-- of the Berlin airlift.

Notes

- 41 Frank Donovan, *Bridge in the Sky* (New York: David McKay Company Inc., 1968), 36.
- 42 Frank Donovan, *Bridge in the Sky* (New York: David McKay Company Inc., 1968), 37.
- 43 Lucius D Clay, *Decision in Germany* (New York: Double Day & Company, 1950), 361.
- 44 Avi Shlaim, *The United States and the Berlin Blockade, 1948-1949* (Berkeley, California: University of California Press, 1983), 16.
- 45 General Lucius Clay had been intimately involved in the negotiations and relations with the Soviets during the immediate post war period. His estimation is that the hope for free countries with peace by agreement was certainly dead by the end of the Moscow conference in the spring of 1947. See Lucius D. Clay, *Germany and the Fight for Freedom* (Cambridge, Massachusetts: Harvard University Press, 1950), 31.
- 46 Eric Morris, *Blockade; Berlin and the Cold War* (New York: Stein and Day, 1973), 79.
- 47 Robert Jackson, *The Berlin Airlift* (Wellingborough, England: Patrick Stephens, 1988), 29.
- 48 Truman discusses this aspect of the plan in his memoirs. The goal was strength through economic development and avoiding an environment where communism could find support from economically disaffected people. This aim was coupled with the belief that economic growth and interdependence would help foster a lasting peace. See, Harry S. Truman, *Memoirs Vol. II* (Garden City, New York: Doubleday, 1955-1956), 110-116.
- 49 Ann & John Tusa, *The Berlin Airlift* (New York: Atheneum, 1988), 112.
- 50 Lucius D. Clay, *Decision in Germany* (New York: Double day & Co., 1950), 350.
- 51 The sequence of harassing incidents and pressures applied by both sides is documented in many other works. The New Left interpretation of the “Germany question” sides with the view that the only interests the US held were those of capitalist greed and creation of lucrative markets. The evidence tends to support a less cynical view. Memoirs, meeting minutes, and other records, at least seem to indicate that the interests of the US were varied but primarily focused on cultivating alliances, economic growth and representative governments for the countries of war-torn Europe. This paper accepts this more moderate view and examines the operations undertaken during the Berlin blockade as operations by the United States pursuing legitimate national security objectives.
- 52 Lucius D. Clay, *Decision in Germany* (New York: Double day & Co., 1950), 365, In anticipation of the possibility of blockade, the Western Allies brought in supplies that amounted to a thirty-six day reserve of food stocks and sixty-five days of coal reserves.
- 53 The first “airlift” designated mission was probably flown on April 2, 1948. These trial links for air supply were flown as feasibility tests and they were somewhat limited in scope. Approximately 80 tons were flown in for US garrison needs in 30 C-47 flights per day. See, Robert Jackson, *The Berlin Airlift* (Wellingborough, England: Patrick Stephens, 1988), 37; also see message traffic from EUCOM to CG, Office of Military Government for Germany, US, dated April 4, 1948, (USAF HRA # 570.162D).
- 54 Ann & John Tusa, *The Berlin Airlift* (New York: Atheneum, 1988), 117.
- 55 W. Phillips Davison, *The Berlin Blockade: A Study in Cold War Politics* (New York: Arno Press, 1980), 145.

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- ⁵⁶ General Clay served as both the American Military Governor in Germany and the Commander of US forces in Europe. See, Lucius D. Clay, *Germany and the Fight for Freedom* (Cambridge, Massachusetts: Harvard University Press, 1950), 44.
- ⁵⁷ Wolfgang Haus et. al., *BERLIN - Pivot of German Destiny*, Translated and edited by Charles B. Robson (Chapel Hill, North Carolina: University of North Carolina Press, 1960), 48.
- ⁵⁸ Specific discussions concerning the meetings that took place in Washington are contained in Truman's Memoirs. See, Harry S. Truman, *Memoirs Vol. II* (Garden City, New York: Doubleday, 1955-1956), 126-129. For the perspective from a West German's point of view see, Wolfgang Haus et. al., *BERLIN - Pivot of German Destiny*, Translated and edited by Charles B. Robson (Chapel Hill, North Carolina: University of North Carolina Press, 1960), 50.
- ⁵⁹ Ann & John Tusa, *The Berlin Airlift* (New York: Atheneum, 1988), 142.
- ⁶⁰ Lucius D. Clay, *Decision in Germany* (New York: Double day & Co., 1950), 359.
- ⁶¹ Soviet armed forces did not demobilize following the end of World War Two. As a result there were 18,000 Soviet troops in Berlin itself and over 300,000 Soviet troops in the immediate areas around Berlin compared to the 6,500 Allied troops in Berlin. See, Ann & John Tusa, *The Berlin Airlift*, (New York: Atheneum, 1988), 173. and also Wolfgang Haus et. al., *BERLIN - Pivot of German Destiny*, Translated and edited by Charles B. Robson (Chapel Hill, North Carolina: University of North Carolina Press, 1960), 49.
- ⁶² Avi Shlaim, *The United States and the Berlin Blockade, 1948-1949* (Berkeley, California: University of California Press, 1983), 251.
- ⁶³ *Foreign Relations of the United States, 1948*, vol. 2, 1314-1315.
- ⁶⁴ Ann & John Tusa, *The Berlin Airlift* (New York: Atheneum, 1988), 144.
- ⁶⁵ The British were simultaneously carrying out operation PLANEFARE. Due to its focus on USAF doctrine and US command relations this thesis will only look at US operations. This does not mean the British contributions were insignificant or unimportant.
- ⁶⁶ For more insight into the actual course of conversation see the Oral History Interview with General Curtis LeMay, March 9, 1971, March AFB, California, 8, (USAF HRA #K239.0512-000 736) and also Richard Collier, *Bridge Across the Sky* (New York: McGraw-Hill, 1978), 61.
- ⁶⁷ Oral History Interview with General Curtis LeMay, March 9, 1971, March AFB, California, 9, (USAF HRA #K239.0512-000 736).
- ⁶⁸ Oral History Interview with General Howell Estes Jr., August 27-30, 1973, Oakland, California, 87-88. (USAF HRA #K239.0512-000 686).
- ⁶⁹ Richard Collier, *Bridge Across the Sky* (New York: McGraw-Hill, 1978), 68-69.
- ⁷⁰ The actual numbers vary based on how operational airframes and mission ready crewmembers were counted. The two groups consisted of four squadrons each with 8-9 aircraft in each squadron. Depending on maintenance and operational availability of the crews the actual ability to carry cargo would vary. For more information and insights as to how hard the flying schedule was for the crews see, Paul Fisher, "The Berlin Airlift", 1959 article reprint published by the United States Air Force, 4-6. (USAF HRA # K146.01.64B).

⁷¹ Tonnage estimates derived from various sources. See “Report on the Airlift Berlin Mission; The operational and internal aspects of the advance element”, from General Tunner, 1949, (USAF HRA #572.101B). and also, Paul Fisher, “The Berlin Airlift”, 1959 article reprint published by the United States Air Force, 8 (USAF HRA # K146.01.64B).

⁷² *Military Airlift Command: A Short History, 1941-1991*, Scott AFB, Illinois, Office of MAC History, June 1991, 2. For the evolution of the early days of MATS see, Roger D. Launius, “Consolidation by Decree: The Air Force and Navy Strategic Airlift Merger of 1948”, Office of MAC History Special Study, Military Airlift Command, Scott AFB, Illinois, 1989.

⁷³ The divisions between the Air Force and Navy over airlift consolidation ran deep. MATS was finally formed as the result of a directive from Secretary of Defense Forrestal after the services were unable to work out a compromise on their own. For more in-depth information on the genesis of MATS see, Roger D. Launius, “Consolidation by Decree: The Air Force and Navy Strategic Airlift Merger of 1948”, Office of MAC History Special Study, Military Airlift Command, Scott AFB, Illinois, 1989, 14-19.

⁷⁴ Oral History Interview with General William Tunner, October 5-6, 1976, Ware Neck, Virginia, 82, (USAF HRA #K239.0512-000 911).

⁷⁵ In a personal letter from General Wedemeyer to Col Nick Pasti, dated January 21, 1974, General Wedemeyer details his involvement in lobbying for General Tunner to direct the airlift. This is also supported from other sources which discuss the debate in Washington concerning the direction of the airlift. See, Personal letter from General Wedemeyer to Col. Nick Pasti, dated January 21, 1974, (USAF HRA # K168.16-17) and also, Ann & John Tusa, *The Berlin Airlift* (New York: Atheneum, 1988), 155.

⁷⁶ “Preliminary Analysis of Lessons Learned of the Combined Airlift Task Force, Preliminary report to the Commanding General USAFE by Commanding General CALTF, June 1949, 5, (USAF HRA #572.549-1).

⁷⁷ Oral History Interview with General Howell Estes Jr., August 27-30, 1973, Oakland, California, 82. (USAF HRA #K239.0512-000 686)

⁷⁸ Oral History Interview with General William Tunner, October 5-6, 1976, Ware Neck, Virginia, 86. (USAF HRA #K239.0512-000 911).

⁷⁹ Oral History Interview with General William Tunner, October 5-6, 1976, Ware Neck, Virginia, 87. (USAF HRA #K239.0512-000 911).

⁸⁰ An insight to Tunner's approach to the airlift can be found in Tusa, 187. Tunner states, “A successful airlift is about as glamorous as drops of water on a stone. The real excitement from running an airlift comes from seeing a dozen lines climbing steadily on a dozen charts - tonnage delivered, utilisation of aircraft - and the lines representing accidents and injuries going sharply down.”

⁸¹ An immediate increase in tonnage delivered is reflected in the daily statistics graph charts compiled by the task force as well as through anecdotal evidence supplied by General Wedemeyer. See the Combined Airlift Task Force statistical report 1949. (USAF HRA #168.7158-295); and, personal letter from General Wedemeyer to Col Nick Pasti, January 21, 1974, (USAF HRA # K168.16-17). For some anecdotes and details of how the airlift was reorganized see, Frank Donovan, *Bridge in the Sky* (New York: David McKay Company Inc., 1968), 109-112.

⁸² Oral history with General Laurence Kuter, July 8, 1978, 17. (USAF HRA #K239.0512-000 1446).

⁸³ Airlift statistics can be found in numerous formats from the compilation of various operational agencies in the theater. A composite figure is found in the Combined Airlift Task Force statistical report 1949. (USAF HRA #168.7158-295), also in Richard Collier, *Bridge Across the Sky* (New York: McGraw-Hill, 1978), 162.

⁸⁴ Some evidence of Stalin's desire to avoid war can be found in various biographies. A discussion of his possible motives is found in, Adam B. Ulam, *Stalin, The Man and His Era* (New York: Viking Press, 1973, 685-687. While there is no direct evidence concerning Stalin's intentions at the beginning of the Berlin blockade, discussion of the probable Soviet motives in early 1949 can be found in, Jean Edward Smith, *Lucius D. Clay, An American Life* (New York: Henry Holt & Company, 1990), 549-551.

⁸⁵ Harry S. Truman, *Memoirs Vol. II* (Garden City, New York: Doubleday, 1955-1956), 130-131.

⁸⁶ This initial figure is an estimate derived from cumulative sources at the end of the operation. The actual totals for personnel attached in support of the airlift break out as follows: September 1948 - 1,320 officers and 3,605 enlisted personnel; January 1949 - 2,374 officers and 7,563 enlisted personnel; June 1949 - 2,463 officers and 9,017 enlisted personnel. See "Report on the Airlift Berlin Mission: The operational & internal aspects of the advance element," 1949. (USAF HRA #572.101B)

⁸⁷ Oral History Interview with General William Tunner, October 5-6, 1976, Ware Neck, Virginia, 91. (USAF HRA #K239.0512-000 911).

⁸⁸ "Preliminary Analysis of Lessons Learned of the Combined Airlift Task Force, Preliminary report to the Commanding General USAFE by Commanding General CALTF, June 1949, 7. (USAF HRA #572.549-1).

⁸⁹ "Preliminary Analysis of Lessons Learned of the Combined Airlift Task Force, Preliminary report to the Commanding General USAFE by Commanding General CALTF, June 1949, 8. (USAF HRA #572.549-1).

⁹⁰ "Preliminary Analysis of Lessons Learned of the Combined Airlift Task Force, Preliminary report to the Commanding General USAFE by Commanding General CALTF, June 1949, 13. (USAF HRA #572.549-1).

⁹¹ Oral History Interview with General William Tunner, October 5-6, 1976, Ware Neck, Virginia, 94-95. (USAF HRA #K239.0512-000 911).

⁹² "Preliminary Analysis of Lessons Learned of the Combined Airlift Task Force, Preliminary report to the Commanding General USAFE by Commanding General CALTF, June 1949, 7. (USAF HRA #572.549-1).

⁹³ Oral History Interview with General William Tunner, October 5-6, 1976, Ware Neck, Virginia, 92 See also, Paul Fisher, "The Berlin Airlift", 1959 article reprint published by the United States Air Force, 11-12. (USAF HRA # K146.01.64B).

⁹⁴ Message traffic dated October 17, 1948 confirms trend to fill any manpower shortfalls in USAFE through PCS transfer of deployed MATS personnel. General Tunner's reassignment is confirmed through orders transmitted October 31, 1948. All of these formalized procedures went into effect immediately after General Cannon's assumption of command on October 15, 1948. More evidence of General Cannon's attempts to directly control the airlift and all personnel associated with it. Source: Message Traffic File from the Airlift Task Force Berlin, (USAF HRA #570.162D)

⁹⁵ According to General Ross Milton, Tunner's Chief of Staff, a conflict between Tunner and Cannon was unavoidable. Tunner had come to run the airlift and develop a proprietary attitude towards it. General Cannon was a commander who demanded to know every detail. Their differences were many. For more information see, Ann & John Tusa, *The Berlin Airlift* (New York: Atheneum, 1988), 251.

⁹⁶ This initial command arrangement authorizing direct correspondence with MATS and other stateside agencies is detailed in formal instructions from LeMay's staff to General Tunner. Instructions from Brigadier General A.H. Kissner, USAF, to Major General William H. Tunner, USAF, Subject, "Instructions to Commander, Airlift Task Force (Provisional)." Hq., USAFE, 30 July 1948. See *USAFE and the Berlin Airlift: Supply and Operational Aspects*, vol. I, 1948, Hq. USAFE, 1 February 1950, 49. (HRA #570.04C). See also, Oral History Interview with General William Tunner, October 5-6, 1976, Ware Neck, Virginia, 101-102. (USAF HRA #K239.0512-000 911).

⁹⁷ Oral History Interview with General William Tunner, October 5-6, 1976, Ware Neck, Virginia, 94. (USAF HRA #K239.0512-000 911), and other information sources.

⁹⁸ Mission Statement from, "Report on the Airlift Berlin Mission: The operational & internal aspects of the advance element", Order dated 29 June 1948 from commanding general USAFE to Project Commander of the USAFE Berlin Airlift Operations, 1. (USAF HRA #572.101B)

⁹⁹ The importance of these flight procedures is addressed in, "Preliminary Analysis of Lessons Learned of the Combined Airlift Task Force, Preliminary report to the Commanding General USAFE by Commanding General CALTF, June 1949, 16-18 (USAF HRA #572.549-1). For anecdotes concerning the implementation of these procedures see, Ann & John Tusa, *The Berlin Airlift* (New York: Atheneum, 1988), 247-249.

¹⁰⁰ This aspect of the commander's control was specific to this situation as there was no existing civilian or extensive military air traffic control system in place at the time. LeMay begrudgingly came to support the control of airlift corridors by the airlift commander and agreed in principle in October of 1948. See, *USAFE and the Berlin Airlift: Supply and Operational Aspects*, vol. I, 1948, Hq. USAFE, 1 February 1950, 75. Also see formal recommendations and findings in, "Preliminary Analysis of Lessons Learned of the Combined Airlift Task Force, Preliminary report to the Commanding General USAFE by Commanding General CALTF, June 1949, 15, (USAF HRA #572.549-1).

¹⁰¹ "Preliminary Analysis of Lessons Learned of the Combined Airlift Task Force, Preliminary report to the Commanding General USAFE by Commanding General CALTF, June 1949, 6, (USAF HRA #572.549-1).

Chapter Three

US Airlift to Israel October 1973

The airlift was invaluable. It not only lifted our spirits, but also seemed to make the American position clear to the Soviet Union, and it undoubtedly served to make our victory possible.

Golda Meir

Air mobility and military airlift continued to evolve after the Berlin airlift and in 1966 MATS was redesignated as the Military Airlift Command (MAC). This redesignation placed MAC on an equal level with the other Air Force combat commands.¹⁰² It was completely re-equipped with aircraft whose design was optimized for transporting military cargo. During the late 1960's and early 1970's MAC performed constant operations into Vietnam supporting the US war effort there. It also continued to fly numerous humanitarian missions and other types of nonlethal operations. In 1973 war again erupted in the Middle East and MAC was called upon to perform a strategic airlift operation in direct support of a US ally -- Israel. This resupply operation to Israel, named NICKEL GRASS, demonstrated the unique capabilities of organic military strategic airlift.¹⁰³

The Berlin airlift highlighted some problems with command relationships, and though there were some command relationship problems during Operation NICKEL GRASS, this operation as a whole is especially noteworthy as an example of strategic air mobility directly supporting a national security objective. During the airlift, US military organic strategic airlift forces operated independently of any US combat forces. They directly pursued US strategic objectives and helped maintain the balance of power in the Middle East. During the Israeli airlift of 1973, operating without well established route

support or infrastructure, “it was the first time that the men and machines of the strategic airlift force were called upon to virtually go it alone.”¹⁰⁴

On October 6, 1973, the population of the state of Israel was celebrating the Jewish holiday of Yom Kippur. That morning a quiet mobilization began as reservists slipped from the synagogues and temples to join their military units. This mobilization came as the result of Israeli intelligence estimates that an Arab attack was imminent but the mobilization was to be a case of too little, too late.¹⁰⁵ At precisely 2 PM, (4 hours earlier than Israeli intelligence estimates), Egyptian forces mounted an assault on Israeli defenses on the eastern side of the Suez Canal. Water cannons breached openings in the huge defensive sand berms, bridges were hastily thrown across the canal, and Egyptian armor, protected by an umbrella of anti-aircraft missiles, began to roll across into the Israeli occupied areas of the Sinai peninsula.

Reports from northeast Israel carried equally ominous news. Coordinated with the Egyptian attack, Syrian mechanized infantry divisions rolled into the Golan Heights and attacked Israeli defense forces with unrelenting fury. Syrian tanks pressed the offensive against outnumbered Israeli troops and made territorial gains into that strategic region.¹⁰⁶ Both the Syrians, and the Egyptians to the south, advanced into territories held by Israel since the Six Day War in 1967, but not without cost.

The Yom Kippur war of 1973 became marked by its enormous consumption rates of both equipment lost to enemy action, and ammunition and supplies used in prosecuting the battle.¹⁰⁷ Over the course of the next seventeen days, the battles would rage and stocks of all war-related materials for both sides of the conflict would become depleted to dangerously low levels. The Arab coalition received support and supplies from the Soviet Union via airlift within days of the beginning of the war and President Nixon faced a precarious decision.

Nixon's decisions shaped many aspects of America's future relations with all concerned in the region. These decisions would affect the US-Israeli relationship as well

as relations with the Arab world. Further, all decisions for action taken in that region would indirectly influence the superpower relations between the US and USSR. A difficult balancing act would require the US to demonstrate its resolve to back the state of Israel, while maintaining working relations with Arab states in the region. It also had to accommodate growing détente with the Soviet Union by avoiding direct confrontation with the Soviets while receiving little backing or support from its western European allies. In large part, the US relied on air mobility assets to pursue its national security objectives and maintain a balance of power in the region. The airlift provided the means for the US to support Israel directly through strategic nonlethal airpower while limiting the potential for an expansion and escalation of the conflict into one involving the superpowers.

Background

The history of conflict and turmoil in the Middle East spans thousands of years. The most recent focus of tensions, however, saw its genesis in 1948 when the state of Israel was created by UN mandate. A series of wars, border clashes, and terrorist activities led to the preemptive attack by Israel against mobilized and deployed Arab forces in 1967. The “Six Day War” resulted in the utter and swift defeat of Egyptian, Syrian, and Jordanian military forces. Israel found itself occupying the strategically valuable Golan Heights, the West Bank areas around the city of Jerusalem, and the vast expanses of the Sinai Peninsula. The humiliation of the Arab military forces was complete and losses to the Egyptian army alone were estimated by President Nasser to be in excess of 80%.¹⁰⁸ The Arab states did not change their public posture towards Israel. Moreover, as a result of the war, their public posturing became more vehement and their goal of rebuilding their military power became paramount. Nasser asserted after the 1967 war that “Israel's existence in itself is an aggression” and a diplomatically brokered peace, hoped for by Israel, was not to be.¹⁰⁹ The occupied territories remained under the control of the Israelis as a defensive buffer zone against attack by hostile neighbors.

The Soviet Union used the 1967 war as a chance to become the defender of Arab nations in the region.¹¹⁰ Massive supplies of arms flowed into the region and Soviet “advisors” trained Arab military personnel and in some cases manned the equipment themselves. The equipment arriving was also of higher technological standards than previous supplies. The Egyptians set about building a sophisticated SAM network, that included the new SAM 3, to ward off Israeli airpower.¹¹¹ The Soviets also supplied arms to the Syrians. This double build up created the specter of Israel having to fight another two-front war sometime in the future, but it had handled that very situation without much problem in 1967.

At the same time the Soviets were exerting their influence in the region, the US was also improving relations with the Egyptians. In 1970, with the death of Nasser, Anwar Sadat became the president of Egypt. His approach to the superpowers was an attempt to balance relationships with both actors while maintaining the support of his domestic political constituency. The United States, in response to the Soviet arms shipments to the Arab states, continued to provide arms and supplies to Israel. Though the support given to Israel was short of that provided Egypt and Syria by the Soviets, it nonetheless demonstrated that the US was committed to the survival of Israel and it also cast the area as a theater of contest between the two superpowers. The United States was not going to allow a Soviet client armed by the USSR to defeat a US client armed by the US.¹¹² With this commitment in mind, Sadat realized that the only realistic course open to him was to rely on the United States to restrain Israel in future conflicts and mount actions with more limited objectives.

Sadat felt that in order to win back prestige lost in the 1967 defeat, he must find a way to seize back some of the occupied territory, and then conduct diplomacy from a position of strength. To accomplish this aim, he needed offensive arms and mobile anti-aircraft missile systems to protect his forces. Sadat felt that the Soviets were not cooperating and would offer only defensive arms. As a result, he expelled Soviet

military advisors from Egypt in July of 1972. The lack of direct Soviet influence in the Egyptian armed forces allowed Sadat to formulate his plans unhindered. He launched an effort for a settlement concerning the occupied territories through political efforts and threats of renewed war.¹¹³ By 1973, Arab states still relied on the USSR for military arms and supplies, but Egypt had also opened limited relations with the US in an attempt to influence Israeli actions indirectly. With the Vietnam war experience over, the US supported Israel, searched for diplomatic solutions with Egypt, and also cultivated détente with the Soviet Union.

Throughout the late 1960's and the early 1970's, President Nixon pursued the path of détente. One of the goals sought was an agreement on strategic arms limitations, which came to fruition in 1972 with the signing of the SALT agreements. Détente also produced more open exchanges and commitments to limit involvement in third world conflicts.¹¹⁴ Though both countries continued to provide arms and supplies to client states, there was an implicit understanding that the potential of escalation could be limited by avoiding direct confrontation in third world theaters. That understanding influenced the Middle East situation and combined with Arab concerns to shape the US/Israeli relationship between 1967 and 1973.¹¹⁵

Following the Six Day War, Israel occupied territory that had previously been parts of Egypt, Syria, and Jordan. The US helped to assure that Israel retained the territory after the 1967 war to pressure the Arabs to negotiate for a real peace.¹¹⁶ Unfortunately, as already seen, the Arab states felt they could not negotiate from such a position of weakness and that stigma could not be averted until the territories were returned. Thus, Israel faced a war of attrition against the Arab countries. The new Israeli security challenges were no longer survival issues, but rather trying to frustrate Arab efforts to compel Israel to relinquish war gains from the 1967 war.¹¹⁷ As the “War of Attrition” progressed, the losses mounted on both sides. Finally in 1970, an agreement was reached between Israel and Egypt in an effort to stem the violence along the Sinai

border. This agreement was promptly violated a few months later when Nasser moved his forces up to the Suez Canal under the protective umbrella of his newly acquired defensive SAM system.¹¹⁸ Israel responded by preparing a defensive system that evolved into the Bar Lev line. This system was designed to provide defensive positions and observation points that would allow skeleton forces of the Israeli Defense Force (IDF) to stymie any enemy actions while reserves mobilized to create complete units. The equipment that would fill the Israeli positions was largely American built and supplied, and these two forces faced each other across the Suez canal in anticipation of future conflict.

This intricate balance of superpower influence, evolving strategies, objectives, and perceptions would come to a head in October of 1973. The events from 1967 to 1973 created complex interrelationships between the countries involved and these multifaceted relations would influence the decision process during the first few days of the war. Throughout this time period and after the war began “American and Israeli relations with the Soviet Union, Europe, the Arab countries and the Third World were significantly shaped and reshaped again and again”.¹¹⁹ The true test of commitment, support, and diplomacy by both sides would be tempered in the flame of conflict.

The Decision and Objectives

The initial assault by Arab forces caught the Israelis by surprise. Though there are differing arguments as to why the mobilization came so late, the preponderance of information points to a combination of intelligence breakdowns and political considerations. Israeli intelligence had observed the Egyptian and Syrian buildups along the borders of the occupied territories. Their assessments, however, had misjudged both the intentions and timing of the enemy forces, resulting in a situation where they failed to predict the attack until it was almost too late. Secondly, political leaders in Israel were hesitant to act on intelligence estimates. A false mobilization had occurred earlier that year, costing the state millions of dollars, and officials were reluctant to repeat that

mistake.¹²⁰ In addition, Israel was pressured by the United States not to take preemptive actions against the Arabs. In 1967, the Israelis had launched preemptive attacks in response to Arab actions and deployments. In the aftermath of the destruction of the Arab forces there were critics that the Israelis were the aggressors. In this instance Nixon tried to preserve a friendly relationship with the Arab world and he did not want Israel to appear in any way to be the aggressor.¹²¹ In any case, the IDF mobilized late and a timely mobilization was crucial to the defense of Israel.

The defense concept of Israel had always been dictated by the inability of the country to maintain a large standing force at any given time. Her defense was based on three elements: intelligence, which should give ample warning to mobilize reserves; a standing army, which would fight the holding phase of an enemy attack; and an air force, which had a large regular component. These three elements were designed to win time and hold the line until the reserves moved in and took over.¹²²

The reserves scrambled to form units and faced the task of shoring up defenses being overwhelmed by motivated, well trained, and well equipped Arab forces.

On the Suez front, Egyptian forces stayed beneath their protective anti-aircraft umbrella and carried the attack to the Bar Lev line. The line did not present as robust a defense as envisioned by its planners because the Israeli commander for that section had not deployed his armored forces to their defensive positions. The Egyptians carried the line and established a broad front five miles into Israeli held territory.¹²³ They then prepared defensive positions and dug in to repel any counterattacks. In the north the Syrians launched a more mobile, mechanized campaign against the Israelis in the Golan Heights. As they advanced, they were met by fierce resistance and the fighting was bloody and costly. Within several days the Israeli defenses had bent but not broken, and mobilized reserves began arriving to round out the units.

Fighting ebbed and flowed for the first several days. By the 10th of October it was clear the Egyptians were holding their positions with no immediate plans for an offensive. The Israelis mounted a counterattack in the Golan Heights and after

unrelenting pressure they gained back territory previously lost to the Syrians and advanced towards Damascus. Pressure was placed on Egypt, by the Syrians, to launch an attack to relieve the Israeli pressure in the north. The Egyptians left the protection of their anti-aircraft batteries on the west bank of the Suez and attempted a large-scale attack deep into Israeli territory. Their effort was soundly defeated, with Israeli airpower supplying the knockout blow. The Egyptian offensive had lasted only half of a day.¹²⁴ The battles raged for the first week and it became evident that the war was not to be a repeat of the short decisive war of 1967. This war was to be costly to both sides, and it was reflected in the early, exceptionally high rate at which war stocks were consumed and equipment and personnel lost.¹²⁵

The superpowers had competing interests in the Middle East that had already clashed. The Soviet Union balanced the need to avoid direct conflict with the US and maintain *détente* with the need to support their client Arab states in the war. As a result, the Soviets pushed for a cease-fire, while fighting for terms most favorable to their client states. The US pushed for both super powers to restrain from delivering additional weapons to either the Arabs or the Israelis and use their combined influence to bring about a cease-fire.¹²⁶ It became clear to the Soviets, however, especially after the reversal of fortunes for the Syrians and the failed Egyptian offensive, that they would need to resupply their allies if they were to achieve any success in tipping the balance of force in their favor. The Soviets thus began airlifting supplies to Egypt and Syria on the 10th of October. Over 70 flights a day went into the two countries.¹²⁷ This resupply effort threatened to tip the balance of power in the conflict in favor of the Arab nations, which would in turn threaten the survival of Israel.

American leaders had always been dedicated to a balance of power in the region as a top priority. Though he realized there was little chance of an early end to the fighting, Nixon sought diplomatic solutions to the conflict from the beginning in the hope

that the US would not have to intervene. US initiatives for a diplomatic peace were begun in the Security Council of the United Nations, but Nixon states,

As far as the American position was concerned, I saw no point in trying to impose a diplomatic cease-fire that neither side wanted or could be expected to observe. It would be better to wait until the war had reached the point which neither side had a decisive military advantage.¹²⁸

Unfortunately the war was rapidly depleting Israel's war materials. This put US security interests in the area at risk. There were several loosely defined objectives for that region that framed Nixon's decision process. First and foremost, the United States was dedicated to the survival of Israel, and within this parameter Nixon hoped to: 1) avoid a superpower confrontation by limiting the length and violence of the war, 2) maintain détente and preserve the balance of power in the region, and 3) preserve and possibly improve the US standing in the Arab world by dealing with the situation in an evenhanded way and exerting some influence over Israel to resolve the conflict with Arab desires in mind.¹²⁹ These objectives set the framework for the decision to send relief to Israel.

Help in the form of supplies and arms was requested by Israel almost immediately. On the 7th of October, Israeli Prime Minister Golda Meir requested arms and aid, but the request was denied because at that time it was thought by American leaders that the Israelis could win the war without American help.¹³⁰ By the time the true status of the war was known several days later, military supplies that the US had promised to Israel prior to the outbreak of hostilities were expedited and loaded aboard El Al airlines aircraft for emergency lift back to Tel Aviv. The National Command Authorities assessed the situation and weighed the various options and pressure was mounting on the administration. Watergate was fast becoming a major national issue and the Israeli ambassador to the United States, Simcha Dinitz, implied that he would seek pressure for American aid and supplies through the Jewish delegation in Congress.¹³¹ Nixon's advisors needed facts to help make the decision and Israel was quick to provide

them. On October 9th, the Israelis made known the extent of their losses, and the news was sobering. Within the first few days of the war Israel had lost over 49 combat aircraft and 500 battle tanks.¹³² It had become evident that Israeli needs were legitimate and if they were to be saved from a military defeat, they too would have to be resupplied, and quickly.¹³³ Golda Meir was quick to point out to the Secretary of State, Henry Kissinger, that part of the blame for their predicament lay with the US pressure preventing an Israeli preemptive attack.

You know the reasons why we took no preemptive action. Our failure to take action is the reason for our situation now. If I had given the Chief of Staff authority to preempt as he had recommended, some hours before the attack began, there is no doubt our situation would now be different.¹³⁴

Estimates showed that there was less than a one week supply of ammunition available to Israel, and the United States had to act fast.¹³⁵ The only option available that could avoid a direct conflict, preserve Israel, and help preserve the balance of power in the region appeared to be the rapid resupply of Israel's military needs by airlift.

Organization and Execution

Work on a contingency plan began within the US military almost immediately after the war in the Middle East started. As the Military Airlift Command (MAC) tried to outline contingency possibilities, White House, National Security Council, Department of State and Department of Defense organizations attempted to define the extent of US involvement.¹³⁶ As details about the conflict emerged, the complex interrelationships of all parties involved in the conflict were not lost on military leaders. General Paul K. Carlton, the commander of MAC, realized that it would be difficult to determine

what did need to be done to support Israel or possibly the Arabs as the case may have been. You know we do business daily with both sides of that fence -- we are very interested in our Arab connections and very dependent on the product of the oil fields and I guess there's nothing that could have been more difficult for the US to cope with than fighting in this area -- cause [sic] we've got friends on both sides. We've got to maintain a balance or we lose both ways.¹³⁷

The decisions at the national level in Washington set parameters on how the resupply would be conducted. Once Nixon decided to maintain the balance of forces in the Mideast conflict through an aerial resupply effort, the Military Airlift Command, as single manager of Defense Department strategic airlift, was asked to implement it.¹³⁸ The overall scheme would involve a mixture of lift vehicles with the key being “quick movement of critical items, followed by far greater quantities through necessarily slower means.”¹³⁹ Sealift would be necessary to supply the long term needs of Israel, but the immediate crisis response would rely on the quick, responsive capability of airlift.

The airlift planning at MAC began by looking at several options. The first was simply to allow Israel to continue conducting its own operations via El Al airlines.¹⁴⁰ This possibility was quickly ruled out as the meager resources, a handful of commercial Boeing 707s and 747s, available to the airline were totally inadequate for the expected volume of resupply necessary. Additionally, these aircraft were limited in their ability to onload and offload cargo through small side doors designed for passenger use. Another alternative, that of contracting US commercial carriers to augment El Al, was considered but there were no US carriers willing to take on the risk. The carriers were concerned with insurance problems of flying into a war zone, as well as the impact of their aiding Israel on future business with Arab nations.¹⁴¹ The solution would have to involve the US military organic strategic airlift fleet.

The use of US military airlift included two possible options. The first was to carry supplies to a facility short of Israel and then transship the goods to an Israeli aircraft for the final leg into Tel Aviv. This option would keep US aircraft out of the war zone and eliminate the image of US military cargo aircraft flying directly to the aid of Israel. Using this method, however, would produce problems similar to those already encountered by using El Al. This system would merely move the bottleneck to the transshipment point, where El Al would still not have adequate lift capability to get the needed supplies to Israel in a timely fashion. Additionally, the US commitment to

prevent the defeat of Israel would not be as apparent as in more direct methods. The second option was to allow US military aircraft to fly the supplies from the United States along the entire route into Tel Aviv itself. This plan eliminated the need for time-consuming transshipment but also resulted in more direct, visible involvement on the part of the US, which was a possible drawback in terms of fostering Arab relations.

The receipt of additional information made the difference. On October 9th, the true extent of Israeli losses was known and on October 10th the Soviet Union began a full-scale airlift effort to replace Syrian and Egyptian losses.¹⁴² At the same time US inquiries for allied support and requests to use US overseas bases received negative replies.¹⁴³ The only allied country that appeared to be willing to lend any support at all was Portugal. Their tentative offer was to let US airlift forces use Lajes AFB, Azores Islands, for refueling and crew change purposes in consideration of future US basing rights negotiations.¹⁴⁴ Nixon decided that America's military strategic airlift fleet was the answer.¹⁴⁵ It would best accomplish both the military objective of getting supplies to Israel and send the political message by displaying America's unconditional support of Israel to both the Soviets and the Arab states.¹⁴⁶ General Carlton later stated:

Although we made some initial queries into the availability of commercial airlift, there were good reasons for the ultimate decision to keep the Israeli airlift "all blue suit." In its early stage, the operation was as important for its demonstration of national resolve as it was for the supplies it carried. Such national intent could only be emphasized in unequivocal terms through the use of military aircraft.¹⁴⁷

The airlift was to be carried out largely by the US strategic airlift forces, partially aided by the continuing efforts of El Al airlines. What was needed was the approval from Portugal to use the Azores, and a subsequent execution order from the US command structure.

Concurrent with the evaluation of the several options, MAC planners began preparations for deploying the necessary infrastructure to support the operation. The airlift would pickup Israel-destined cargo at various embarkation points in the US, then

transit Lajes, and from there proceed across the Mediterranean to Tel Aviv. The requests for equipment from Israel were received by the State Department, evaluated and passed to the Department of Defense, from which the requests were given to the Air Force Logistics Command (AFLC). The job of AFLC was to locate the requested equipment, assess the impact on USAF readiness if it were shipped to Israel, then prepare the cargo for air transport.¹⁴⁸ AFLC would oversee the Joint Chiefs of Staff priority system for air shipments and AFLC coordinated their requirements with MAC Headquarters to schedule airlift.¹⁴⁹ MAC arranged for the deployment of Airlift Control Elements (ALCEs), consisting of over 250 personnel, to the designated pickup points to coordinate the onload, traffic flow, and mission tracking of the MAC flights.¹⁵⁰ Flights would then proceed to Lajes Air Base in the Azores.

At Lajes the infrastructure could not support the expected flight traffic flow. It was a small facility scheduled to be transferred to the Navy in a few months time. It normally handled only about 15-20 flights per month, and the expected traffic flow for the Israeli airlift was estimated to exceed 20-30 flights per day. A force of over 450 support personnel were sent to Lajes and housed in any facilities that could be found, including hallways and hospital rooms.¹⁵¹ They brought with them servicing and support equipment as well as spare parts needed to keep the airlift flowing. Lajes was critical to the airlift. Without it serving as a refueling point, the C-141s could not reach Israel and the C-5 aircraft would have to greatly reduce their cargo loads for the extra fuel that would be required for the nonstop flight to Tel Aviv.¹⁵² Without Lajes, the US could not provide the required flow of material to sustain Israel's warfighting needs.

After Lajes, the aircraft would proceed along the portion of flight most susceptible to incident. In the Mediterranean the flight path was chosen carefully to avoid flying in airspace controlled by North African Arab states as well as airspace controlled by non-cooperative European nations. This carefully selected route was coupled with safeguards of US escort coverage provided by the US Navy's 6th Fleet as

picket ships. They monitored each flight's progress and provided information to flight crews of any potentially hostile actions as well as air escort if required. For the last portion of the route, US cargo aircraft were escorted by Israeli fighters into Tel Aviv.¹⁵³

Once on the ground it was important to keep the traffic flow moving through expeditious offloading of the aircraft. Lod International airport in Tel Aviv initially had no US personnel present to help in support activities for the airlift. An ALCE unit was designated to deploy with the first delivery aircraft into Tel Aviv. Once there it would coordinate with the Israeli government and El Al airlines for the provisions necessary to refuel, service and offload the US military aircraft. US presence was kept to a minimum, but there were eventually over 50 MAC ALCE personnel assigned at Lod airport.¹⁵⁴

The pieces were in place. MAC ALCE units were being deployed, aircrews were on alert and embarkation points in the US were ready to load cargo. The final go ahead was received by General Carlton on the 13th of October. Portugal had agreed to the use of Lajes and Nixon had ordered the airlift to proceed immediately.¹⁵⁵ Within nine hours the first load of supplies was airborne on its way towards Israel. To accomplish the airlift, MAC waived crew rest and crew duty day limits to get the maximum utility of its aircrew members.¹⁵⁶ The airlift transported supplies uninterrupted to Israel and delivered critical supplies through the efforts of many throughout the system. At the offload point in Israel, “the fastest turnaround times were essential to get the incoming *C-5 Galaxies* and *C-141 Starlifters* offloaded, fueled and airborne on their return flights. By the fifth day of activity, MAC ALCE crews were regularly achieving aircraft turnaround times as low as 55 minutes on C-141s and under 2 hours on the C-5s”¹⁵⁷ (The normal scheduled turnaround times are 3 hours and fifteen minutes for C-141s and four hours and fifteen minutes for a C-5). As the airlift peaked, interest began to focus on sealift, and the task of building up sufficient quantities of arms to meet the long-term requirements fell to the ships.¹⁵⁸ The US airlift to Israel officially ended November 14, 1973, thirty-three days after it had begun.

The airlift was a success in many ways. It delivered over 22,000 tons of supplies and out-performed the Soviet effort even though the US airlift had to cover four times the distance and started five days after the Soviets began.¹⁵⁹ It had delivered the supplies necessary for Israel's army to continue the fight. Anti-tank weapons such as TOW and MAVERICK missiles, as well as ammunition for artillery pieces and tanks, made their way immediately into action. "Materials were transferred to Israeli trucks, waiting in long lines for their precious cargo and hauled to Israeli supply distribution points for allocation."¹⁶⁰ The pace of offload never slackened. As one crewmember noted after several flights into Tel Aviv, "within a few days the atmosphere at Lod had turned from desperate urgency to one of businesslike efficiency."¹⁶¹ While some supplies made a direct contribution to Israel's fighting capability, other equipment deliveries performed the equally important task of sending a clear message of US support. The well-publicized offloading of M-60 tanks from mammoth C-5 aircraft in Israel served as a psychological boost if not an actual combat capability. "The airlift showed the Arabs what could be done by the United States. Soviet leaders got the same message -- that the United States was both determined and able to restock Israel with weapons to replace its heavy losses, including even heavy tanks and missiles."¹⁶² The impact of the delivery of tanks and other heavy outsized cargo also is evident through the statements of President Sadat after the war, when he confirmed that he had seen the resupply as almost an inexhaustible supply of tanks and armor from the US to Israel.¹⁶³ The airlift had performed an integral role in supporting Israel, containing the conflict through the demonstration of support and helped bring about a settlement.¹⁶⁴ Israel was able to counter Arab attacks and secure battle lines for the eventual negotiated end to the conflict.¹⁶⁵ The US airlift had helped make this possible, but not without problems.

Command Relations and Lessons Learned

Post-airlift "lessons learned" focused primarily on three areas: contingency planning, the strategic airlift force structure itself, and command and control (command

relationships).¹⁶⁶ The first two areas were found deficient in several ways. There was inadequate contingency planning for supporting Israel, but it was largely attributed to tight Israeli security measures and non-cooperation that had made any meaningful planning impossible. In terms of the airlift force structure, the cost overrun and design-problem plagued C-5 aircraft had performed well. The biggest deficiency was found to be the lack of air refueling capability. C-141s had no physical capability built into the aircraft and the C-5, which had an aerial refueling system built into it, lacked crews trained in aerial refueling. Steps were taken to rectify these problems as C-141s were retrofitted with aerial refueling systems and all MAC airlift pilots began training to become aerial refueling qualified. In terms of command relations (command and control) the problems were less well-defined and more varied. General Carlton faced several frustrating problems during both the early planning phases of the operation and the actual conduct of the airlift.

During airlift planning, many individuals tried to determine the “best way” to perform an airlift. Some of the considerations were primarily political and were of great importance. The decision to transship supplies, use military aircraft or commercial, and where to provide enroute support were all largely driven by the political atmosphere engendered by the crisis. Problems in setting up the airlift arose primarily because little advice was sought from MAC. General Carlton continually voiced his frustration with policy makers in the State Department and the Department of Defense who had no idea of the problems associated with the use of commercial aircraft, transshipping problems, and infrastructure support requirements for enroute stations. At one point he talked with Lieutenant General William Snavely, the Deputy USAF Chief of Staff for Systems and Logistics. General Snavely, working through AFLC, was the point of contact to the rest of DOD and the National Command Authority and had attempted to set up the framework for the airlift (as well as requisition supplies). However, he was unqualified to take on the task. Throughout his career, he had received little experience or training in any type

of strategic airlift and neither had his staff. This deficiency became apparent when, during the course of one conversation, General Carlton had to inform him what an ALCE was and why they were needed both at Lajes and in Tel Aviv.¹⁶⁷ General Carlton also had to explain continually the requirements for enroute support, flying operations and cargo traffic management.

On several occasions General Carlton commented that he was “mystified at the way things were running” and that he was being given directives but not being consulted on how best to plan for the airlift operation.¹⁶⁸ This process continued throughout the airlift. The Department of Defense and the State Department placed limits on the numbers of aircraft that could be used in the airlift and the number of flights per day into Israel that were permissible. While political factors may have been a consideration, none were cited for the restrictions except that the staffs of those agencies had determined the optimal flow for the operation.¹⁶⁹

All of the problems associated with extra correspondence, coordination, and bureaucratic layering to put the operation in place could have been reduced if MAC had been allowed to plan the airlift within only broad directives and guidelines. This observation is reinforced by the findings of the Office of the Comptroller General of the United States in its “Report to Congress.” While recognizing the existence of political constraints in the operation, the report cites the fact that “The SECDEF [Secretary of Defense] controlled the number of aircraft allowed at Lod. This severely constrained MAC in its ability to schedule airlift.”¹⁷⁰ Had General Carlton been designated as operation's overall commander, he would have had the ability -- and authority -- to plan and task other support as required. His actions could then be guided by an overall framework of political guidance within which he would operate. This arrangement was, in fact, the recommendation in the comptroller's report. The comptroller recommended that, “MAC be allowed to manage the movement of cargo and personnel and to control the flow of aircraft in future strategic airlift operations, within the overall limits

established by higher authorities.”¹⁷¹ This ability to have the responsibility and authority for the operation would allow him to task other agencies as required. They would then support him as the strategic airlift forces directly pursued national security objectives.

The operation was a success. It displayed the US commitment to Israel while avoiding direct confrontation with the Soviets. The airlift, combined with the air-refueled transfer of fighter aircraft and C-130s that were given to the Israelis, provided the vital supplies required to help Israel fight the war. Ammunition was primary, but tanks, artillery and other oversize cargo were just as important in sending the message and assuring Israel's survival. Though this action was not the only key to resolving the crisis (threat of Soviet intervention and alert status of US military forces in response, diplomatic initiatives, etc.) it demonstrated the unique capabilities that military strategic airlift/air mobility can provide for national decision authorities. In this case it was the airlift that provided the ability for the US to navigate the treacherous balance of power issues at stake in the region as well as the confused waters of Israeli, Arab, and European relations. In the words of Golda Meir, “For generations to come all will be told of the immense planes from the United States bringing in the material that meant life to our people. Israel probably was saved from being overrun by President Nixon's quick decision to intervene with huge resupply.”¹⁷²

Notes

¹⁰² *Military Airlift Command: A Short History, 1941-1991* (Scott AFB, Illinois: Office of History, Headquarters Military Airlift Command, June 1991), 5.

¹⁰³ Airlift employed by the United States military is divided into two basic categories. The first is “organic”, and it consists of aircraft developed, owned and operated by military forces specifically designed for use in military operations. The second is “contract commercial”, and these are aircraft that have civilian equivalents and they are operated by civilian companies on contract to the Department of Defense. The unique cargo capacity and loading characteristics of the “organic” military aircraft, the C-141 *Starlifter* and the C-5 *Galaxy* contributed to the success of the Israeli airlift in 1973.

¹⁰⁴ Kenneth L. Patchin, *Flight to Israel: A Historical Documentary of Strategic Airlift to Israel 14 October - 14 November 1973* (Scott AFB, Illinois: Office of MAC History, April 30, 1974), (revised July 1976), 7.

¹⁰⁵ There remains a good deal of discussion of the reasons Israel waited until the last minute to mobilize. Intelligence mistakes and reluctance by Israeli to appear as the aggressor are commonly cited. Captured documents revealed the timing of the Egyptian and Syrian attack to Israeli intelligence agents but this occurred only six hours before the attack. See, Herbert Druks, *The U.S. and Israel 1945-1973, A Diplomatic History* (New York: Robert Speller & Sons, 1979), 104.

¹⁰⁶ Chaim Herzog, *The Arab-Israeli Wars* (New York, Random House, 1982), 288.

¹⁰⁷ Consumption of battlefield supplies far exceeded any planned rates. A high rate of attrition was suffered by both sides with a single illustrative example being that close to 3,000 tanks were lost (75% of them Arab) in less than three weeks. Accurate rates of consumption are hard to find but, "both sides in the Middle East war found themselves beginning to run out of ammunition after a single week of murderous but indecisive fighting. And yet, as against their size and GNP, the belligerents were by no means ill-prepared; on the contrary, they are probably the most heavily-armed states on earth...". See, Martin Van Creveld, *Military Lessons of the Yom Kippur War: Historical Perspectives* (Beverly Hills, California: Sage Publications, 1975), 47-48.

¹⁰⁸ Nadav Safran, *Israel the Embattled Ally* (Cambridge, Massachusetts: Belknap Press, 1981), 257.

¹⁰⁹ A.K.F. Organski, *The \$36 Billion Dollar Bargain: Strategy and Politics in U.S. Assistance to Israel* (New York: Colombia University Press, 1990), 191.

¹¹⁰ A.K.F. Organski, *The \$36 Billion Dollar Bargain: Strategy and Politics in U.S. Assistance to Israel* (New York: Colombia University Press, 1990), 162.

¹¹¹ This was especially important as the attacks in the first few hours of the 1967 war had virtually destroyed the Egyptian Air Force on the ground. In addition to SAMs, the Egyptians built shelters for their aircraft and dispersed them to make them less vulnerable to a preemptive strike.

¹¹² A.K.F. Organski, *The \$36 Billion Dollar Bargain: Strategy and Politics in U.S. Assistance to Israel* (New York: Colombia University Press, 1990), 35.

¹¹³ Nadav Safran, *Israel the Embattled Ally* (Cambridge, Massachusetts: Belknap Press, 1981), 257.

¹¹⁴ For some background on Nixon's thoughts concerning the détente and discussions with the Soviets over third world see, Richard M. Nixon, *The Memoirs of Richard Nixon* (New York: Grosset & Dunlap, 1978), 621-623

¹¹⁵ With Kissinger's appointment to the office of the Secretary of State, he continued to pursue policies aimed at maintaining the balance of military power in the Middle East as well agreements with the Soviets on principles aimed at keeping both superpowers from direct intervention in any hostilities between the Arab states and Israel. See, Henry Kissinger, *Years of Upheaval* (Boston, Massachusetts: Little, Brown & Co., 1982), 469-470. Exploration of this pursuit of policy can be found in; William B. Quandt, *Peace Process; American Diplomacy and the Arab-Israeli Conflict since 1967* (Berkeley, California: University of California Press: , 1993), 145-147.

¹¹⁶ Nadav Safran, *Israel, The Embattled Ally* (Cambridge, Massachusetts: Belknap Press:, 1981), vii.

¹¹⁷ Nadav Safran, *Israel, The Embattled Ally* (Cambridge, Massachusetts: Belknap Press:, 1981), 257.

¹¹⁸ William B. Quandt, *Decade of decisions: American Policy Toward the Arab-Israeli Conflict, 1967-1976* (Berkeley, California: University of California Press, 1977), 217.

¹¹⁹ Nadav Safran, *Israel, The Embattled Ally* (Cambridge, Massachusetts: Belknap Press, 1981), viii.

¹²⁰ The false mobilization had taken place in mid-May 1973, only four months before. The estimated cost for mobilizing the reserves was 10 million dollars. See, Nadav Safran, *Israel, The Embattled Ally* (Cambridge, Massachusetts: Belknap Press, 1981), 283 also, Golda Meir, *My Life* (New York: G.P. Putnam's Sons, 1975), 424.

¹²¹ Nixon confirms that he had begun private talks with the Egyptians and that preserving a working relationship with them was one of his goals. See, Richard M. Nixon, *The Memoirs of Richard Nixon* (New York: Grosset & Dunlap, 1978), 922. Kissinger also discusses both the failure by policy makers to correctly analyze intelligence information they received (including himself) and the fact that he was asked to communicate to the Arabs on behalf of Israel that the Israelis intended no preemptive actions in response to reported Arab military mobilizations. See, Henry Kissinger, *Years of Upheaval* (Boston, Massachusetts: Little, Brown & Co., 1982), 466. Reports of direct US pressure on Israel not to launch preemptive attacks comes from primarily Israeli sources. See, Golda Meir, *My Life* (New York: G.P. Putnam's Sons, 1975), 426.

¹²² Chaim Herzog, *The Arab-Israeli Wars* (New York: Random House, 1982), 230.

¹²³ David R. Mets, *Land-Based Airpower in Third World Crises* (: Air University, Maxwell Air Force Base, Alabama: Air University Press, 1986), 96.

¹²⁴ Major Dennis B. Dolle, "Operation Nickel Grass" (Master's Thesis, Air Command and Staff College, Maxwell AFB, Alabama, 1987), 5. (Air University Library Doc # M-U 43122 D6650).

¹²⁵ Major Dennis B. Dolle, "Operation Nickel Grass" (Master's Thesis, Air Command and Staff College, Maxwell AFB, Alabama, 1987), 5. (Air University Library Doc # M-U 43122 D6650).

¹²⁶ Kenneth L. Patchin, *Flight to Israel: A Historical Documentary of Strategic Airlift to Israel 14 October - 14 November 1973* (Scott AFB, Illinois: Office of MAC History, April 30, 1974), (revised July 1976), 8.

¹²⁷ Kenneth L. Patchin, *Flight to Israel: A Historical Documentary of Strategic Airlift to Israel 14 October - 14 November 1973* (Scott AFB, Illinois: Office of MAC History, April 30, 1974), (revised July 1976), 5.

¹²⁸ Richard M. Nixon, *The Memoirs of Richard Nixon* (New York: Grosset & Dunlap, 1978), 921.

¹²⁹ David R. Mets, *Land-Based Airpower in Third World Crises* (Air University, Maxwell Air Force Base, Alabama: Air University Press, 1986), 101.

¹³⁰ D.K. Palit, *Return to Sinai: The Arab Offensive, October 1973* (Dehra Dun, India: Palit & Palit, 1974), 124. This opinion expressed by Palit is backed up by evidence from Henry Kissinger. Kissinger asserts that the initial prognosis was for another short and decisive war for which Israel was well equipped. For an in-depth look at the entire conflict as well as the initial evaluation of Israeli requests from the perspective of US national policy decision makers see, Henry Kissinger, *Years of Upheaval* (Boston, Massachusetts: Little, Brown & Co., 1982), 450-545.

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- 131 A complete discussion of the pressures and decision inputs can be found in Henry Kissinger, *Years of Upheaval* (Boston, Massachusetts: Little, Brown & Co., 1982), 489-495.
- 132 Henry Kissinger, *Years of Upheaval* (Boston, Massachusetts: Little, Brown & Co., 1982), 492.
- 133 Message and notes from telecon between Gen. Carlton and Gen. Wade (Vice Chief of Staff USAF) Oct 11, 1973. This conversation helps to illustrate that military officials were aware of the gravity of the situation and the importance of maintaining the balance of power in the Middle East region. (USAF HRA # 168.7100-556)
- 134 Henry Kissinger, *Years of Upheaval* (Boston, Massachusetts: Little, Brown & Co., 1982), 477.
- 135 Estimates of the true amounts of munitions remaining in Israel's stockpiles are varied. Some pessimistic views put the reserves at less than three days while others maintain that supplies were adequate and Israel used the war as an excuse to acquire excess amounts. The predominant view puts the actual amounts remaining between the three day and one week figure.
- 136 "Airlift to Israel", MAC Command ops briefing, July 1974, 2. (HQ AMC History Office, Box 36)
- 137 Taped interview and briefing between General Carlton and Mr. Dave Brown of *Aviation Week*. Held in Commander's conference room, MAC HQ, Scott AFB, Illinois, November 20, 1973, A-4. (USAF HRA #168.7100-559)
- 138 "The Resupply of Israel by Air", *The Defense Transportation Journal*, March-April 1974, 17.
- 139 "The Resupply of Israel by Air", *The Defense Transportation Journal*, March-April 1974, 18.
- 140 El Al Airlines is the state airline of Israel. It conducted airlift from the US to Israel from the outset of the war and continued throughout the conflict.
- 141 Report to the Congress, "Airlift Operations Of The Military Airlift Command During The Middle East War", by the Comptroller General of the United States, April 16, 1975, 8. (Air University Library Doc # M-U 41026-8 no. 75-204)
- 142 Henry Kissinger, *Years of Upheaval* (Boston, Massachusetts: Little, Brown & Co., 1982), 493.
- 143 Allied countries in Europe gave overwhelmingly negative replies to US requests for refueling rights, overflight, and use of airbases for support. They were unequivocal in their positions and unwilling to make the least compromise for fear of Arab reprisals in the form of oil supplies being cut off. For details of information on various countries see: Letter to MAC CC from Theodore Tremblay, Political Advisor and attached State Department memos on, "Efforts to Obtain Use of European Bases for the Airlift to Israel", October 9, 1973. (AMC HQ History Office, Box 35)
- 144 Taped interview and briefing between General Carlton and Mr. Dave Brown of *Aviation Week*. Held in Commander's conference room, MAC HQ, Scott AFB, Illinois, November 20, 1973, A-10. (USAF HRA #168.7100-559)
- 145 Nixon had decided that there was no time for any further delay. He expressed frustration with the debate between military aircraft and contract carriers. It was obvious the commercial airlines would not participate and when asked about the open use of US military aircraft he said, "Whichever way we have to do it, get them in the air, *now*." See, Richard M. Nixon, *The Memoirs of Richard Nixon* (New York: Grosset & Dunlap, 1978), 927.

146 Kissinger's Middle East experts on his staff evaluated the use of military aircraft as inconsequential in terms of future relations with Arab nations and it would reinforce the US commitment to the state of Israel. See, Henry Kissinger, *Years of Upheaval* (Boston, Massachusetts: Little, Brown & Co., 1982), 513.

147 "The Resupply of Israel by Air", *The Defense Transportation Journal*, March-April 1974, 18.

148 Stephen Stieritz, "AFLC Support Operation of Operation Nickel Grass/9DD 10 October - 14 November 1973," AFLC Historical Study No. 384, June 1975. (HQ AMC History Office, Box 32), 2.

149 Stephen Stieritz, "AFLC Support Operation of Operation Nickel Grass/9DD 10 October - 14 November 1973," AFLC Historical Study No. 384, June 1975. (HQ AMC History Office, Box 32), 12-13.

150 Report to the Congress, "Airlift Operations Of The Military Airlift Command During The Middle East War", by the Comptroller General of the United States, April 16, 1975, 17. (Air University Library Doc # M-U 41026-8 no. 75-204)

151 There are several good accounts of the inadequacies of Lajes to handle the flow. See primarily: Kenneth L. Patchin, *Flight to Israel: A Historical Documentary of Strategic Airlift to Israel 14 October - 14 November 1973* (Scott AFB, Illinois: Office of MAC History, April 30, 1974), (revised July 1976), 45 and, Taped interview and briefing between General Carlton and Mr. Dave Brown of *Aviation Week*. Held in Commander's conference room, MAC HQ, Scott AFB, Illinois, November 20, 1973, A-8. (USAF HRA #168.7100-559)

152 Kenneth L. Patchin, *Flight to Israel: A Historical Documentary of Strategic Airlift to Israel 14 October - 14 November 1973* (Scott AFB, Illinois: Office of MAC History, April 30, 1974), (revised July 1976), 36.

153 Taped interview and briefing between General Carlton and Mr. Dave Brown of *Aviation Week*. Held in Commander's conference room, MAC HQ, Scott AFB, Illinois, November 20, 1973, 19. (USAF HRA #168.7100-559)

154 Report to the Congress, "Airlift Operations Of The Military Airlift Command During The Middle East War", by the Comptroller General of the United States, April 16, 1975, 17. (Air University Library Doc # M-U 41026-8 no. 75-204)

155 Message traffic and Memos for record, General Carlton, MAC CC, (USAF HRA # 168.7100-557)

156 Kenneth L. Patchin, *Flight to Israel: A Historical Documentary of Strategic Airlift to Israel 14 October - 14 November 1973* (Scott AFB, Illinois: Office of MAC History, April 30, 1974), (revised July 1976), 52-54.

157 "The Air Force and The Middle East War", *Air Force Policy Letter for Commanders*, No. 2-1974, February 1974, 27.

158 "The Resupply of Israel by Air", *The Defense Transportation Journal*, March-April 1974, 19.

159 The following chart compares the airlift efforts of the US and Soviet Union during the period of the Yom Kippur War:

	<u>Duration</u>	<u>Missions</u>	<u>Distance (one way)</u>	<u>Tonnage</u>
Soviet Union	40 days	935	1,700 miles	15,000
US	32 days	567	6,450 miles	22,318

Source: Kenneth L. Patchin, *Flight to Israel: A Historical Documentary of Strategic Airlift to Israel 14 October - 14 November 1973* (Scott AFB, Illinois: Office of MAC History, April 30, 1974), (revised July 1976), 254. (Compiled from MAC record logs and tabulated for MAC Command Briefing Information).

¹⁶⁰ “The Resupply of Israel by Air”, *The Defense Transportation Journal*, March-April 1974, p. 21. Other sources confirm the quick transfer of materials from aircraft into the Israeli logistics system. Early in the operation General Carlton commented on the total offload support MAC was receiving at Lod Airport and how quickly the Israelis were unloading aircraft and getting the supplies away from the airport and into the field. See, Kenneth L. Patchin, *Flight to Israel: A Historical Documentary of Strategic Airlift to Israel 14 October - 14 November 1973* (Scott AFB, Illinois: Office of MAC History, April 30, 1974), (revised July 1976), 151.

¹⁶¹ Robert Whitehouse, Capt., “Munitions, roses and rockets”, *The Air Reservist*, March 1974, 8.

¹⁶² Ed O'Brien, Chief of the Globe-Democrat Washington Bureau, “C-5s saved the day”, *St. Louis Globe Democrat*, November 11, 1973, 3-F.

¹⁶³ One example of the impression that the airlift of heavy tanks made comes from a compilation in Dr. Mets book, *Land-Based Airpower in Third World Crises* (Air University, Maxwell Air Force Base, Alabama: Air University Press, 1986), Footnote #47, 119. This account comes from Golda Meir, *My Life*, (New York: Putnam's, 1975), 431. While evidence supports that few if any of the US supplied tanks saw battle, they were offloaded with much publicity at Lod airport (not Al-Arish). Their arrival made a vivid impression on Sadat:

Al-Arish became an airbase where colossal US transport aircraft landed, loaded with tanks and sophisticated weapons. Al-Arish is an Egyptian city; it is the capital of Sinai, and lay directly behind the front...I noticed that every time I destroyed a dozen tanks, more tanks were to be seen on the battlefield. The United States was taking part in the war to save Israel...and the Americans were using the Egyptian Al-Arish airfield, immediately behind the front quite openly, so as to turn Israel's defeat into victory...Soon, however, I found that they were facing hundreds of tanks which the United States supplied to the Israelis on the spot.

¹⁶⁴ The airlift was not the only action taken by the US. Tactical Air Command fighters were ferried to Israel with the support of SAC tanker aircraft. US Army forces in the US were also placed on alert in response to Soviet hints they may enter the conflict with their own forces. All of these events help guide the outcome of the conflict, however, this paper by necessity of length and its primary focus on airlift only addresses the MAC airlift contribution.

¹⁶⁵ Alert status of forces both in the USSR and the US contributed to growing tensions that could have erupted in direct confrontation. The initial move known to the US was the readiness status of up to seven Soviet divisions that were “readied” for airlift to the Middle East. This was countered by US raising its alert status of nuclear forces and the readiness status of the 82nd Airborne division. Pressures to save the surrounded Egyptian Third Army helped coerce Soviet efforts to broker a cease-fire, while mounting domestic problems for the Nixon administration in dealing with Watergate provided impetus to the US. Each side had their own reasons to seek a negotiated cease-fire--and quickly.

¹⁶⁶ For an outline of findings after the airlift see the Lessons Learned section of the Report to the Congress, “Airlift Operations Of The Military Airlift Command During The Middle East War”, by the Comptroller General of the United States, April 16, 1975, 30. (Air University Library Doc # M-U 41026-8 no. 75-204)

¹⁶⁷ Telecon memo for record between General Carlton and General Snavely October 12, 1973. (HRA #168 7100-556)

¹⁶⁸ These observations can be found in a series of phone call records and memos kept by the MAC CC beginning October 9, 1973. (HRA #168.7100-557)

¹⁶⁹ See records of message traffic cited and Memos for record by MAC HQ/CC from October 15 - November 5, 1973. (HRA # 168.7100-556 to 557).

¹⁷⁰ Report to the Congress, "Airlift Operations Of The Military Airlift Command During The Middle East War", by the Comptroller General of the United States, April 16, 1975, 9. (Air University Library Doc # M-U 41026-8 no. 75-204)

¹⁷¹ Report to the Congress, "Airlift Operations Of The Military Airlift Command During The Middle East War", by the Comptroller General of the United States, April 16, 1975, 35-36. (Air University Library Doc # M-U 41026-8 no. 75-204)

¹⁷² "The Air Force and The Middle East War", *Air Force Policy Letter for Commanders*, No. 2-1974, February 1974, 27.

Chapter Four

Implications for the Future

It has been convincingly demonstrated that strategic airlift can be mobilized quickly and employed at far-distant points as a powerful and effective component of American airpower. Our strategic airlift component has attained our national objectives in peacetime. The airlift component has now taken the proper place alongside the combat strategic, tactical and air defense components of airpower. Unlike those armed components, the airlift component can be employed independently in time of peace or in time of war.

General Laurence S. Kuter, 1949

The two previous case studies provide some historical evidence of the importance of strategic air mobility. In these situations it was airlift/air mobility that directly allowed the achievement of national security objectives through nonlethal means. In Berlin, a newly formed command provided resources and expertise to achieve national strategic objectives in post World War II Europe. However, Military Air Transport Service personnel and resources were absorbed by the geographic command US Air Forces Europe, resulting in an extra layer of bureaucracy. This command arrangement removed airlift personnel from the necessary direct communications required to achieve the desired objective most efficiently. This organization also removed a portion of authority from the commander perhaps best qualified to direct the effort and know the support requirements needed from outside agencies and commands.

As the importance of strategic airlift was recognized, the Military Airlift Command was formed and became a full Air Force Command as well as the single DOD manager for strategic airlift. The autumn 1973 the crisis in the Middle East caused MAC to be called upon to achieve national security objectives in that vital region. The airlift directly supported Israel's ability to carry on the fight while simultaneously demonstrating to the Arab nations, the United States' unfaltering resolve and commitment to Israel. This operation, combined with military alert postures, also warned the Soviet

Union against escalation or any further direct involvement in the conflict. This airlift operation was a clear case of the unique capabilities of organic strategic military airlift/air mobility performing a critical airpower mission that was nonlethal. The Israeli airlift was in direct pursuit of national security policies and not an enhancement or support function of any other US military action.

While these two operations are prime examples of the use of strategic air mobility by national command authorities to pursue national objectives, they are by no means isolated examples. USAF resources have been involved in over 450 noncombat/nonlethal operations between 1947 and 1989.¹⁷³ In these operations U.S. support aircraft acted apart from traditional combat to accomplish a national goal. This figure excludes most minor operations and focuses on large overseas activities in which the Air Force played a leading role. Overall, these operations have occurred at the rate of once a month since the creation of the USAF, and they have occurred regardless of whether or not the Air Force was involved in major wars or smaller conflicts.¹⁷⁴ While these operations have included all types of nonlethal airpower applications, strategic air mobility has made up a major portion of them.

From the time airlift assets were centralized under MATS to the present day structure of Air Mobility Command serving as a component of United States Transportation Command, there have been many major airlift operations. The history office of AMC has catalogued 372 major airlift operations between 1947 and 1987.¹⁷⁵ The majority were humanitarian relief efforts as the result of natural disasters, civil unrest, plagues and disease, but they also have included the transport of peacekeeping forces, noncombatant evacuation operations (NEOs), and diplomatic support missions. These numbers illustrate the importance that nonlethal uses of airpower have played in carrying out national security policies, and since 1987 the use of air mobility resources in pursuit of national security objectives has continued.

In the 1990s, AMC has provided resources to numerous noncombat operations. They have included airlift and relief to the Kurdish people in Northern Iraq through Operation PROVIDE COMFORT, transporting over 2,300 tons of relief supplies to former Soviet republics in Operation PROVIDE HOPE, and the most recently completed operations in Somalia which provided relief from widespread famine in that country.¹⁷⁶ Mobility forces have also supported US participation in other United Nations directed operations. As recently as February 1994, the United States was involved in UN directed humanitarian peacekeeping operations in Somalia, Northern Iraq, the former Yugoslavia, Bosnia, Lebanon, the Sinai, Kuwait, Cambodia and Korea.¹⁷⁷ By almost any measure, strategic air mobility as a nonlethal application of airpower has been important and doubtless it will continue to be so.

As noted earlier, the future of the international order is uncertain but the majority view maintains that, “with the changing international environment, the trends in the military, political, economic, technological, and demographic areas portend major changes in the security environment.”¹⁷⁸ These changes will possibly cause US national security interests to evolve into areas of concern that are less traditional (such as water rights and environment issues), and involve more indirect threats to US interests. Several new perspectives on the emerging international order focus on the linkages between resource scarcity, civil unrest, ethnic violence and large-scale regional instability.¹⁷⁹ The outgrowth from these circumstances in poor, resource starved areas could “cause several specific types of acute conflict, each with potentially serious repercussions for the security interests of the developed world”.¹⁸⁰ All of these factors point to a continued need for US involvement in the international arena to secure national interests; and within that, there is a vital role for the use of strategic air mobility resources. The most recent operation in Somalia, RESTORE HOPE, demonstrates some of the problems and complexities that may be faced by nonlethal operations in the emerging international environment.

Somalia and Operation RESTORE HOPE

The Air Force became officially involved in Somalia on August 14, 1992 when President George Bush ordered emergency food shipments flown in to aid in feeding 1.5 million starving Somalis.¹⁸¹ This initial effort, along with seafried relief supplies, to provide 145,000 tons of food was frustrated, however, by marauding parties of armed men that prevented the distribution of food to those in need. Following widespread publicity via international news agencies of the near total anarchy in Somalia, the United Nations Security Council voted on December 3, 1992 to authorize the use of a UN peacekeeping force. This force was to “use all possible means to establish as soon as possible a secure environment for humanitarian relief operations” in Somalia.¹⁸² AMC, operating via a USTRANSCOM directive, immediately established enroute facilities for aerial refueling efforts at Lajes AFB, Azores and the structure eventually grew to include operations out of Moron Air Base, Spain as well as crew staging operations in Djibouti and Cairo.¹⁸³ These facilities, along with others, were to support the airlift effort into Somalia.

Regular supply missions began to flow into Mogadishu on December 28 with the arrival of a C-141 aircraft. The airlift was primarily a humanitarian relief effort until August of 1993, when the focus subtly shifted as US Army Ranger units began to arrive in response to continuing violence and harassment caused by Somali “warlords.” Actions against hostile Somali forces culminated in military actions in early October, when 18 US troops were killed and over 100 wounded in an attempt to capture aides to the warlord Mohammed Farah Aidid.¹⁸⁴ As a result of this incident, President Clinton declared direct US involvement in Somalia would end no later than March 31, 1994 and Operation Restore Hope officially ended on that date. While most information on this operation is still being compiled, examined, and evaluated, what is available may provide some insights into future US military operations and the role of air mobility.

In terms of military operations, the efforts in Somalia were characterized by an extremely complicated set of relationships, a complex continuously evolving situation, and confused objectives. The primary effort within Somalia itself was directed by the Joint Task Force Commander, Major General Robert Johnston, USMC. This task force was formed under US Central Command with the responsibility to assume control of all operations within Somalia.¹⁸⁵ In addition, the operation was carried out under UN orders with an international joint task force. This arrangement provided some exceptional challenges in determining operational and support requirements that are beyond the scope of this paper but are indicative of how future operations may be conducted. Coalitions and United Nations operations very probably will be a part of future US military operations. The National Security Strategy of the United States commits itself to the proposition that “The United States should significantly increase its efforts to improve regional and United Nations conflict prevention efforts, humanitarian efforts and peacekeeping capabilities.”¹⁸⁶ Additionally, it recognizes that “long-standing missions, such as humanitarian assistance, must now be undertaken in the midst of civil war and anarchy. Peacekeeping and peace enforcement are more complex than ever.”¹⁸⁷ These complexities were certainly evident in Somalia.

The initial efforts in Somalia focused largely on the need to relieve suffering of the starving population. Military forces were deployed to provide an environment within which the primary task of distributing relief supplies could take place. Later, as the seriousness of the threat from armed Somalis continued, the focus shifted. As evidenced by further deployments of combat units the task force began to adopt a primary role of establishing order and wresting power from the warlords through armed actions. This series of events helps illustrate that the complexities of humanitarian operations in an atmosphere of chaos and anarchy can cause primary objectives to shift during the operation and cause the distinction between humanitarian relief and armed conflict to

blur. This type of a situation can also affect the relationships established between supported and supporting commands.

The operations in support of Somalia provide evidence that not only is the distinction between objectives and command relations complex, but also that there still exist some recurring problems with air mobility's relations to other "supported" commands. Some of the frustrations experienced by airlift personnel during past mobility operations were present in the mission to support Somalia. Difficulties in obtaining facilities and support from other combatant commanders created hardships and affected the ability of AMC to do its mission. Within the immediate area of responsibility, designated as Somalia and Kenya, the air mobility personnel became the de facto Central Air Forces. Because there were no deployments of fighter aircraft from the traditional CENTAF supporting units, the AMC Director of Mobility Forces (DIRMOBFOR) fulfilled that function.¹⁸⁸ As such he was largely able to task and receive support from normal CENTCOM formal lines of communication. This cooperative level of support was not the same experience shared by other AMC personnel within the CENTCOM AOR who were outside of the immediate Joint Task Force operational area in Somalia.

At Cairo West Air Base a stage operation was established for aircrew changes and aircraft servicing. The support received from CENTCOM at this location was marginal. The first personnel to arrive found that the normal lines of communication (through CENTCOM) for requests were time consuming and extremely ineffective. A general feeling developed among the AMC personnel that since "the action" was in Somalia, and all the operations at Cairo were committed to airlift and mobility support functions, CENTCOM felt no urgency in providing base support personnel, quarters, or facilities for the AMC people stationed there.¹⁸⁹ Normally the geographic CINC will provide the necessary base operations support personnel for operations at facilities within his AOR, but in this instance it was difficult to achieve because CENTAF, as a component of

CENTCOM, had deployed no operational units and therefore saw the operations outside of Somalia as solely an AMC operation. According to Colonel Robert Ford, who served as the Commander of 1610 Airlift Support Group at Cairo West, the situation evolved to one where he had to use informal lines of communication to get the necessary support. He had the ability to “request” items from CENTCOM but no authority to task the command to provide it.¹⁹⁰ He instead used direct link satellite communications to Scott AFB, HQ AMC to process requests for the items he needed to perform his mission of keeping the airlift flowing. The ability to task CENTCOM components to provide the required support would have greatly increased his efficiency and effectiveness in carrying out the mission. These same frustrations were felt back at AMC headquarters.

When the CINC with the responsibility for the AOR will not, or cannot, provide the needed people or equipment to support a mobility function, the Mission Support and Augmentation Division at AMC must fill in. Major Bob Bruno, Headquarters AMC served as the chief of the Mission Support and Augmentation Division during the airlift to Somalia. His experiences showed the unwillingness of CENTAF personnel to commit their resources to support the requirements for air mobility operations at Cairo. Major Bruno's counterparts at CENTAF stated that it was an AMC operation, and they felt that he had no authority to task their support.¹⁹¹ This was especially critical because the bare-base “Harvest” kits and other equipment required at Cairo West were owned by CENTAF.¹⁹² AMC, on the other hand, does not own its own resources to provide the capability for “bare-base” operations. This is usually not a significant problem if considered in the traditional scenarios of air mobility supporting combat operations. In the traditional scenario, combat squadrons deploy and take their kits to the operating site, and provide personnel to run operations. Since there were no combat units involved at Cairo West for Operation RESTORE HOPE, CENTAF was reluctant to allow its resources to be used by another command. The result was that the people performing the mission could not receive the support required (which was available in CENTCOM

stocks in theater) and further, they had no authority to task anyone to provide that support. While as yet there is no conclusive evidence as to the extent of these types of problems, the experiences cited above, at the very least, illustrate that the issue of which command is supporting the other is a relevant one. It appears to have become more blurred and complex as the distinctions between combat (lethal) operations and humanitarian airlift (nonlethal) operations merge.

The most recent operations in Somalia may be an indicator of what trends the future holds for the US military. With air mobility capable of achieving certain national strategic security objectives, and a continuing need for these operations in the emerging international environment, how may these requirements affect military command relationships and USAF doctrine?

Command Relationships

With a recognition that nonlethal airpower is often an appropriate political instrument, comes the need to examine the relationship between commands and the CINC tasked with conducting the operation. How can these relationships and designation of the supported commander be best determined? Today it is primarily by the “pin in the map method”. If a certain operation falls into the geographic AOR of a particular CINC, then he is designated as the supported CINC and all others are tasked to support him. This designation is quite logical if it is a combat situation requiring the application of lethal force. The geographic commander will have to integrate various combat units according to the dictates of the situation and orchestrate their contribution to the primary military objective. The “lay of the land” becomes important to the strategy and scheme of maneuver, and expertise concerning that geographic area can greatly enhance the chances for success.

While such considerations may also be factors in nonlethal scenarios, they tend to be less significant in terms of successfully accomplishing the mission. When using air mobility resources in the nonlethal application of strategic airpower, a geographic

designation may or may not be the best way to appoint a commander. If the operation is such that it lies overwhelmingly in the realm of transportation and mobility, then it may make more sense to have CINCTrans as the supported CINC with the full authority and responsibility to direct the operation. Other CINCs would then be tasked to support him and provide the required material and personnel to enable him to perform the operation. As the supported CINC he would then have authority over supporting commanders and could establish relationships whereby these supporting commanders would “aid, protect, complement, or sustain” the mobility forces as the mobility forces pursued the designated objectives.¹⁹³

With the emerging complexities of roles, objectives, and combined forces anticipated in future military operations, there are several criteria that could be helpful in analyzing and indicating which CINC may best perform the commanding and supported role. Some of the criteria that may apply are: (1) determining the primary objective of the operation; (2) locating the expertise and staff best capable of pursuing the desired objectives in an efficient, effective and timely manner; and finally, (3) determining who controls the preponderance of resources required for the operation.

The primary objective of the operation should be the main determinant of the supported command role. If the goal requires the use of combat forces in a lethal application, and air mobility is serving in a traditional role as a force enhancer, then it is probably appropriate to designate the geographic CINC as the supported commander. If the primary objective requires air mobility to achieve national security objectives, independent from the application of lethal force, then it may make more sense to designate the mobility CINC as the supported commander. In some operations, multiple objectives may exist and be interdependent. They also may change over the course of the operation. If so, they must be examined carefully to assure that the most important objectives are determined, and reexamined throughout the course of the operation. The designation of a supported commander should attempt to reflect the primary objectives of

the operation. Should the primary objectives change during the course of the operation, then it may become necessary to designate new command relations and a new supported commander. Using the primary objectives to determine command relations may not provide an easy answer in complex scenarios, but this method of using objectives at least provides a logical starting point for considering the most effective command relations structure. If the primary objective is identified, then this determination should also help indicate the commander who possesses the expertise and staff to conduct the operation.

In today's military, personnel have become more specialized and focused in their areas of expertise. Technology has multiplied effectiveness on the battlefield but it has also created the need for more specialized knowledge. This specialization and expertise is equally applicable to the field of mobility. Planning and executing a mobility plan has evolved into a highly complex and intricate process, and “the best people to assess transportation feasibility are the people who are going to plan the deployment, namely the staff of USTRANSCOM and its components.”¹⁹⁴ When planning and conducting an operation in the modern military, expertise is required to produce the greatest results. At times the situation can drive which staff expertise and specialized knowledge requirements are most urgently required. If it is a combat situation, a joint battle staff with a diversity of experience can best serve the objective. If it is primarily a mobility operation, then it probably follows that mobility experts can best plan and execute the operation in the most efficient, effective, and timely manner. Their ability to direct the operation and acquire support should help them maximize the resources they possess.

A final look at required resources and their location should help narrow the choice for the supported commander. Advantages are usually inherent with a system that already has in-place lines of communication and established relationships. If a command individually brings an overwhelming preponderance of resources to the operation then it can most likely control those resources and maximize their use. In a scenario where the overwhelming resources and effort support a strategic mobility operation, the commander

most likely to be best suited to decide and “have the authority to exercise general direction of the supporting effort” is the mobility commander (CINCTRANS).¹⁹⁵ Because strategic air mobility can achieve national security objectives, and could lead to the redesignation of the supported commander, Air Force doctrine, should recognize the role of air mobility as a direct application of nonlethal airpower.

USAF Doctrine

In current USAF doctrine contained in Air Force Manual 1-1, airlift and air mobility perform only support or enhancement missions.¹⁹⁶ This role of force enhancement is usually the case when the military arm is used in supporting United States national strategic national security objectives. As discussed in Chapter One, in those instances it is the place of air mobility to serve as the primary initial response vehicle transporting combat forces capable of applying lethal force. Air mobility allows forces to be deployed quickly to virtually anywhere in the world and provides for the sustainment and support of those fighting forces in theater until other, slower modes of lift (sealift and overland transportation), can arrive. This capability is becoming even more important today as the US military shrinks in size, and abandons overseas forward deployment locations in favor of a strategy that is based in the continental United States with deployment scenarios in response to Major Regional Contingencies (MRCs).¹⁹⁷

Yet despite this traditional role of strategic air mobility, there are times when strategic mobility does not act as a support or enhancement function. As already seen, Israel in 1973 and Berlin 1948 are prime examples of when strategic air mobility forces were not employed in traditional enhancement roles for the military's lethal arm. Historical data cited earlier shows there are hundreds more examples of the same types of missions and operations carried out by air mobility to achieve national security policy objectives. Despite these events, there is still no recognition in official USAF doctrine of the direct role nonlethal airpower, in the form of strategic air mobility, can play in the independent pursuit of national security objectives. Air Force doctrine should change

and recognize the role air mobility plays in independent non-lethal operations due to doctrine's impact on: 1) shaping how the service views its role in national defense, 2) creating diverse options available to national security decision makers on the possibilities of applying and utilizing airpower in the emerging new world, and finally, 3) setting guidelines for force composition and sizing.

Doctrine is important because it provides the framework for understanding how to organize, equip, and apply military power.¹⁹⁸ Military power is evolving and typically power has equated to force and is measured in terms of combat capability.¹⁹⁹ With the changing demands of the new world environment, it may be that combat capability may not always be the best measure of military power. The application of nonlethal airpower will continue to be a major role for the USAF in the future. While the service's primary role will most likely remain that of applying lethal force and deterring it through a lethal stance, it can still play an important role in the furtherance of US foreign policy and national security objectives via nonlethal means. Doctrine allows a starting point for new thinking within the service on how airpower can serve the national interest. Through official organizational doctrine, the service can “provide a tempered analysis of experiences and a determination of beliefs” that can then be taught to each succeeding generation within the Air Force.²⁰⁰ With the inclusion of a new perspective on the role of mobility forces and their nonlethal application, doctrine may begin to provide the means for new theories on how to use nonlethal airpower as an enabling strategy that obviates the need for lethal intervention. Doctrine sets the stage, and strategic air mobility as a direct application of nonlethal airpower, has been absent. The Air Force, by including the direct use of strategic air mobility in its doctrine, can at least begin considering how traditional employment strategies and uses for airpower may be evolving. This could help airpower retain its validity in employment strategies in the increasingly complex scenarios of the future. Inclusion of the direct role that air mobility can play in achieving national security objectives may not drastically alter Air Force strategy, but its inclusion

provides an incremental improvement at little cost. This small beginning may spark ideas for future strategies and possibly offer more diverse options to national security decision-makers.

Doctrine contains not only a service's basic beliefs, but doctrine can also provide a foundation for strategy options. Doctrine as an articulation of “a common basis of knowledge and understanding can provide guidance for actions.”²⁰¹ Though outside agencies rarely, if ever, actually read or know a service's doctrine, the doctrine may influence the strategies and options that are formulated by the service and thus presented to the decision-makers. Indirectly, the doctrine may guide a service's strategy formulation process and constrain the choices and options available. The focus of Air Force doctrine constrains air mobility to the support and enhancement roles. General Ronald R. Fogleman, the commander of Air Mobility Command, agrees that this is an overly restrictive point of view.

Air mobility forces - tankers and airlifters - are traditionally regarded as “force enhancers,” setting up other forces to prosecute the conflict. That perspective is too narrow and overlooks the use of “nonlethal airpower as a military instrument to achieve military objectives.”

You could call the Berlin Airlift a humanitarian relief operation, but it was also an example of using airlift to achieve specific objectives not possible with other instruments of national power.²⁰²

Additionally, if a theory or category for employing airpower is not in the doctrine there may be misconceptions by those outside the organization about the service's willingness or capability to perform that role. There is evidence of a division among Air Force leaders over the subject of nonlethal airpower operations.²⁰³ Some maintain that it dilutes and takes away from the primary combat mission of the service. Others maintain that,

the Air Force must expand its concept of itself and its place in American society. It should embrace noncombat operations as an important and growing segment of its mission spectrum in an era when the demands on the Air Force will focus as much on its noncombat contribution to national policy as its combat capabilities. Their view is that the nation's needs are

changing and that, as a servant of the nation, the Air Force should broaden its vision beyond the traditional combat roles.²⁰⁴

Evidence seems to support the claim that nonlethal operations have always been an important part of the Air Force mission. Recognition of the role air mobility has played in the past may in USAF doctrine may help the service to present better structured proposals and concepts for the nonlethal use of airpower, especially strategic air mobility, to directly support national security objectives.

There is no guarantee that any decision-maker will heed the advice or choose a specific option presented by military advisors. In some instances a course of action may have been decided upon despite military advice to the contrary. However, in circumstances where the decision-maker is willing to consider all options and committed to weighing the advice of the different services, the options presented should not be constrained as the result of a limited doctrinal foundation. Doctrinal limits in this case may effectively reduce the number and variety of options the Air Force presents to national decision-makers. Additionally, if the internal division over the future role of nonlethal airpower in the Air Force is not resolved by the institution, it seems likely that it will be resolved for it by budgets and mandates imposed on it from without.²⁰⁵

A final role for doctrine lies in its ability to outline basic concepts for force size and structure. Doctrine has been used in the past to define relationships between services, and boundaries for various roles and missions, in order to allow the command or service who can best perform a particular role advocate its beliefs and needs for resources. The Air Force should include an expanded view of the role of nonlethal airpower in its doctrine to help bolster its ability to pursue the necessary force size, structure, and capability to help it best execute the missions and operations the Air Force may be tasked to perform in the new world order. Some argue that recognizing air mobility as a direct means of pursuing national security objectives outside of the enhancement or support role will result in fewer funds for lethal combat aircraft systems.

Statistics show that in reality over the past fifty years, nonlethal air operations and system have consumed approximately 50% of the Air Force budget, and in the most recent drawdown the percentage of air mobility aircraft is remaining larger on a relative scale than fighter type aircraft. This past portion share of the budget seems to indicate that nonlethal airpower and air mobility have always been fairly high priority missions and to detail their role in doctrine would only be admitting the reality of past events. Including the role that air mobility can play, outside of force enhancement, in Air Force doctrine, would demonstrate the Air Force's recognition of the significance of that role. This admission of the importance of air mobility as a direct means of achieving national security objectives, as well as a combat force enhancer, could help to argue the case for systems such as the C-17, which the Air Force states it desperately needs. By arguing the C-17's role in nonlethal applications to directly support the national security policies and objectives of the United States, it becomes a much stronger case than the argument of lethal force deployment alone. All in all, it is time for the inclusion in Air Force doctrine that, in some circumstances, the air mobility mission may not be enhancement, but rather the direct application of nonlethal airpower to achieve national security objectives.

Conclusion

The world is changing and the international environment is uncertain. The evidence seems to indicate that the United States will be required to remain an active participant in the world arena and adaptive to the evolving international environment to assure its national security needs. One major instrument of military power may indeed be strategic air mobility. Air mobility forces may be called upon to support a variety of combat operations but may also perform primary missions in various nonlethal situations. The use of air mobility forces in the direct pursuit of national strategic objectives should be recognized by USAF doctrine. This recognition could begin to formalize a foundation for airpower thought and theory that may provide more diverse and imaginative options for national decision makers. A revised doctrine could also provide a foundation to

better pursue a force structure and composition that can better serve the needs of the country.

Command relations also need to recognize the importance of air mobility taking the lead in certain scenarios. In general, it may be best to designate the supported commander, granting him full authority to command the operation and task support requirements, based on an evaluation of the primary objectives, the command's expertise, and the resources available to the operation. Using the above criteria should result in a more logical selection of a supported commander and a more efficient and effective execution of the operation. In certain specific situations, where air mobility accomplishes the primary objective in a nonlethal operation, it may be more effective and efficient to name CINCTRANS as the supported commander.

The United States will continue to be active in the international arena and the military as a whole, and the United States Air Force in particular, must recognize the unique attributes that strategic air mobility provides the nation outside of the traditional support and enhancement roles. This capability will help assure that the rest of the world will retain “an enduring faith in America - that it can and will lead in a collective response to the world's crises.”²⁰⁶

Notes

¹⁷³ Robert Lempert, et al., *Air Force Noncombat Operations: Lessons from the Past, Thoughts for the Future*, RAND Report N-3519-AF (Santa Monica, California: Rand Corporation, 1992).

¹⁷⁴ A complete discussion of these operations and their relationship to combat operations can be found in the RAND study cited above as well as, Carl Builder, et al., *Report of a Workshop on Expanding U.S. Air Force Noncombat Mission Capabilities*, RAND Report (Project Air Force) MR-246-AF (Santa Monica, California: Rand Corporation, 1993), (Air University Library Doc. #M-U 30352-84 no. 246)

¹⁷⁵ These operations are varied but primarily focus on humanitarian relief and transport of civil and peacekeeping forces. Source: HQ AMC History Office, The Haulman files, Box 23A, Books 270-274.

¹⁷⁶ These operations have all been directed and monitored from the highest levels of national policy makers and reflect the use of strategic mobility assets in the direct pursuit of national security objectives. Only in the case of the Somalia Operations was air mobility to serve in a capacity that was partially seen as support or enhancement to other US combat/lethal operations. See Project Air Force Summary, *The Changing Spectrum of Air Force Missions*, RAND Directory (Santa Monica, California: Rand Corporation, 1994), 28.

¹⁷⁷ "Aerospace Power: Regional Conflict in the 1990s", *Foundation Forum*, Published by the Aerospace Education Foundation, A National Symposium Sponsored by the Air Force Association, February 17-18, 1994, Orlando, Florida.

Transcript of an address by General Ronald R. Fogleman, CC AMC, "Air Power, the Air Mobility Dimension," 65-74.

¹⁷⁸ Carl Builder, et al., *Report of a Workshop on Expanding U.S. Air Force Noncombat Mission Capabilities*, RAND Report (Project Air Force) MR-246-AF (Santa Monica, California: Rand Corporation, 1993) 1. (Air University Library Doc. #M-U 30352-84 no. 246). There is also a school of thought that points to future conflicts taking place between actors other than traditional nation states. This may redefine the requirements for force application and shift the necessary emphasis to a different paradigm in force structure and command applications. See also, Col. Jeffrey R. Barnett, "Nonstate War", *Marine Corps Gazette* 78, no. 5 (May 1994): 84-89.

¹⁷⁹ While perhaps overly pessimistic, these theories are being borne out in less developed regions of the world today and pose the risk of spreading conflict and unrest to more vital areas of US concern. Interesting reading and in depth analysis of these views can be found in: Thomas F. Homer-Dixon, et. al., "Environmental change and Violent Conflict", *Scientific American* 268, no. 2 (February 1993): 38-47, Robert D. Kaplan, "The Coming Anarchy", *The Atlantic Monthly*, February 1994, 44-76, and Thomas F. Homer-Dixon, "On the Threshold: Environmental Changes as Causes of Acute Conflict", *International Security* 16, no. 2 (Fall 1991): 76-116.

¹⁸⁰ Thomas F. Homer-Dixon, "On the Threshold: Environmental Changes as Causes of Acute Conflict", *International Security* 16, no. 2 (Fall 1991): 78.

¹⁸¹ Kent M. Beck and Robert deV. Brunkow, *Global Reach in Action: The Air Mobility Command and the Deployment to Somalia* (Scott Air Force Base, Illinois: Office of History Air Mobility Command, December 1993), 1. (The document is classified SECRET/Not Releasable to Foreign Nationals, only unclassified portions of the document have been cited and/or included in this thesis). (Article, "Somalia: U.S. Sets Food Airlift," *Facts on File*, 20 Aug. 92, 622-623.

¹⁸² Kent M. Beck and Robert deV. Brunkow, *Global Reach in Action: The Air Mobility Command and the Deployment to Somalia* (Scott Air Force Base, Illinois: Office of History Air Mobility Command, December 1993), 22. (The document is classified SECRET/Not Releasable to Foreign Nationals, only unclassified portions of the document have been cited and/or included in this thesis). (Article, "U.N. orders US-Led Force into Somalia", *Washington Post*, 4 Dec. 92, . 1, 17; Article, "U.N. Backs Somalia Force; Bush Promises a Quick Exit but Pentagon is Less Sure," *New York Times*, 4 Dec. 92,. 1.)

¹⁸³ Kent M. Beck and Robert deV. Brunkow, *Global Reach in Action: The Air Mobility Command and the Deployment to Somalia* (Scott Air Force Base, Illinois: Office of History Air Mobility Command, December 1993), 23-24. (The document is classified SECRET/Not Releasable to Foreign Nationals, only unclassified portions of the document have been cited and/or included in this thesis). (Historian's Notes (S/OADR), J.H. Smith, AMC/HO, "0800L Restore Hope Update (U)," 4 Dec. 92, info used is Unclassified, Sup Doc 65.

184 A good brief chronology of events can be found in the *Air Force Times* article cited below. It also contains additional background comments and information. "Good-bye, Somalia", Special Report, *Air Force Times*, April 4, 1994, 12-14

185 Msg (S/OADR), USCINCENT/CCJ3 to USCINTRANS, "Deployment Order (U)," 032001Z DEC 92, info used is unclassified, Sup Doc 69.

186 *National Security Strategy of the United States*, January 1993, 19.

187 *Ibid.*, 1.

188 This information comes from an oral interview conducted by the author with Colonel Walt Evans, HQ AMC/XOT conducted April 12, 1994, at Scott AFB, Illinois. Col. Evans served as the DIRMOBFOR at Mogadishu from December 1992 through March 1993.

189 While this type of evidence is hard to quantify, in interviews conducted by the author with over 25 AMC personnel who coordinated and directed activities and operations at Cairo West, one item came out in every interview. The level of cooperation from CENTAF was low and it took a lot of negotiation and arbitration to finally get the required equipment and facilities to effectively run the stage operation.

190 This information comes from an oral interview conducted by the author with Colonel Robert Ford, HQ AMC/XOR conducted April 12, 1994, at Scott AFB, Illinois. Col. Ford served as the CC 1610 Airlift Support Group at Cairo West Air Base from September 1993 to December 1993.

191 This information comes from an oral interview conducted by the author with Major Bob Bruno, HQ AMC/MSPO conducted April 13, 1994, at Scott AFB, Illinois. Major Bruno served as the Chief, Mission Support and Augmentation Division, Air Mobility Command, throughout the entire airlift operation into Somalia.

192 Harvest kits are sets of tents and support facility equipment that may be loaded onto aircraft and deployed to a site. Once on site, civil engineering squadrons erect the sets and create a "tent city" for operations.

193 For a fuller discussion of the supported versus supporting roles of commanders and their forces see Joint Pub 3-0, *Doctrine for Joint Operations*, September 1993, II-7 to II-9

194 LtCol David F. Todd, "Improving Deployment Operations During Crisis," *Marine Corps Gazette* 78, no. 4 (April 1994): 50-51.

195 Joint Pub 3-0, *Doctrine for Joint Operations*, September 1993, II-10.

196 See figure 2-1 for the Roles and Missions of Aerospace Power; AFM 1-1 Volume I, *Basic Aerospace Doctrine of the United States*, March 1992, 7.

197 This basic concept is discussed in the proposal for a Global Reach Laydown system for AMC. See: "Air Mobility for Tomorrow: AMC's Evolving Doctrine", AMC Commander's Staff Group White Paper, 1994, 5.

198 This is a quote from the foreword to AFM 1-1. This foreword is written and signed by General Merrill A. McPeak, Chief of Staff, USAF. Air Force Manual 1-1, *Basic Aerospace Doctrine of the United States Air Force*, March 1992, v.

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- ¹⁹⁹ Carl Builder, et al., *Report of a Workshop on Expanding U.S. Air Force Noncombat Mission Capabilities*, RAND Report (Project Air Force) MR-246-AF (Santa Monica, California: Rand Corporation, 1993), 3. (Air University Library Doc. #M-U 30352-84 no. 246).
- ²⁰⁰ Three functions of doctrine are discussed in detail concerning their role in providing the linkage between abstract thought and specific guidance for action and execution. See, Col. Dennis M. Drew and Dr. Donald M. Snow, *Making Strategy; An Introduction to National Security Process and Problems* (Maxwell Air Force Base, Alabama: Air University Press, 1988), 171.
- ²⁰¹ This function of providing guidance for action and strategy decisions is discussed in, Col. Dennis M. Drew and Dr. Donald M. Snow, *Making Strategy; An Introduction to National Security Process and Problems* (Maxwell Air Force Base, Alabama: Air University Press, 1988), 171-174.
- ²⁰² These comments are found in the “Washington Watch” column in Air Force Magazine. See, John T. Correll, “Readiness First”, *Air Force*, April 1994, 13.
- ²⁰³ For an in-depth analysis of this issue and information pertaining to its application to the future roles and missions of aerospace power see both RAND studies: Carl Builder, et al., *Report of a Workshop on Expanding U.S. Air Force Noncombat Mission Capabilities*, RAND Report (Project Air Force) MR-246-AF (Santa Monica, California: Rand Corporation, 1993), (Air University Library Doc. #M-U 30352-84 no. 246), and, Robert Lempert, et al., *Air Force Noncombat Operations: Lessons from the Past, Thoughts for the Future*, RAND Report N-3519-AF (Santa Monica, California: Rand Corporation, 1992).
- ²⁰⁴ Carl Builder, et al., *Report of a Workshop on Expanding U.S. Air Force Noncombat Mission Capabilities*, RAND Report (Project Air Force) MR-246-AF (Santa Monica, California: Rand Corporation, 1993), xiii. (Air University Library Doc. #M-U 30352-84 no. 246).
- ²⁰⁵ Carl Builder, et al., *Report of a Workshop on Expanding U.S. Air Force Noncombat Mission Capabilities*, RAND Report (Project Air Force) MR-246-AF (Santa Monica, California: Rand Corporation, 1993), 64. (Air University Library Doc. #M-U 30352-84 no. 246).
- ²⁰⁶ *National Security Strategy of the United States*, January 1993, 3.

Glossary

Airways and Air Communications Service

AACS	Air Force Logistics Command
AFLC	Air Force Manual
AFM	Airlift Control Element
ALCE	Air Mobility Command
AMC	Area of Responsibility
AOR	Air Traffic Control
ATC	Air transport Command
ATC	China-Burma-India Theater
CBI	Central Air Forces
CENTAF	Central Command
CENTCOM	Commander in Chief
CINC	CINC Transportation Command
CINCTRANS	Continental United States
CONUS	Director Mobility Forces
DIRMOBFOR	Department of Defense
DOD	Headquarters
HQ	Israeli Defense Force
IDF	Military Airlift Command
MAC	Military Air Transport Service
MATS	Major Regional Contingency
MRC	NATS

NEO	Naval Air Transport Service
SAM	Noncombatant Evacuation Operation
SECDEF	Surface to Air Missile
UN	Secretary of Defense
USAF	United Nations
USAFE	United States Air Force
USMC	United States Air Forces Europe
USTRANSCOM	United States Marine Corps
	United States Transportation Command

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